



**TEAM TOGETHER,
BETTER SOLUTION**



「 PRODUCT
CATALOGUE 」

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CHEMICAL ROOM STORAGE CABINET



TYPE 30, 2-DOORS SAFETY CABINET

ECOSAFE, France's 30 min. fire resistant, Type 30 cabinet

- Comply with FM 6050 and EN 14470-1
- Thermo-expanding seals of doors
- Storage of flammable chemicals
- Dimension : 1092 x 457 x 1731 mm
- Storage capacity : 170 L
- Weight 210 kg
- 2 Doors, 2 Shelves
- Weight capacity per shelf, 50 kg

Model	Description
3035UE	Type 30, 2 Doors Safety Cabinet (30 min fire resistant)



TYPE 90, 2-DOORS SAFETY CABINET

ECOSAFE, France's 105 min. fire resistant, Type 90 cabinet

- Comply with FM 6050 and EN 14470-1
- Storage of flammable chemicals, commonly used in chemical and oil&gas industries
- Dimension : 1137 x 620 x 1950 mm
- Storage capacity : 250 L
- Weight 453 kg
- 2 Doors, 3 Shelves
- Weight capacity per shelf, 50 kg

Model	Description
795+E	Type 90, 2 Doors Safety Cabinet (105 min fire resistant)



LITHIUM-ION BATTERY SAFETY CABINET

ECOSAFE, France's 90 min. flammable resistant design specific to store lithium-ion batteries.

- Cabinet design to store lithium-ion batteries
- Dimension : 1137 x 620 x 1950 mm
- Storage capacity : 250 L
- Weight 488 kg
- 2 Doors, 4 Shelves
- Weight capacity per shelf, 100 kg

Model	Description
795+LIX4	Type 90, 2 Doors Safety Cabinet for Lithium-ion battery



45 GALLON/170 L FLAMMABLE CABINET

OSHA 29, NFPA Code 30 compliance. EN 14470-1 & CE certified

- 1650 H x 1090 L x 460 D mm
- 2 doors, 2 shelves
- Weight Capacity per shelf, 100 kg
- Yellow colour, for solvent storage
- 1.0 mm thickness, with gap between the two walls at 38 mm
- 50 mm of containment sump
- 2 fire arrester, ventholes

Model	Description
ZYC0045	45 Gallon/170 L Yellow Flammable Solvent Cabinet



45 GALLON/170 L ACID METAL CABINET

OSHA 29, NFPA Code 30 compliance. EN 14470-1 & CE certified

- 1650 H x 1090 L x 460 D mm
- 2 doors, 2 shelves
- Weight Capacity per shelf, 100 kg
- Blue colour, for organic acid storage
- 1.0 mm thickness, with gap between the two walls at 38 mm
- 50 mm of containment sump
- 2 fire arrester, ventholes

Model	Description
ZYC0045B	45 Gallon/170 L Blue Organic Acid Cabinet



45 GALLON/170 L COMBUSTIBLE CABINET

OSHA 29, NFPA Code 30 compliance. EN 14470-1 & CE certified

- 1650 H x 1090 L x 460 D mm
- 2 doors, 2 shelves
- Weight Capacity per shelf, 100 kg
- Red colour, for combustible storage
- 1.0 mm thickness, with gap between the two walls at 38 mm
- 50 mm of containment sump
- 2 fire arrester, ventholes

Model	Description
ZYC0045R	45 Gallon/170 L Red Combustible Liquid Cabinet

CHEMICAL ROOM STORAGE CABINET



200 L X 2 DRUM STORAGE CABINET

OSHA 29, NFPA Code 30 compliance.
EN 14470-1 & CE certified

- 1650 H x 1500 L x 860 D mm
- Capacity 2 x 200 L Drum
- Weight capacity per shelf, 50 kg
- 2 Doors
- Roller drum base included

Model	Description
ZYC0110D-1	2 x 200 L Drum Storage Cabinet



4 COLOURS COMBINATION STORAGE CABINET

Come with 4 compartment with 4 colour codes : Flammable, Acid, Combustible and Toxic

- 1850 H x 900 L x 520 D mm
- Internal material is polypropylene (PP)
- Double walls, with fire arrester ventholes
- Comes with 4 wheels
- Weight capacity per shelf, 50 kg

Model	Description
202311	Combination Storage Cabinet, 4 colours



GAS CYLINDER STORAGE CABINET

Explosion proof single gas cylinder storage cabinet

- 1900 H x 900 L x 450 D mm
- Fixed bell to hold cylinder
- Fold down ramp, for load & unload
- Alarm
- Automatic exhaust system

Model	Description
ZY-FBQPG-2	Ex-proof Gas Cylinder Storage Cabinet, single cylinder



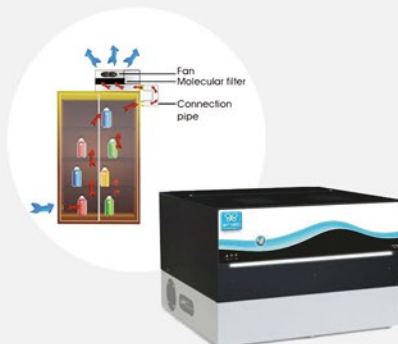
45 GALLON/170 L POLYPROPYLENE (PP) ACID CABINET

Greyish White PP Acid Cabinet suitable for strong in-organic acid

- 1650 H x 1090 L x 460 D mm
- 2 doors, 2 shelves
- Weight Capacity per shelf, 40 kg
- Suitable for strong acid like hydrochloric acid, sulphuric acid and nitric acid

Model	Description
ZYP0045	45 Gallon/170 L PP Strong Acid Cabinet

STORAGE VENTILATION – FILTRATION BOX



CHEMTRAP MIDCAP/SMART H402

Stand-alone filtration box for chemical storage cabinet

- Compatible with any brands and size, Horizontal Type
- Comply to EN14470-1, AFNOR NFX 15-211
- Double filtration system
- Fan speed adjustable
- 315 H x 482 L x 451 D mm

Model	Description
Chemtrap Midcap H	Basic Filtration box, Horizontal type
Chemtrap Smart H	Filtration box with smart sensor and connectivity



CHEMTRAP MIDCAP/SMART V201

Stand-alone filtration box for under-bench storage cabinet

- Compatible with any brands and size, Vertical Type
- Comply to EN14470-1, AFNOR NFX 15-211
- Fan speed adjustable
- 632 H x 245 L x 554 D mm

Model	Description
Chemtrap Midcap V	Basic Filtration box, Vertical type
Chemtrap Smart V	Filtration box with smart sensor and connectivity

LABORATORY CHEMICAL STORAGE CABINET



CAPTAIR 632B SMART UNDERBENCH CHEMICAL STORAGE

Underbench Ductless Filtering Chemical Storage

- Storage capacity : up to 44 bottles / 1 Liter
- Dimension : 654 x 554 x 715 mm
- Smart Alarm : Fan failure, filter saturation and door sensor

Model	Description
Captair Smart 632B, Opt. 1	Captair 632B Smart Underbench Cabinet, Option 1 with 2 shelves and sliding door
Captair Smart 632B, Opt. 2	Captair 632B Smart Underbench Cabinet, Option 2 with extractible storage volume
Filter Type :	
HF2AS	Carbon Filter for Liquid and Powder Solvent Chemical, 2 layers Chemtrap filter
HF2BE	Carbon Filter for Liquid and Powder Acid/Base Chemical, 2 layers Chemtrap filter



CAPTAIR 531 SMART BENCHTOP CHEMICAL STORAGE

Tabletop Ductless Filtering Chemical Storage

- Storage capacity : up to 72 bottles of 20 ml. Max height is 26 cm (w/o shelf)
- Dimension : 500 x 220 x 400 mm
- 1 removable shelf and absorption mat included

Model	Description
Captair Store 531	Tabletop Filtration Storage Cabinet 531
Filter Type :	
HF1AS	Carbon Filter for Solvent Vapour– Chemtrap
HF1BE	Carbon Filter for Solvent & Acid Vapour – Chemtrap



CAPTAIR 834 SMART

2 Doors Ductless Filtering Storage Cabinet With RFID Door Smart Lock

- Storage capacity : up to 160 bottles/500 ml
- Dimension : 900 x 530 x 2140 mm
- Smart Alarm : Fan failure, filter saturation and door sensor
- Option to upgrade to amber glass door

Model	Description
Captair 834 Smart	2 Doors Ductless Filtration Storage Cabinet 834 Smart with RFID cards
Filter Type :	
GF4AS	Carbon Filter for Solvent Vapour
GF4BE	Carbon Filter for Solvent & Acid Vapour
GF4HP	HEPA H14 Filter for dust and powder



CAPTAIR 1634 SMART

4 Doors Ductless Filtering Storage Cabinet With RFID Door Smart Lock

- Storage capacity : up to 320 bottles/500 ml
- Dimension : 1802 x 530 x 2140 mm
- Smart Alarm : Fan failure, filter saturation and door sensor
- Option to upgrade to amber glass door

Model	Description
Captair 1634 Smart	4 Doors Ductless Filtration Storage Cabinet 1634 Smart with RFID cards
Filter Type :	
GF4AS	Carbon Filter for Solvent Vapour
GF4BE	Carbon Filter for Solvent & Acid Vapour
GF4HP	HEPA H14 Filter for dust and powder

LABORATORY CHEMICAL STORAGE CABINET



CUSTOMIZED 2/4 DOORS CHEMICAL STORAGE WITH ERLAB ABOVE

Option of 2/4 Doors Ductless Filtered Storage Cabinet With key lock and individual spillage trays.
Licensed from Erlab Above filtration modular system



Model	Description
ALARA 834 Storage Cabinet	2 Doors Ductless Filtration Storage Cabinet with Erlab Above. Dimension : 900 x 530 x 2135 mm
ALARA 1634 Storage Cabinet	4 Doors Ductless Filtration Storage Cabinet with Erlab Above. Dimension : 1800 x 530 x 2135 mm
Filter Type :	
GF4AS	Carbon Filter for Solvent Vapour
GF4BE	Carbon Filter for Solvent & Acid Vapour
GF4HP	HEPA H14 Filter for dust and powder

PPE STORAGE CABINET

MICROSCOPE STORAGE CABINET



PPE STORAGE CABINET

Personal Protective Equipment (PPE) storage cabinet is essential to provide large space and easy access of laboratory & industrial used PPE.

- 2 Swing doors with wire mesh and key lock
- Dimension : 920 mm x 500 mm x 1800 mm
- Come with 1 hanger and 2 shelves
- We also provide custom-made cabinet according to customer requirement.

Model	Description
T-PC1020-MW	PPE Storage Cabinet with 2 wire mesh swing doors



MICROSCOPE STORAGE CABINET (BASIC UNIT)

ALARA Microscope Basic Storage Cabinet is made with chemical resistant powder coated steel.

- 2 Swing Doors with Insert glass & key-lock
- Dimension : 900 mm x 450 mm x 1960 mm
- Built in temperature controller with sensor and interfacing circuit
- 3 adjustable shelves

Model	Description
T-MC1020-MG	Microscope Storage Cabinet, Basic Unit



MICROSCOPE STORAGE CABINET, WITH DEHUMIDIFIER, UVC AND FILTER

ALARA Microscope Storage Cabinet comes with auto-dehumidifier, UVC lamp to remove fungus/molds and filter unit to remove particulate/pores.

- 2 Swing Doors with Insert glass & key-lock
- Dimension : 900 mm x 750 mm x 1975 mm
- Operating humidity < 50%
- 3 adjustable shelves

Model	Description
T-MC2020-DUF	Microscope Storage Cabinet, with dehumidifier, UVC & filter

OUTDOOR CHEMICAL & WASTE STORAGE BUILDINGS



- Custom modular designed container
- Comply to international Safety Standard
- Explosion proof certified
- 4 hours of fire resistant



Explosion proof temperature control system

Explosion proof exhaust and filtration system

Explosion proof electrical switch box and monitoring system

Explosion proof light system

Automatic fire extinguishing system

Container environment monitoring system

Anti-leakage sum and drainage system

Smart management system

DOUBLE-TIERED PALLETISED DRUM & IBC CONTAINERS STORAGE BUILDING



Non-occupancy design of these buildings with full-face opening doors provides efficient forklift access to contents of palletised drum and/or IBC containers.

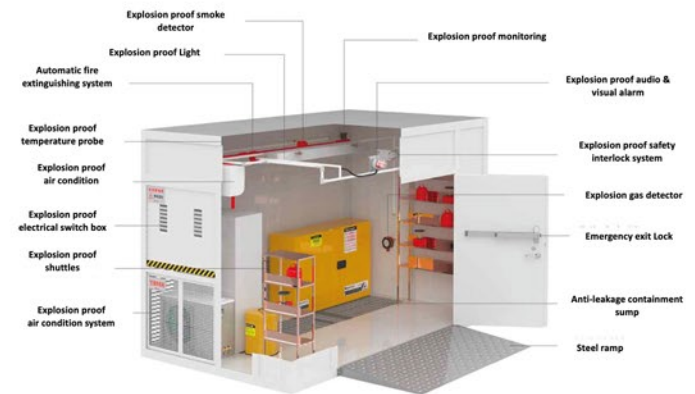
- Suitable for large quantity dangerous chemical storage, hazardous waste storage, outdoor centralized chemical/waste storage
- Complete with explosion proof monitoring system, automatic fire extinguishing system, anti-leakage sump and lighting arrester

WALK IN CHEMICAL & WASTE STORAGE BUILDING



Walk in design, suitable for storage of small chemical containers and outdoor chemical handling station

- Explosion proof building structure
- Temperature controlled system
- Explosion proof exhaust and filtration system
- Build in air purification system
- Complete with Automatic fire extinguishing system, anti-leakage sump and steel ramp



Model	Description
Double-Tiered Palletised Drum & IBC Containers Storage Building	
ZYCCX5000	3000 H x 7000 L x 1800 D mm size, Double tiered, 16 Drums x 2 layers capacity (Drum = 200 L)
ZYCCX6000	3400 H x 7000 L x 1800 D mm size, Double tiered, 6 IBC x 2 layers capacity (IBC = 1,000 L)
ZYCCX7000	3200 H x 7000 L x 1800 D mm size, Double tiered, 6 IBC x 16 drums capacity
Walk In Chemical & Waste Storage Building	
ZYCCX3000-1	2800 H x 6000 L x 2300 D mm size, Walk in Chemical or Waste Storage Building
ZYCCX3000-2	2800 H x 9000 L x 2300 D mm size, Walk in Chemical or Waste Storage Building
ZYCCX3000-3	2800 H x 12000 L x 2300 D mm size, Walk in Chemical or Waste Storage Building

DUCTLESS FUME HOOD

CAPTAIR SMART SERIES



CAPTAIR 321 SMART

2.6 fts Ductless fume hood with smart sensors and filtration system

- Dimension : 800 x 615 x 1154 mm
- Sash type : Oblong
- Fan/Air flow/Filter Sesnor
- Various worktop and stand option

Model	Description
321 Smart	2.6 ft Ductless Fume Hood, 321 smart



CAPTAIR 391 SMART

3.3 fts Ductless fume hood with smart sensors and filtration system

- Dimension : 1005 x 615 x 1154 mm
- Sash type : Oblong
- Fan/Air flow/Filter Sesnor
- Various worktop and stand options

Model	Description
391 Smart	3.3 ft Ductless Fume Hood, 391 smart



CAPTAIR 392 SMART

3.3 fts Ductless fume hood with smart sensors and filtration system

- Dimension : 1005 x 750 x 1332 mm
- Sash type : Reverso Door
- Fan/Air flow/Filter Sesnor
- Various worktop and stand options

Model	Description
392 Smart	3.3 ft Ductless Fume Hood, 392 smart



CAPTAIR 481 SMART

4 fts Ductless fume hood with smart sensors and filtration system

- Dimension : 1280 x 615 x 1154 mm
- Sash type : Oblong
- Fan/Air flow/Filter Sesnor
- Various worktop and stand options

Model	Description
481 Smart	4 ft Ductless Fume Hood, 481 smart



CAPTAIR 483 SMART

4 fts Ductless fume hood with smart sensors and filtration system

- Dimension : 1298 x 750 x 1332 mm
- Sash type : Reverso Door
- Fan/Air flow/Filter Sesnor
- Various worktop and stand option

Model	Description
483 Smart	4 ft Ductless Fume Hood, 483 smart



CAPTAIR 632 SMART

5 fts Ductless fume hood with smart sensors and filtration system

- Dimension : 1600 x 615 x 1154 mm
- Sash type : Oblong
- Fan/Air flow/Filter Sesnor
- Various worktop and stand option

Model	Description
632 Smart	5 ft Ductless Fume Hood, 632 smart



CAPTAIR 633 SMART

5 fts Ductless fume hood with smart sensors and filtration system

- Dimension : 1620 x 750 x 1332 mm
- Sash type : Reverso Door
- Fan/Air flow/Filter Sesnor
- Various worktop and stand option

Model	Description
633 Smart	5 ft Ductless Fume Hood, 633 smart



CAPTAIR 714 SMART

6 fts Ductless fume hood with smart sensors and filtration system

- Dimension : 1819 x 750 x 1332 mm
- Sash type : Reverso Door
- Fan/Air flow/Filter Sesnor
- Various worktop and stand option

Model	Description
714 Smart	6 ft Ductless Fume Hood, 714 smart

* Before proposal, Erlab provide free chemical assessment validation (Valiquest) service. Safety certificate will be provided with information of filter life span and recommendation.

NEXT GENERATION GREEN FUME HOOD



GREEN FUME HOOD GFH5300

External Dimension (mm) : 1433 x 978 x 1590-1673 mm
Volume of air treated : 690 m³/hr

- Neutrodine Unisorb Filter greatly increases the retention capacity for the majority of vapors emitted from a wide variety of laboratory handlings
- User identification and approval system (RFID card)
- Adaptable Modular Filtration Column (AMFC)
- Visual and Audio Active Alert System

Model	Description
GFH5300	5 ft Green Fume Hood, With 3 filters column + 6 Neutrodine Filters

GREEN FUME HOOD GFH6400

External Dimension (mm) : 1849 x 978 x 1590-1673 mm
Volume of air treated : 920 m³/hr

- Neutrodine Unisorb Filter greatly increases the retention capacity for the majority of vapors emitted from a wide variety of laboratory handlings
- User identification and approval system (RFID card)
- Adaptable Modular Filtration Column (AMFC)
- Visual and Audio Active Alert System

Model	Description
GFH6400	6 ft Green Fume Hood, With 4 filters column + 8 Neutrodine Filters

WEIGHING STATION



WEIGHING STATION 321W SMART

External Dimension (mm) : 800 x 615 x 1106– 1292 mm
Volume of air treated : 220 m³/hr (130 cfm)

- OEB Tested and Report
- Stability Table with graphite worktop is available.

Model	Description
321W Smart	2.6 ft Weighing Station, 321W Smart

WEIGHING STATION 392W SMART

External Dimension (mm) : 1005 x 750 x 1332-1518 mm
Volume of air treated : 440 m³/hr (130 cfm)

- OEB Tested and Report
- Stability Table with graphite worktop is available.

Model	Description
392W Smart	3.3 ft Weighing Station, 392W Smart

WEIGHING STATION 483W SMART

External Dimension (mm) : 1298 x 750 x 1332-1518 mm
Volume of air treated : 660 m³/hr (130 cfm)

- OEB Tested and Report
- Stability Table with graphite worktop is also available.

Model	Description
483W Smart	4 ft Weighing Station, 483W Smart

Filter Type :

HEPA Filter HEPA H14 Filter for dust and powder
 filtration efficiency : 99.995% according to MPPS method, EN1822 standard

CUSTOMISED INSTRUMENT ENCLOSURE



Filtered enclosure fully adapted to any size of your instruments that generate chemical vapour.

- Easy to use and install
- Front access and rear access through sliding doors
- Entry ports for cables and hoses
- High filtration efficiency according to NFX15:211 standard
- Transparent panel made of acrylic 8 mm thickness

Model	Description
IEXXX	Customised Instrument Enclosure. Request for quotation.

STANDALONE AIR PURIFICATION SYSTEM



CO2 Indication
HEPA H14 Filters, 2 kg
Activated Carbon Filter, 5 kg

SASOO AIR PURIFICATION SYSTEM

- Powerful – up to 100 m² room size
- Filters 99.995% of extracted viruses and particulates
- Quiet with < 52 dBA
- Fits into every room, 0.25 m² footprint
- With hepa H14 and activated carbon filters

Model	Description
Sasoo	Air Purification System for large room, equipped with Hepa and Carbon Filters

CEILING MOUNTED AIR PURIFICATION SYSTEM (REMOVAL CHEMICAL VAPOUR OR DUST PARTICULATES)

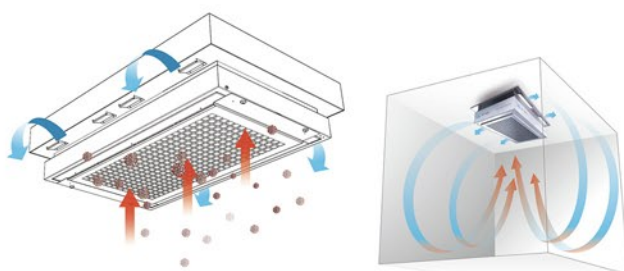
HALO AIR PURIFICATION SYSTEM

Designed for Laboratories, now available for all commercial spaces



Setting the standard for (IAQ) Indoor Air Quality

Air purification is not a one size fit all approach, and each project is unique. Let the professionals with over 50 years of experience in air filtration work with you to develop a tailored plan to address your IAQ challenges of today and beyond.



- Halo is ceiling mounted stand alone air purification system
- No need to connect to existing HVAC system
- Improve air change rate and air movement in the laboratory
- Operate 24 hours/7 days non stop with automatic speed adjustment setting
- It captures fugitive chemical emissions or dust particulates/viruses/bacteria in the room
- Equipped with sensor to ramp up the filtration speed once detected chemical vapour (option with chemical sensor)

HALO P (TIME-BASED) AIR FILTRATION SYSTEM

Model	Description
HALO P HEPA	HALO P Air Filtration System with HEPA H14 Filter for dust particulate/viruses/bacteria
HALO P VOC	HALO P Air Filtration System with VOC Filter to constantly remove VOC in the room
HALO P Chemplus	HALO P Air Filtration System with Chemplus Filter, for removal of solvent and acid vapours

HALO C (WITH CHEMICAL SENSOR) AIR FILTRATION SYSTEM

Model	Description
HALO C VOC	Halo C with Molecode S sensor, VOC Filter for Volatile Organic Compounds removal
HALO C Solvent	HALO C with Molecode S sensor, Chemplus for solvent vapour removal
HALO C Acid	HALO C with Molecode A sensor, Chemplus for acid vapour removal
HALO C Formaldehyde	HALO C with Molecode F sensor, F filter for Formaldehyde vapour removal

ERLAB VERTICAL LAMINAR FLOW



321F SMART LAMINAR FLOW

External (mm) :
800 x 615 x 1106 – 1292 mm
Air Volume : 220 m³/hr

- Slanted sash provides comfortable working position
- UV-C Germicidal Lamp
- Class 5 air quality/ ISO 14644-1
- Stainless steel worktop

Model	Description
321F Smart	2.6 ft Vertical Flow Laminar Cabinet, 321F Smart



391F SMART LAMINAR FLOW

External (mm) :
1005 x 615 x 1106 – 1292 mm
Air Volume : 220 m³/hr

- Slanted sash provides comfortable working position
- UV-C Germicidal Lamp
- Class 5 air quality/ ISO 14644-1
- Stainless steel worktop

Model	Description
391F Smart	3.3 ft Vertical Flow Laminar Cabinet, 391F Smart



483F SMART LAMINAR FLOW

External (mm) :
1298 x 750 x 1332 – 1518 mm
Air Volume : 660 m³/hr

- Slanted sash provides comfortable working position
- UV-C Germicidal Lamp
- Class 5 air quality/ ISO 14644-1
- Stainless steel worktop

Model	Description
483F Smart	4 ft Vertical Flow Laminar Cabinet, 483F Smart



714F SMART LAMINAR FLOW

External (mm) :
1819 x 750 x 1332 – 1518 mm
Air Volume : 880 m³/hr

- Slanted sash provides comfortable working position
- UV-C Germicidal Lamp
- Class 5 air quality/ ISO 14644-1
- Stainless steel worktop

Model	Description
714F Smart	6 ft Vertical Flow Laminar Cabinet 714F smart

ERLAB PCR HOOD



320BIO PCR HOOD

External (mm) : 809 x 616 x 715 mm,
without Hepa Filter

- DNA/RNA Free Workstation :
- Seamless worktop and smooth corners with Stainless Steel 304L top
- Slanted sash provides an ergonomic working position
- UV-C lamp 254 nm triggered with adjustable timer (from 5 – 30 min)
- Visual and Audio Active Alert System

Model	Description
320Bio	2.6 ft PCR Hood without filter



321BIO SMART PCR HOOD

External (mm) : 809 x 616 x 715 mm

- DNA/RNA Free Workstation :
- Seamless worktop and smooth corners with Stainless Steel 304L top
- Slanted sash provides an ergonomic working position
- UV-C lamp 254 nm triggered with adjustable timer (from 5 – 30 min)
- Visual and Audio Active Alert System

Model	Description
321Bio Smart	2.6 ft PCR Hood with filter (clean bench)



391BIO SMART PCR HOOD

External (mm) : 1005 x 616 x 715 mm

- DNA/RNA Free Workstation :
- Seamless worktop and smooth corners with Stainless Steel 304L top
- Slanted sash provides an ergonomic working position
- UV-C lamp 254 nm triggered with adjustable timer (from 5 – 30 min)
- Visual and Audio Active Alert System

Model	Description
391Bio Smart	3.3 ft PCR Hood with filter (clean bench)

CLEAN BENCH SOLUTION



BIOSAFETY CABINET, CLASS II

HFsafe & Alphasafe Class II BSC Type A2 series are certified by NSF 49, EN 12469, CFDA & YY0569 standard

- ULPA filter more than 99.9995% filtration efficiency
- Filter life indicator and smart LCD display
- Multiple length option, from 3 ft to 6 ft.

Model	Description
HFsafe LC	Biosafety Safety Cabinet, Class II, Type A2



LAMINAR FLOW CABINET

Laminar flow cabinet, comes with vertical or horizontal flow, with long shelf life HEPA filter.

- Cleanliness standard : ISO Class 5, Class 1000 (FED 209E)
- Self compensation for the clogging of filters and life span indicator optimized working conditions
- Dimension : 1500 mm L x 760 mm D x 1630 mm H

Model	Description
AlphaClean 1300 V/H	Vertical/Horizontal Laminar Flow Cabinet

GLOVE BAG



PYRAMID PORTABLE GLOVE BAG

Multi-function disposable glove box, made with high quality transparent PVC, assembled in few seconds. indoor or outdoor use.

- External Dimension : 860 mm L x 560 mm W x 725 mm H
- Krystal clear PVC 0.3 mm thickness
- Weight 1.55 kg
- Zipper Length 600 mm Visual and Audio Active Alert System

Model	Description
2200ANM/XL	Captair Pyramid Portable Glove Bag

DUCTED FUME HOOD



POLYPROPYLENE (PP) DUCTED FUME HOOD

PP Ducted fume hood is suitable for handling strong acids, it has the characteristics of acid/alkali resistance and anti-corrosion

- Body and baffle material : 5-8 mm Polypropylene white
- Worktop : 30 mm phenolic worktop
- Come with various length, from 4 ft to 6 ft, Typical Dimension : 1500 mm L x 750 mm D x 800 mm H
- Come with PP base cabinet

Model	Description
PPFH1500	5 ft Polypropylene Ducted Fume Hood – PP White

SUCTION ARM



SUCTION ARM & CAPTURE HOOD

Polypropylene (PP) Suction Arm and Capture Hood, with duct diameter of 4 inches, with extended length of 2.5 meters

- Come with 2HP chemical resistant PP blower fan
- Various customisation is possible, example connected with canopy hood or multiple suction arm.
- Various materials, diameters and lengths are available

Model	Description
PPSA0425	4" PP Suction arm and capture hood

DUCTED FUME HOOD



PROTECTOR DUCTED FUME HOOD

ASHRAE 110 and EN 14175 certified. Tested to ensure maximum safety

- Internal ceramic liner and baffle, to provide chemical and heat resistance
- Unique aerodynamic structure design for outstanding airflow control
- Multiple length from 4 ft to 8 ft models (specify length while order)

Model	Description
Protector DT	Protector ducted fume hood



PROTECTOR FLOOR MOUNTED FUME HOOD

ASHRAE 110 and EN 14175 certified. Tested to ensure maximum safety

- Maximum visibility, with two tempered glass sashes, a total opening height of up to 2.0 metres.
- Internal ceramic liner and baffle, to provide chemical and heat resistance
- Multiple length from 4 ft to 8 ft models (specify length while order)

Model	Description
Protector FM	Protector floor mounted fume hood



PROTECTOR X DUCTED FUME HOOD

ASHRAE 110 and EN 14175 certified. Tested to ensure maximum safety

- Ultra spacious, extremely narrow aerodynamic fascia
- Unique Push-Pull aerodynamic technology
- Internal ceramic liner and baffle, to provide chemical and heat resistance
- Multiple length from 4 ft to 8 ft models (specify length while order)

Model	Description
Protector X	Protector X ducted fume hood (Ultra spacious)



VAV FLOW CONTROL SYSTEM

Variable Air Volume (VAV) Smart Control System

- More precise flow control
- Valve response/stabilization time less than 3 seconds.
- Meet performance requirement of ASHRAE 110 and EN 14175
- Longer lifespan

Model	Description
VAV Flow	VAV flow controller system

For ANSI/ASHRAE110-2016 Fume Hood Performance Testing Hardware and Software



ASHI/ASHRAE 110 FUME HOOD PERFORMANCE TESTING HARDWARE & SOFTWARE

Complete fume hood performance test kit according to ANSI/ASHRAE 110, consist of

- SF6 tracer gas analyser
- Face velocity test kit
- Smoke tester
- Manniquin stand
- Software

Model	Description
FH ASHRAE 110	Complete fume hood test set according to ASHRAE 110



SF6 GAS LEAK DETECTOR

ESD (Electron Capture) SF6 gas leak portable detector

- Fast response, 1 sec
- Sensitivity 0.01 ppm
- Dimension : 430 mm H x400 mm W x 230 mm D
- Accuracy : +/-5%
- Leak rate 1 x 10-8 ml/s

Model	Description
Q200	SF6 Gas Leak Detector

CUSTOMISED LABORATORY FURNITURE



DESIGN AND CUSTOMISED LABORATORY FURNITURE

Tested, certified & high quality laboratory furniture for laboratories. We involve in planning, designing, project management, and installation & commissioning. We supply powder coated galvanised steel furniture and poly propylene (PP) laboratory furniture

Model	Description
TMS-Furniture	Laboratory furniture
TMS-PP Furniture	Laboratory PP furniture
TMS-ProjectTK	Laboratory Turn-key project
TMS-SchFurniture	School Classroom furniture

INDUSTRIAL FUME EXTRACTOR



Cleaning system for electrostatically charged surfaces : ioniser, flushing air, brush and extraction rolled into one

JUMBO FILTERROLLEY 2.0 MOBILE FILTRATION UNIT

ULT Jumbo Filterrolley 2.0 LabCat is a mobile extraction and filtration unit for changing work sites and application where there is lack of space.

- The unit combined multiple type of filtration, guarantees air purification from course to finest dusts, odours and hazardous gases.
- Dimension : 450 mm L x 340 mm D x 540 mm H
- Combined filters : G4, M5, H13 Filter & activated carbon

Model	Description
Jumbo 2.0 LabCat	Jumbo Filterrolley 2.0 Mobile Filtration Unit

ELECTROSTATIC CHARGED SURFACE CLEANING UNIT

ULT Jumbo Filterrolley 2.0 Elephant is a mobile all-in-one cleaning unit for EC (electrostatically charged) surfaces.

- Ioniser hand unit with exchangeable round brush, with multi-channel compressed air nozzle
- Dimension : 530 mm L x 320 mm D x 600 mm H
- Combined filters : G4, M5 and H13 Filter

Model	Description
Jumbo 2.0 Elephant	ULT Jumbo Filterrolley 2.0 Elephant EC surface cleaning unit

INDUSTRIAL FUME EXTRACTOR



LASER FUME EXTRACTOR

ULT extraction and filtration technology for laser fume removal

Applications : Laser cutting, sintering, welding, marking, structuring, ablation, printing and medical laser

- Dimension : 460 L x 475 D x 975 H mm

Model	Description
LAS 260	LAS Fume Extractor for Laser Fumes



CHEMICAL VAPOUR EXTRACTOR

ULT extraction and filtration technology for removal of hazardous vapours, gases and odours.

Applications : Laminating, coating, dosing, and any application that involve chemicals.

- Dimension : 630 L x 580 D x 900 H mm

Model	Description
ACD 400	ACD Fume Extractor for chemical vapours



DUST & POWDER EXTRACTOR

ULT extraction and filtration technology for removal of dust, smoke and gases.

Applications : Grinding, cutting, milling, crafts, restoration, and weighing

- Dimension : 585 L x 475 D x 766 H mm

Model	Description
ASD 300	ASD Fume Extractor for dust and powder



OIL MIST EXTRACTOR

ULT extraction and filtration technology for removal of oil mists and vapours.

Applications : Metal work with cooling lubricants, eroding, deep-hole drilling, oil bath exhausting and oil pump

- Dimension : 370 L x 370 D x 700 H mm

Model	Description
AOD 200	AOD Fume Extractor for oil mists



SOLDERING FUME EXTRACTOR

ULT extraction and filtration technology for removal of fluxes, decomposition products and dust/smoke during soldering.

Applications : Manual soldering operations

- Dimension : 400 L x 390 D x 610 H mm

Model	Description
LRA 200	LRA Fume Extractor for Soldering Work



WELDING FUME EXTRACTOR

SAS extraction and filtration technology for removal of welding fumes

Applications : Manual welding operations

- Come with fire retardant flex arm and hood
- Dimension : 575 L x 500 D x 550 H mm

Model	Description
SS-400-WFE	Welding Fume Extractor



LABORATORY MULTI-GAS MONITORING SYSTEM



MULTI GAS MONITOR FOR LABORATORY

Ax60+ is a wall mountable multi gas monitor for detection of CO2 with an option for monitoring O2.

- Alarm set points can be fully customized by the user
- Approval from EN50270, IEC61010 (UL), CE, DIN6653 (TUV)
- Max 4 sensors, 8 alarm set

Model	Description
Ax60+	CO2 & O2 multi gas monitor system for laboratories, Ax60+



OXYGEN ENRICHMENT & DEPLETION MONITOR

Monitor oxygen enrichment and depletion ranges from 0 to 25%. 1 low and 1 high audio/visual alarm

- Long shelf life of oxygen sensor
- Wall mounted
- Response time, <60 seconds

Model	Description
SAFE-OX+	Oxygen Enrichment & Depletion Monitor, SAFE-OX+



OXYGEN DEPLETION MONITOR

An ambient oxygen depletion monitor comprising a wall mounted main sensor unit and a repeater

- Long shelf life of oxygen sensor
- Wall mounted
- Response time, <60 seconds

Model	Description
O2NE+	Oxygen Depletion Monitor, O2NE+

MONITORING DEVICES



STROBOSCOPE FOR RPM

NS-600 is designed to measure speed of rotating object, like fan speed and motions.

- Battery powered
- NIST Traceable Calibration
- Range 12-120,000 fpm/rpm

Model	Description
NS-600	LED Stroboscope



PORTABLE HOT-WIRE ANEMOMETER

Hot wire anemometer to monitor air flow velocity

- Battery powered
- Measuring range 0.0 – 5.0 m/s, 0.0–10.0 m/s
- Resolution 0.01 m/s

Model	Description
FH ASHRAE 110	Complete fume hood test set according to ASHRAE 110

SERVICES

Laboratory Safety, Equipment Performance Test and Compliance Testing

TMS Service Team provide independent testing service as follow :

Model	Description
Serv/LEV	Local Exhaust Ventilation Annual Testing by IHT2 (Ducted/Ductless Fume Hood)
Serv/CHRA	Chemical Hazard Risk Assessment Services
Serv/DOE	Chimney/Stack DOE submission service
Serv/Filter Replacement	Filter Replacement & Disposal Service
Serv/PM	Annual PM Service for Equipment
Serv/BSC&LFC	BSC & LFC filter replacement/testing service

WATER ACTIVITY & MOISTURE

AQUALAB



AQUALAB 4TE WATER ACTIVITY METER

Fast, precise and reliable water activity meter, leading the market in speed & accuracy.

- Sensor: Chilled mirror dew point sensor (primary method)
- Range: 0.0300 – 1.0000 aw
- Resolution: 0.0001 aw (4 decimal points)
- Accuracy: ± 0.0030 aw
- Repeatability: 0.0010 aw
- Temperature control from 15°C - 50°C
- Read time: ~5min
- CE, AOAC approved method

Model	Description
Aqualab 4TE	Aqualab 4TE water activity meter



AQUALAB PRE WATER ACTIVITY METER

Robust entry level water activity meter with stripped down form, not limited function.

- Sensor: Chilled mirror dew point sensor (primary method)
- Range: 0.050 – 1.000 aw
- Resolution: 0.001 aw (3 decimal points)
- Accuracy: ± 0.010 aw
- Temperature default at room temp.
- Read time: ~5min
- CE, AOAC approved method

Model	Description
Aqualab PRE	Aqualab PRE water activity meter



AQUALAB PAWKIT WATER ACTIVITY METER

Grab & Go portable water activity meter.

- Sensor: Capacitance sensor
- Range: 0.00 – 1.00 aw
- Resolution: 0.01 aw (2 decimal points)
- Accuracy: ± 0.02 aw
- Read time: ~5min
- CE, manufactured under ISO 9001:2015 EM, ISO/IEC 17050:2010

Model	Description
Aqualab Pawkit	Aqualab Pawkit water activity meter



AQUALAB TDL2 WATER ACTIVITY METER

Precise water activity data for even the most volatile compounds.

- Sensor: Tunable diode laser sensor
- Range: 0.0000 – 1.0000 aw
- Resolution: 0.0001 aw (4 decimal points)
- Accuracy: ± 0.0050 aw
- Repeatability: 0.0010 aw
- Temperature control from 15°C - 50°C
- Read time: ~5min
- CE, manufactured under ISO 9001:2015 EM, ISO/IEC 17050:2010

Model	Description
Aqualab TDL2	Aqualab TDL2 water activity meter



AQUALAB 3 (AQ3) WATER ACTIVITY METER

One-minute analysis with SKALA-powered predictive AI, also total moisture content analyzer.

- Sensor: Chilled mirror dew point and capacitive hygrometer
- Range: 0.0300 – 1.0000 aw
- Resolution: 0.0001 aw (3 decimal points)
- Accuracy: ± 0.005 aw (dew point); ± 0.015 aw (capacitance)
- Repeatability: 0.002 aw (dew point); 0.010 aw (capacitance)
- Temperature controlled at constant 25.00°C
- Read time: ~5min
- Display: iPad

Model	Description
Aqualab 3 AQ3	Aqualab 3 (AQ3) water activity meter

RAPID MOISTURE ANALYZER



Model	Description
XM 50	Precisa (Switzerland) Moisture Analyzer, 52g x 1mg, 30-170°C



Model	Description
MX-50	A&D (Japan) Moisture Analyzer, 51g x 0.001g, 50-200°C

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AQUALAB VAPOUR SORPTION ANALYZER (VSA)

High-resolution moisture sorption isotherms for shelf life prediction. Isotherms in <48hrs with 200+ data points.

- Range: 0.0300 – 0.9500 aw
- Resolution: 0.0001 aw (4 decimal points)
- Accuracy: ± 0.0050 aw
- Isotherm methods: Dynamic Dew Point isotherm (DDI) & Static (DVS)
- Temperature range: 15.00 – 60.00°C
- Temperature resolution: 0.01°C
- Temperature accuracy: ± 0.10 °C
- Read time: ~5min (~48 hrs for a DDI test)

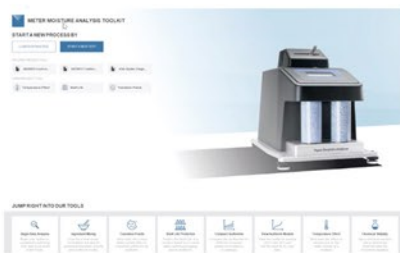
Model	Description
VSA	Aqualab Vapour Sorption Analyzer



AQUALAB WATER ACTIVITY STANDARD

0.250 aw standard, 13.41 mol/kg LiCl
 0.500 aw standard, 8.57 mol/kg LiCl
 0.760 aw standard, 6.00 mol/kg NaCl
 0.920 aw standard, 2.33 mol/kg NaCl
 0.984 aw standard, 0.50 mol/kg KCl
 1.000 aw standard, USP purified water

Model	Description
40460 - 40465	Aqualab water activity standard, box of 50 vials



AQUALAB MOISTURE ANALYSIS TOOLKIT (MAT)

- All the moisture calculations in one place
- Select the model, input equations and the toolkit does the calculating
- Calculate product shelf life
- Evaluate packaging
- Determine critical water activity for caking, clumping and texture changes
- Predict the final water activity of a recipe
- Predict the effect of storage conditions

Model	Description
MAT	Aqualab Moisture Analysis Toolkit



AQUALAB SAMPLE CUPS & LIDS

Sample cups and lids
 500 units

Model	Description
40106	Aqualab Sample Cups & Lids



AQUALAB MOISTURE ANALYZER (ROS1)

Automated moisture analyzer for high-throughput labs. 9 samples, 40 minutes, zero busywork.

- Range: 0.1 – 100.0%
- Repeatability (4g sample): 0.1%
- Repeatability (10g sample): 0.0%
- Method: Loss on drying using any standard method
- Scale maximum: 50.00g
- Scale calibration: Performed in Bridge software
- Sample number: 1 – 9
- Sample size range: 0.50 – 20.00g
- Heat source: Resistive coils provide conductive heat
- Temperature range: 50.00 – 150.00°C
- CE, manufactured under ISO 9001:2015 EM, ISO/IEC 17050:2010

Model	Description
ROS1	Aqualab Moisture Analyzer



AQUALAB CLEANING KIT

1 x kimwipes
 3 x distilled water
 3 x cleaning solution
 3 x activated charcoal carbon

Model	Description
30595	Aqualab Cleaning Kit

WATER ACTIVITY AND GROWTH OF MICROORGANISMS IN FOOD



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	Range of a_w	Microorganisms Generally Inhibited by Lowest a_w in This Range	Foods Generally within This Range
	1.00–0.95	<i>Pseudomonas</i> , <i>Escherichia</i> , <i>Proteus</i> , <i>Shigella</i> , <i>Klebsiella</i> , <i>Bacillus</i> , <i>Clostridium perfringens</i> , some yeasts	Highly perishable (fresh) foods and canned fruits, vegetables, meat, fish, milk, and beverages
	0.95–0.91	<i>Salmonella</i> , <i>Vibrio parahaemolyticus</i> , <i>C. botulinum</i> , <i>Serratia</i> , <i>Lactobacillus</i> , <i>Pediococcus</i> , some molds, yeasts (<i>Rhodotorula</i> , <i>Pichia</i>)	Some cheeses (Cheddar, Swiss, Muenster, Provolone), cured meat (ham), bread, tortillas
	0.91–0.87	Many yeasts (<i>Candida</i> , <i>Torulopsis</i> , <i>Hansenula</i>), <i>Micrococcus</i>	Fermented sausage (salami), sponge cakes, dry cheeses, margarine
	0.87–0.80	Most molds (mycotoxigenic penicillia), <i>Staphylococcus aureus</i> , most <i>Saccharomyces (bailii) spp.</i> , <i>Debaryomyces</i>	Most fruit juice concentrates, sweetened condensed milk, syrups, jams, jellies, soft pet food
	0.80–0.75	Most halophilic bacteria, mycotoxigenic aspergilli	Marmalade, marzipan, glacé fruits, beef jerky
	0.75–0.65	Xerophilic molds (<i>Aspergillus chevalieri</i> , <i>A. candidus</i> , <i>Wallemia sebi</i>), <i>Saccharomyces bisporus</i>	Molasses, raw cane sugar, some dried fruits, nuts, snack bars, snack cakes
	0.65–0.60	Osmophilic yeasts (<i>Saccharomyces rouxii</i>), few molds (<i>Aspergillus echinulatus</i> , <i>Monascus bisporus</i>)	Dried fruits containing 15-20% moisture; some toffees and caramels; honey, candies
	0.60–0.50	No microbial proliferation	Dry pasta, spices, rice, confections, wheat
	0.50–0.40	No microbial proliferation	Whole egg powder, chewing gum, flour, beans
	0.40–0.30	No microbial proliferation	Cookies, crackers, bread crusts, breakfast cereals, dry pet food, peanut butter
	0.30–0.20	No microbial proliferation	Whole milk powder, dried vegetables, freeze dried, corn starch, potato chips, corn chips

* Adapted from L.R. Beuchat, *Cereal Foods World*, 26:345 (1981).

PROTEIN ANALYSIS DIGESTION



MICRO KJEDAHL BLOCK DIGESTION

- With 16, 24 or 40 sample slots
- With digestion vessels of 100mL
- 25 freely configurable programs
- Complete systems with digestion vessels, rack & extraction hood

Model	Description
K16	Behr-Labor Kjedaahl
K24	Block Digestion with digestion vessel 100mL
K40	



STANDARD KJEDAHL BLOCK DIGESTION

- With 8, 12 or 20 sample slots
- With digestion vessels of 250mL
- 25 freely configurable programs
- Complete systems with digestion vessels, rack & extraction hood

Model	Description
K8	Behr-Labor Kjedaahl
K12	Block Digestion with digestion vessel 250mL
K20	



INFRARED RAPID DIGESTION (MANUAL ENERGY CONTROL)

- Direct heating using high quality quartz infrared heaters
- Constant heating to 410°C in approx. 10 min
- With 4, 6 or 12 sample slots
- With digestion vessels of 100mL, 250mL, 500mL, 750mL.
- Complete systems with tiered rack, fume removal unit, insert rack and digestion vessels

Model	Description
InKjel-M	Behr-Labor Kjedaahl Infrared Digestion with manual energy regulation



INFRARED RAPID DIGESTION (WITH TEMPERATURE CONTROL)

- Direct heating using high quality quartz infrared heaters
- Constant heating to 410°C in approx. 10 min
- With 4, 6, 10 or 12 sample slots
- With digestion vessels of 100mL, 250mL, 500mL, 750mL.
- Complete systems with tiered rack, fume removal unit, insert rack and digestion vessels

Model	Description
InKjel-TCP	Behr-Labor Kjedaahl Infrared Digestion with programmable power setting



BUCHI KJELDIGESTER

Reduces block digestion process by up to 2 hours.

- Max. temperature: 450°C
- Sample positions: 20
- Sample parameter: Total Kjeldahl Nitrogen

Model	Description
K-446	KjelDigester with manual lift
K-449	KjelDigester with automatic lift & temperature programs



BUCHI SPEEDDIGESTER

The entry level of IR digester

- Max. temperature: 580°C
- Sample positions: 5 - 20
- Sample parameter: Total Kjeldahl Nitrogen, Chemical Oxygen Demand (COD), heavy metals, phosphate

Model	Description
K-425	SpeedDigester, with 6 positions
K-436	SpeedDigester, with 12 positions
K-439	SpeedDigester, with 12 positions & temperature programs

PROTEIN ANALYSIS

DISTILLATION & TITRATION



S1 STEAM DISTILLER



S2 STEAM DISTILLER



S3 STEAM DISTILLER



S4 STEAM DISTILLER



S5 STEAM DISTILLER

- Robust and insensitive housing made of polyurethane
- Distillation time approx. 3 min per sample
- Detection limit 0.1 mg N
- Retrieval rate > 99.5%
- Reproducibility $\pm 1\%$
- Adjustable steam output (10% - 100%)
- Particularly easy, menu-driven operation using a single-knob control
- Programmable reaction time & distillation time
- USB interface
- Level monitoring for canister set
- Practical quick release clamping device (easily operate with left hand)

Model	Description
S1	Behrotest® steam distiller with automatic addition of NaOH
S2	Behrotest® steam distiller with automatic addition of NaOH & H ₂ O
S3	Behrotest® steam distiller with automatic addition of NaOH & H ₂ O with automatic extraction of sample residues with 10 programs
S4	Behrotest® steam distiller with automatic addition of NaOH, H ₂ O & H ₃ BO ₃ with automatic extraction of sample residues with 99 programs
S5	Behrotest® steam distiller with automatic addition of NaOH, H ₂ O & H ₃ BO ₃ with automatic extraction of sample residues with 99 programs and a connection option for external titrator



BUCHI EASYKJEL



BUCHI BASICKJEL



BUCHI MULTIKJEL

BUCHI's latest steam distillation units

- Adjustable steam power: 10 – 100% programmable steam ramps
- Sample parameters: Total Kjeldahl Nitrogen, Total Volatile Basic Nitrogen, nitrate, nitrite

Model	Description
EasyKjel	Buchi Kjel Line Steam Distiller with NaOH pump
BasicKjel	Buchi Kjel Line Steam Distiller with NaOH pump, H ₂ O pump, AutoDist
MultiKjel	Buchi Kjel Line Steam Distiller with NaOH pump, H ₂ O pump, AutoDist, sample disposal, boric acid dosing & titration vessel

FAT ANALYSIS SOXHLET EXTRACTION



Behrotest® series extraction devices are the cost-effective and user-friendly solution for classis Soxhlet extractions.

- Complete with reaction vessels, intermediate extraction pieces and condensers
- Energy individually adjustable for every sample position
- Cooling water distribution strip ensures uniform cooling at sample positions
- Extractors with specially developed siphon tubes guarantee consistent extraction cycles
- Brackets for safety holding the intermediate extraction pieces

Model	Description
KEX 30	Behrotest® serial heating unit for 30mL extraction, 100mL round bottom flask, 1 position
R 304 / 306 / 308	Behrotest® serial heating unit for 30 mL extraction, 100mL round bottom flask, 4 positions / 6 positions / 8 positions
KEX 60	Behrotest® serial heating unit for 60mL extraction, 250mL round bottom flask, 1 position
R 604 / 606	Behrotest® serial heating unit for 60mL extraction, 250mL round bottom flask, 4 positions / 6 positions

TWISSELMANN EXTRACTION

Extraction according to Twisselmann is a continuous hot extraction, improves solubility and shortens the extraction time up to 50%

Model	Description
KEX 100T	Behrotest® compact system for 100mL hot extraction according to Twisselmann, 1 position
R 104T / 106T	Behrotest® serial heating unit according to Twisselmann, 250mL round bottom flask, 4 positions / 6 positions

RANDALL EXTRACTION



BEHROTEST® ES 2+2

BEHROTEST® ES 6

Hot extraction procedure according to Randall consists of 3 steps: Boiling, Rinsing, Recovery.

- Step by step user friendly instructions on the display
- One heating program for all sample positions
- Cooling water manifold ensures uniform cooling
- Low solvent losses attributed to the specially designed behrotest® coolers
- 31 freely configurable programs for individual extraction applications
- Audible and visual error messages
- Integrated overtemperature protection
- Resource-saving cooling water saving program

Model	Description
ES 2+2	Behrotest® Semi-automatic hot extraction according to Randall, 100 mL extraction tubes, 4 sample positions
ES 6	Behrotest® Semi-automatic hot extraction according to Randall, 100 mL extraction tubes, 6 sample positions

FAT ANALYSIS

FULLY AUTOMATIC FAT EXTRACTION SYSTEM



Model	Description
E-500	Fully automatic FatExtractor E-500 (SOX / LSV / HE / ECE)

Buchi fully automatic FatExtractor E-500 is designed for quick and compliant fat extraction. Interchangeable glass assembly and execute extractions according to Soxhlet, Randall or Twisselmann

- Applications: Fat extraction from food & feed samples
- Extraction method: Soxhlet, Hot extraction, Continuous extraction
- Solvents: Petroleum ether, hexane, chloroform
- Glass sample tube: Standard 65mL

EVAPORATION & EXTRACTION



ROTAVAPOR® R-80

Evaporation on the smallest footprint

Most energy-efficient Rotavapor® to date and the most compact Rotavapor® on the market. The R-80 is an affordable and eco-friendly solution that ensures the most efficient use of lab space while meeting BUCHI's high-quality standards.

- Evaporating flask size : up to 1000 mL
- Footprint : 345mm W x 315 mm D
- Temperature range : up to 95 °C



ROTAVAPOR® R-300

Convenient and efficient rotary evaporation

The Rotavapor® R-300 meets the highest expectations of convenience and versatility in rotary evaporation. Its modular design allows the R-300 to be extended to a fully integrated system where a central interface regulates each component.

- Evaporating flask size : 50 – 5000 mL
- Lift mechanism : Manual or automatic
- Temperature range : 20 – 220 °C

FIBER ANALYSIS

CRUDE FIBER



BEHROTEST® CF 2+2



BEHROTEST® CF 6

Behrotest® comfort line equipment for the determination of crude fiber
Ideally suited for:

- Total crude fiber determination (part of the Weender animal feed analysis)
- Neutral detergent fiber and acid detergent fiber determination (NDF & ADF according to Van Soest)
- Acid detergent lignin determination (ADL according to Van Soest)
- Different fractions of fiber (cellulose, hemicellulose and pectin)

Model	Description
CF 2+2	Behrotest® Semi-automatic crude fiber extraction unit, 4 sample positions
CF 6	Behrotest® Semi-automatic crude fiber extraction unit, 6 sample positions



BEHROTEST® DG 2+2



BEHROTEST® DG 6

Model	Description
DG 2+2	Behrotest® cold extraction unit for degreasing, 4 sample positions
DG 6	Behrotest® cold extraction unit for degreasing, 6 sample positions

DIETARY FIBER



Behrotest® filtration unit EN 6-V performs the last filtration and rinsing phase required by the enzymatic method

- Maximum 6 sample positions
- Shaking water bath WBMR simulate the enzymatic digestions
- Glass funnels facilitate the filtration process
- Vacuum accelerates the filtration and rinsing phase

Model	Description
EB 6-V	Behrotest® filtration unit with 6 positions
WBMR	Behrotest® temperature controlled water bath with magnetic stirrer and lid

Refer Megazyme for the Total Dietary Fiber assay kit



ENZYMATIC ASSAY KIT



MEASUREMENT OF DIETARY FIBER / STARCH

Model	Description
K-TDFR-200A	Total Dietary Fiber Assay Kit, 200 assays
K-INTDF	Integrated Total Dietary Fiber Assay Kit, 100 assays
K-RINTDF	Rapid Integrated Total Dietary Fiber Assay Kit, 100 assays
K-TDFC	Total Dietary Fiber Controls
K-DSTRS	Digestible and Resistant Starch Assay Kit, 40 assays
K-SDAM	Starch Damage Assay Kit, 200 assays
K-RSTAR	Resistant Starch Assay Kit, 100 assays
K-TSTA-100A	Total Starch Assay Kit (AA/AMG), 100 assays
K-TSHK	Total Starch HK Assay Kit, 100 assays
K-TSCK	Total Starch Control Flours



ANALYTICAL ENZYMES

Model	Description
E-AMGDF	Amyloglucosidase (<i>Aspergillus niger</i>)
E-BLAAM	α -Amylase (<i>Bacillus licheniformis</i>)
E-BSPRT	Protease (Subtilisin A from <i>Bacillus licheniformis</i>)
E-ANAAM	α -Amylase (<i>Aspergillus oryzae</i>)
E-BSTAA	α -Amylase (Thermostable)(<i>Bacillus</i> sp.)
E-PANAA	α -Amylase (Porcine Pancreatic)
E-CELAN	Cellulase (end0-1,4- β -D-glucanase)(<i>Aspergillus niger</i>)
E-FRMXLQ	Fructanase Mixture (liquid)
E-FRMXPD	Fructanase Mixture (powder)



MEASUREMENT OF MONOSACCHARIDES / DISACCHARIDES / POLYSACCHARIDES

Model	Description
K-GLUC	D-Glucose Assay Kit (GOPOD format), 660 assays
K-GLUHK	D-Glucose HK Assay Kit, 220 assays
K-URONIC	D-Glucuronic / D-Galacturonic Acid Assay Kit, 100 assays
K-SUFRG	Sucrose / D-Fructose / D-Glucose Assay Kit, 300 assays
K-TREH	Trehalose Assay Kit, 100 assays
K-AMYL	Amylose/Amylopectin Assay Kit, 100 assays
K-FRUCHK	Fructan HK Assay Kit, 50 assays
K-FRUC	Fructan Assay Kit, 100 assays
K-BGLU	β -Glucan Assay Kit (Mixed Linkage), 100 assays
K-EBHLG	Enzymatic Yeast β -Glucan Assay Kit, 50 assays
K-YBGL	β -Glucan Assay Kit (Yeast and Mushroom), 100 assays
K-PECID	Pectin Identification Assay Kit, 500 assays



MEASUREMENT OF ENZYME ACTIVITY

Model	Description
K-CERA	α -Amylase Assay Kit (Ceralpha Method), 200 assays
K-AMYLSA	α -Amylase SD Assay Kit, 320 assays
K-CATAL	Catalase Assay Kit, 200 assays
K-CellG5-4V	Cellulase Assay Kit (CellG5 Method), 240 assays
K-GLOX	Glucose Oxidase Assay Kit, 200 assays
K-XYLS	Xylanase Assay Kit (Xylazyme AX), 200 assays



Food



Cereals & Dietary Fiber



Animal Feed & Nutrition



Dairy & Infant Formula

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SERVICE, REPAIR & CALIBRATION

ENZYMATIC ASSAY KIT

MEASUREMENT OF SUGAR ALCOHOLS / ORGANIC ACIDS

Model	Description
K-ETOH	Ethanol Assay Kit, 60 assays
K-INOSL	myo-Inositol Assay Kit, 50 assays
K-MANOL	D-Mannitol Assay Kit, 60 assays
K-SORB	D-Sorbitol/Xylitol Assay Kit, 58 assays
K-ACET	Acetic Acid Assay Kit (ACS Manual Format), 53 assays
K-ACETAK	Acetic Acid Assay Kit (Acetate Kinase Analyser Format)
K-CITR	Citric Acid Assay Kit, 72 assays
K-FORM	Formic Acid Assay Kit, 25 assays
K-GLUT	L-Glutamic Acid Assay Kit, 60 assays
K-DATE	D-Lactic Acid (D-Lactate)(Rapid) Assay Kit, 50 assays
K-LATE	L-Lactic Acid (L-Lactate) Assay Kit, 50 assays
K-PHYT	Phytic Acid Assay Kit, 50 assays
K-SUCC	Succinic Acid Assay Kit, 20 assays



MEASUREMENT OF SULFITE / NITROGEN

Model	Description
K-AMIAR	Ammonia Assay Kit (Rapid), 96 assays
K-LARGE	L-Arginine/Urea/Ammonia Assay Kit, 50 assays
K-PANOPA	Primary Amino Nitrogen Assay Kit (PANOPA), 100 assays
K-URAMR	Urea/Ammonia Assay Kit (Rapid), 100 assays



VERATOX® ELISA MYCOTOXIN SOLUTIONS



- Broad range of validated and approved commodities
- Batch testing – Up to 19 samples at one time
- Minimal training and a microwell reader (650nm)
- MAX – aqueous extraction method
- HS – high sensitivity, detects lower levels of toxins

Veratox®	
8030**	Veratox® for Aflatoxin**
8019	Veratox® for Aflatoxin M1
8335**	Veratox® for DON 2/3**
8830*	Veratox® for Fumonisin*
8610	Veratox® for Ochratoxin
8230	Veratox® for T-2/HT-2
8110	Veratox® for Zearalenone
Veratox® MAX	
8035	Veratox® MAX for Total Aflatoxin
8135	Veratox® MAX for Zearalenone
Veratox® HS	
8031	Veratox® HS for Aflatoxin
8332	Veratox® HS for DON
8832	Veratox® HS for Fumonisin
8632	Veratox® HS for Ochratoxin

*AOAC Approved
**AOAC FGIS Approved



STAT-FAX 4700 MICROWELL ELISA READER

Model	Description
9303	<ul style="list-style-type: none"> • Automatic strip transportation • Bichromatic optics with four filters (405, 450, 492 and 650nm) • Easy-to-use with step-by-step prompting • On-board graphics printing • Calculates results automatically • Includes one 3x12 strip carrier for break apart microwells • Syncs with Veratox software for simple reporting, storage, and tracking of results

FOOD TOXINS ANALYSIS

AOAC AND FGIS APPROVED TESTING SOLUTIONS FOR MYCOTOXINS



QUALITATIVE STRIP TEST MYCOTOXIN TESTING METHOD

Product Code	Description
100000173	AflaCheck Kit
100000198	DONCheck Kit



VERTU TOUCH LATERAL FLOW READER MYCOTOXIN TESTING METHOD

Product Code	Description
176005106	Afla-V ONE
176004972	Afla-V AQUA
176005226	DON-V ONE
176004973	DON-V AQUA
176004974	Fumo-V AQUA
176005232	Glyphosate-V
176004975	Ochra-V AQUA
176004976	Zearala-V AQUA
176004977	T2/HT2-V AQUA
176005in1+	Mycos 5-in-1 PLUS



VERTU TOUCH LATERAL FLOW READER BASIC EQUIPMENT PACKAGE

Product Code	Description
176005142	Vertu Touch Basic Equipment Package



Included with :

Vertu TOUCH Reader; Vertu TOUCH Protective Case; Graduated Cylinder, 50ml; Micro-pipettor, 100ul; Strip Test Vial Rack; Digital Timer; Micro-pipette Tips, 100ul (25 pcs); Vertu PREP Mixer; Vertu PREP Extraction Tubes (5 pcs/pack); Digital Pocket Balance; Vertu TOUCH iQuick Start Guide; Adapters

HPLC/UPLC AND LC-MS MYCOTOXIN TESTING METHOD

Product Code	Description	Product Code	Description
G1003	Afla B Columns	G1065	DONtest WB Columns
G1007	Afla M1 Columns	176002933	DON/NIV WB Columns
G1017	AflaOchra LC Columns	G1008	FumoniTest Columns
G1010	AflaTest Columns	G1060	FumoniTest WB Columns
G1024	AflaTest WB Columns	100000176	Mycos 6in1+ LC/MS/MS
G1068	AflaTest WB Super Recovery Columns	13012	OchraTest Columns
176004746	AflaTest WB SR+ Columns	G1033	OchraTest WB Columns
G1031	AOZ LC Columns	G1028	T-2test LC Columns
176004211	BPATest Columns	176000207	T-2/HT-2 LC Columns
G1070	CitriTest LC Columns	G1012	ZearalaTest Columns
G1005	DONtest LC Columns	G1026	ZearalaTest WB Columns



HPLC/UPLC AND LC-MS MYCOTOXIN TESTING METHOD

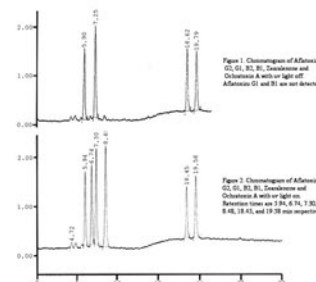
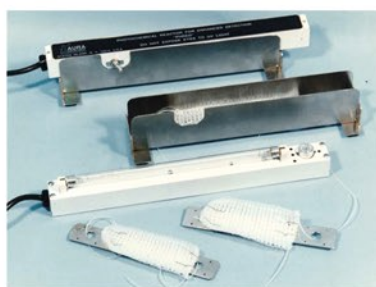
Product Code	Description
G1003	Afla B Columns
G1010	AflaTest Columns
G1047	Afla M1 FL+ Columns
G1008	FumoniTest Columns
13012	OchraTest Columns
G1012	ZearalaTest Columns



HPLC DETERMINATION OF AFLATOXINS BY POST-COLUMN PHOTOCHEMICAL DERIVATIZATION AND FLUORESCENCE DETECTION

Model: PHRED-CE-12
Brand: AURA, USA

Photochemical reactor consists of a lamp holder, a 254 nanometer low pressure mercury lamp, and a holder for the knitted reactor coils (KRCs).



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TEAMFOOD

TEAMMETER

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FOOD ALLERGEN ANALYSIS



- Partnering with the Food Allergy Research and Resource Program (FARRP) since 1998 on allergen testing
- World leading comprehensive line of allergen tests
- Validated for testing low levels of target allergen in a wide variety of food and environmental samples

REVEAL® & REVEAL® 3-D LATERAL FLOW ALLERGEN ANALYSIS



- Industry-leading fast, actionable results within five minutes
- Require minimal training and no equipment needed
- Unique three lines of detection with an 'Overload' line to prevent oversaturation and alert of a high positive result

Reveal® & Reveal® 3-D		Limit of Detection
8555	Reveal® for Multi-Treenut	0.2-2 ppm
902086G	Reveal® 3-D for Almond	0.5 ppm
8565	Reveal® 3-D for Coconut	1 ppm
902081S	Reveal® 3-D for Crustacea	0.5 ppm
902082Q	Reveal® 3-D for Egg	1.2 ppm
8505**	Reveal® 3-D for Gluten**	5 ppm
902087E	Reveal® 3-D for Hazelnut	0.4 ppm
8405	Reveal® 3-D for Mustard	0.9 ppm
901041L*	Reveal® 3-D for Peanut*	0.7 ppm
8535	Reveal® 3-D for Sesame	0.7 ppm
902093K	Reveal® 3-D for Soy	0.4 ppm
8479	Reveal® 3-D for Total Milk	1.3 ppm

*AOAC approved

**AOAC approved, Gluten-Free Certification Organization (GFCO) approved

VERATOX®, VERATOX VIP & BIOKITS ELISA ALLERGEN ANALYSIS



- Produce results in 30 minutes for Veratox® and 180 minutes for BioKits following extraction
- Require minimal training and equipment
- Sensitivity is aligned with prominent allergen threshold recommendations
- Quantify low levels of allergenic residue

Veratox®, Veratox VIP & BioKits		Quantitative Range
8440	Veratox® for Almond	2.5-25 ppm
8460	Veratox® for Casein	2.5-15 ppm
8560	Veratox® for Coconut	1-25 ppm
8520	Veratox® for Crustacea	2.5-25 ppm
8450	Veratox® for Egg	2.5-25 ppm
8480	Veratox® for Gliadin	5-50 ppm
8510*	Veratox® for Gliadin R5*	2.5-40 ppm
8420	Veratox® for Hazelnut	2.5-25 ppm
8400	Veratox® for Mustard	2.5-25 ppm
8430*	Veratox® for Peanut*	2.5-25 ppm
8530	Veratox® for Sesame	2.5-25 ppm
8410	Veratox® for Soy	2.5-25 ppm
8470	Veratox® for Total Milk	2.5-25 ppm
8570	Veratox VIP for Cashew	1-25 ppm
8430M	Veratox VIP for Peanut	1-20 ppm
902061Y	BioKits BLG	2.5-40 ppm
902072T	BioKits Egg	0.5-10 ppm
902085G	BioKits Walnut	2.4-120 ppm

*AOAC approved

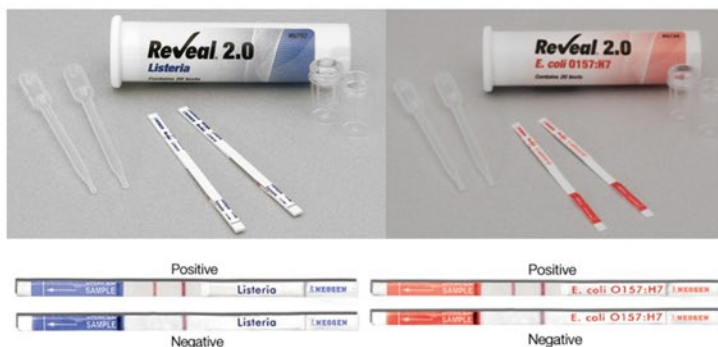


CONVENTIONAL DEHYDRATED CULTURE MEDIA

- Extensive range of dehydrated culture media
- Wide portfolio, high quality with a variety of formulations and specifications
- Comply with internationally recognized testing standards – ISO, BAM, MLG, HP
- Manufactured in the UK and US under ISO 9001:2015, ISO 13485:2016 and QC labs under ISO 11133:2014
- Using the finest quality raw materials, best equipment and skilled technical team to ensure quality and performance of media



REVEAL® RAPID LATERAL FLOW PATHOGEN DETECTION



- Qualitative antibody-based lateral flow strips
- Microbial detection without microbiology training
- Quick and easy screening test for pathogen presence
- Validation report available
- Limit of Detection: 1 cfu/analytical unit
- AOAC approved

Model	Description
9706	Reveal® 2.0 for Salmonella
9707	Reveal® 2.0 for Listeria
9734	Reveal® 2.0 for E.coli O157:H7
9809	Reveal® 2.0 for Group D1 Salmonella

SOLERIS® AUTOMATED MICROBIAL DETECTION

- Ready-to-use culture media vials
- Variety of testing applications – Food, Nutraceutical, Cosmetic
- Validated across variety of applications

Model	Description
NF-TVC*	Total Viable Count (TVC)*
DYM-109C*	Yeasts and Moulds*
CC-102*	Coliform*
EC-104*	E.coli*
S2-EBAC9	Enterobacteriaceae
ACB-109	Alicyclobacillus
S2-GN	Gram Negative
DLA-109	Lactic Acid
SM-118	Staphylococcus
PD-109	Pseudomonas
NF-OSB	Orange Serum Broth
S2-SAL	Salmonella spp.



SOLERIS® READER



Model	Description
SNG-INS32CS	<ul style="list-style-type: none"> • Easily evaluates microbial activity with chromogenic testing • Quicker time to result – 14 to 18 hours • Measures colour changes due to microbial growth by monitoring pH changes, CO2 production or fluorescence activity • Accurate, reliable, reproducible detection of microorganisms

*AOAC approved

Soleris versus Traditional Methods

Soleris Tests	Traditional Methods – Time to Result	Soleris – Time to Result	Soleris Validations & Approvals
Total Viable Count (TVC)	72 hours	22 – 24 hours	AOAC, NSF/ANSI 173
Coliforms	24 hours	18 hours	AOAC
E. coli	18 – 24 hours	18 – 24 hours	AOAC
Yeasts and Moulds	3 – 5 days	48 hours	AOAC, NSF/ANSI 173
Alicyclobacillus	5 days	48 hours	ISO 16140 (IFU)
Enterobacteriaceae	24 – 72 hours	14 – 18 hours	AOAC, ISO 16140-2 (MicroVal), NSF/ANSI 173

MICROBIOLOGY ANALYSIS

SAFETY BUNSEN BURNER



SCHUETT PHOENIX II ECO

- Best suited for safety cabinets
- Flame activation by foot-switch or pressing button by hand (START/STOP)
- Bes low-cost model

Model	Description
Phoenix II ECO	Safety bunsen burner with foot-switch



SCHUETT PHOENIX II STANDARD

- Colour display and language selection
- Sensor and foot-switch
- Flame activation by sensor 1x or 2x, foot switch or pressing button by hand (START/STOP)
- Display of burn-time (1sec – 120min) digitally visualized and adjustable to the sec in all operating modes

Model	Description
Phoenix II STANDARD	Safety bunsen burner with sensor & foot-switch



SCHUETT PHOENIX II ACCU

- Colour display and language selection
- Sensor and foot-switch (optional)
- Ideal for mobile operation
- Flame activation by sensor 1x or 2x, foot switch or pressing button by hand (START/STOP)
- Display of burn-time (1sec – 120min) digitally visualized and adjustable to the sec in all operating modes
- Display of battery power status

Model	Description
Phoenix II ACCU	Safety bunsen burner with sensor, integrated high-power battery (foot-switch optional)

BAG SYSTEM SERIAL DILUTER



Model	Description
Serial Diluter TA	INLABTEC Serial Diluter TA, 6 dilutions, 1mL standard tips
Serial Diluter TA 12	INLABTEC Serial Diluter TA, 12 dilutions, 1mL standard tips

Model	Description
Serial Diluter SA	INLABTEC Serial Diluter SA, 6 dilutions, pipette straws



Model	Description
Serial Diluter UA	INLABTEC Serial Diluter UA, 6 dilutions, with bag vortexer
Serial Diluter UA 12	INLABTEC Serial Diluter UA 12, 12 dilutions, with bag vortexer

MICROBIOLOGY ANALYSIS

INTERSCIENCE LAB BLENDER

interscience
for microbiology



MINIMIX 100 P CC
100 ML LAB BLENDER

- Essential features
- 5 – 80mL
- Variable speed
- Variable blending time
- Click & Clean paddles



MINIMIX 100 W CC
100 ML LAB BLENDER

- Window door
- 5 – 80mL
- Variable speed
- Variable blending time
- Click & Clean paddles



BAGMIXER 400 P
400 ML LAB BLENDER

- Essential features
- 50 – 400mL
- Fixed speed
- Variable blending time
- 270° door opening



BAGMIXER 400 W
400 ML LAB BLENDER

- Window door
- 50 – 400mL
- Fixed speed
- Variable blending time
- Q-tight closing



BAGMIXER 400 SW
400 ML LAB BLENDER

- Window door
- Liquid sensor
- 50 – 400mL
- Variable speed
- Click & Clean paddle
- Silent blending, <48dB

INTERSCIENCE COLONY COUNTER



SCAN 50
EASY TO USE

- Manual colony counter
- Ergonomic
- Counting on Petri dishes (Ø55 to 90mm), Petrifilm
- Indirect LED lighting
- Data export via USB



SCAN 100
THE CLASSIC

- Manual colony counter
- Counting on Petri dishes (Ø55 to 150mm), Petrifilm
- White LED lighting
- Adjustable intensity
- Data export via USB



SCAN 300
ESSENTIAL FEATURES

- Automatic colony counter
- Minimum size of detected colony: 0.1mm
- Camera: 1 megapixel
- Zoom x28
- Counting on Petri dishes (Ø55 to 90mm)
- Counting on pour, surface, Spiral, circle mode plated Petri dish



SCAN 500
EFFICIENCY

- Automatic colony counter
- Minimum size of detected colony: 0.1mm
- Camera: 1 megapixel
- Zoom x28
- Counting on Petri dishes (Ø55 to 90mm)
- Counting on pour, surface, Spiral, circle mode plated Petri dish
- Counting on chromogenic agar
- Inhibition zone reader



SCAN 1200
HIGH-PERFORMANCE

- Automatic colony counter
- Minimum size of detected colony: 0.05mm
- Camera: 1.2 megapixel
- Zoom x28
- Counting on Petri dishes (Ø55 to 90mm)
- Counting on pour, surface, Spiral, circle mode plated Petri dish
- Counting on chromogenic agar, PetriFilm, MC media Pads, Compact Dry, Easy Plate, filtration membranes
- Inhibition zone reader

INTERSCIENCE AUTOMATIC PLATER



EASYSPIRAL AUTOMATIC PLATER

- Syringe capacity: 1000 µL
- Plating mode: exponential, circle
- Counting range: from 3000 to 1.3×10^5 cfu/mL
- Plating cycle time: 25 sec



EASYSPIRAL DILUTE AUTOMATIC DILUTOR & PLATER

- 1/10th serial dilutions
- Plating up to 6 log
- Dilution on 1 single Petri dish
- Plating mode: exponential, constant, circle, pour plate
- Counting range: from 30 to 1×10^{12} cfu/mL
- Plating cycle time: 134 sec



Model	Description
BagLight	Blender bags without filter
BagFilter	Blender bags with filter



Model	Description
Anabac Citrus	Autoclave deodorant, Lemon
Anabac Classic	Autoclave deodorant, Eucalyptus

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SERVICE, REPAIR & CALIBRATION

SANITATION MONITORING



ACCUPOINT® ADVANCED NEXT GENERATION – COMPLETE HYGIENE MONITORING SYSTEM



- Verify your cleaning processes by measuring adenosine triphosphate (ATP)
- AOAC PTM approved
- User-friendly touchscreen
- New Data Manager Software
- Quick, easy upload of data information
- Consistent and reliable data
- Customizable threshold levels

AccuPoint Advanced Next Generation Kit

9904E	AccuPoint Advance NG instrument
9617-USB2	USB thumb drive containing user guide and data manager software
9918	USB data and power cable
1232-2	Quick reference guide
9916	Holster, with shoulder strap and sampler holder
9919	Wall charger

ACCUPOINT® ADVANCED SAMPLERS



- Advanced sampling pad and liquid stable chemistry maximizes recovery of ATP
- Patented flat tip sampler for more significant surface contact
- Breaking through biofilms and exposing difficult bacteria
- 3 types – Surface samplers, Access samplers, Water samplers

AccuPoint Advanced Samplers

9905	AccuPoint Advanced ATP surface samplers (100 samplers)
9906	AccuPoint Advanced ATP water samplers (100 samplers)
9907	AccuPoint Advanced ATP access samplers (100 samplers)

COLITAG™ – WATER TEST



Colitag – Water Test

9850	Colitag P/A water test kits, 20 packs
9851	Colitag P/A water test kits, 100 packs
9859	Sample containers with sodium thiosulfate, 100 packs
9857	Colitag comparator, 100mL

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DRYING TECHNOLOGY

BUCHI SPRAY DRYER



MINI SPRAY DRYER S-300

Laboratory spray dryer

- Evaporation capacity: 1.0L/hr H₂O, higher for organic solvents
- Final particle size: 1 – 60 μm
- Yield up to 70%
- Sample composition: Water / Organic solvents
- Max inlet temperature: 220°C
- Nozzle type: 2 fluid nozzle, 3 fluid nozzle, ultra sonic nozzle

Model	Description
S-300	Laboratory Mini Spray Dryer 220°C



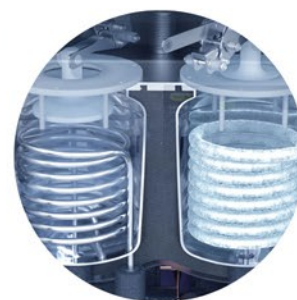
NANO SPRAY DRYER B-90 HP

Small particles, small samples, high yields

- Evaporation capacity: 0.2L/hr H₂O (higher for organic solvents)
- Final particle size: 200 nm – 5 μm
- Yield up to 90%
- Sample composition: Water / Organic solvents
- Max inlet temperature: 120°C
- Nozzle type: piezo electric spray head
- Collector type: high voltage particle collector

Model	Description
B-90 HP	Nano Spray Dryer 120°C Basic / Advanced

BUCHI FREEZE DRYER



LYOVAPOR L-200

Freeze Dryer with Infinite-Control™

- Condenser capacity: <6kg
- Condensing capacity: <6kg/24hrs at 20°C ambient temperature
- Cooling capacity compressor: 1.97 kW (for 50Hz); 2.33 kW (for 60Hz)
- Lowest condenser temperature: -55°C
- Minimum system vacuum: Typically < 0.04 mbar
- Interface: 4.6in display

Model	Description
L-200	Laboratory Freeze Dryer

LYOVAPOR L-300

Freeze Dryer with Infinite-Control™, continuous sublimation with two alternately working condensers

- Condenser capacity: Unlimited (2 x < 1kg)
- Condensing capacity: <12kg/24hrs at 25°C ambient temperature
- Lowest condenser temperature: -105°C
- Minimum system vacuum: Typically < 0.04 mbar
- Interface: 7in display

Model	Description
L-300	Laboratory Freeze Dryer

DIGESTION & REACTOR TECHNOLOGY

MICROWAVE DIGESTION



SPEEDWAVE XPERT MICROWAVE DIGESTER



Vessel option	TS-85X	DAP-60X	DAP-100X	DAK-100X
Volume	85mL	60mL	100mL	100mL
Pressure	40 bar	40 bar	40 bar	100 bar
Temp.	230°C	230°C	230°C	300°C
Rotor	32/16 vessels	12 vessels	12 vessels	8 vessels
Sample weight	2g (inorganic) 1g (organic)	2g (inorganic) 0.4g (organic)	2g (inorganic) 0.5g (organic)	3g (inorganic) 1g (organic)



SPEEDWAVE ENTRY MICROWAVE DIGESTER



Vessel option	DAP-60K	DAQ-10
Volume	60mL	10mL
Pressure	40 bar	75 bar
Temp.	230°C	230°C
Rotor	10 vessels	24 vessels



DISTILLACID BSB939-IR ACID DISTILLER

- Distillate expensive high purity acids
- Suitable for HNO₃, HCl and HF
- Degree of purification: 10 – 500 ppt
- Distillation capacity: 50mL/h (HNO₃, HCl); 42mL/h (HF)
- Programmable time switch

HIGH PRESSURE REACTOR



BERGHOF HIGHPREACTOR



Vessel option	BR-25	BR-300	BR-1000
Volume	30mL	390mL	1220mL
Pressure	200 bar	200 bar	200 bar
Temp.	300°C	300°C	300°C
Insert	TFM-PTFE insert	TFM-PTFE insert	TFM-PTFE insert

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& CALIBRATION

REFRACTOMETER



- Temperature compensation (ATC)
- Sample temperature range: 5 – 80°C
- Quick 2 second read time
- High Ambient Light (HAL) sensor detects and warns of too much light
- Programmable read delay for sample temperature stabilization

- Flat sapphire prism surface mounted in a stainless-steel dish for easy-cleaning
- Outer casing sealed and shaped to withstand sample spillage and moisture ingress
- For start-up, simplicity with Brix, RI scales and digital automatic technology

- Wide beam scan for non-homogenous samples
- Specifically for harsh environments, demanding samples and chemicals
- Sloping-shape, PEEK spill barrier
- 21 CFR Part 11, or good practice is adopted as part of HACCP

OPTi® Digital Refractometer	
Sucrose (Brix)	<ul style="list-style-type: none"> • Range: 0 – 95 • Resolution: 0.1 • Accuracy: ± 0.2
Refractive Index	<ul style="list-style-type: none"> • Range: 1.33 – 1.53 • Resolution: 0.0001 • Accuracy: ± 0.0003
Specific Gravity (SG)	<ul style="list-style-type: none"> • Range: 1.000 – 1.050 • Resolution: 0.001 • Accuracy: ± 0.003
Concentration %	<ul style="list-style-type: none"> • Range: 0 – 95 • Resolution: 0.1 • Accuracy: ± 0.2

RFM732-M Digital Refractometer (ATC & Keypad)	
Sucrose (Brix)	<ul style="list-style-type: none"> • Range: 0 – 100 • Resolution: 0.1 • Accuracy: ± 0.1 • Precision: ± 0.05
Refractive Index	<ul style="list-style-type: none"> • Range: 1.33 – 1.54 • Resolution: 0.0001 • Accuracy: ± 0.0001 • Precision: ± 0.00005
Temperature Range	<ul style="list-style-type: none"> • Range: 5 – 95°C • Sensor: ATC • Accuracy: ± 0.05°C

RFM340-T Digital Refractometer (Peltier & Touchscreen)	
Sucrose (Brix)	<ul style="list-style-type: none"> • Range: 0 – 100 • Resolution: 0.1/0.001 • Accuracy: ± 0.010 (<30)/± 0.030 (>30) • Precision: ± 0.005
Refractive Index	<ul style="list-style-type: none"> • Range: 1.32 – 1.58 • Resolution: 0.00001/0.000001 • Accuracy: ± 0.00002 (<1.38)/ ± 0.00004 (>1.38) • Precision: ± 0.000005
Temperature Range	<ul style="list-style-type: none"> • Range: 5 – 80°C • Sensor: Peltier • Accuracy: ± 0.03°C

DENSITY METER



DSG50 Density Meter	
Range	0 – 3 g/cm ³
Resolution	0.00001 g/cm ³
Accuracy	0.00005 g/cm ³
Measuring System	Oscillating U-tube with reference oscillator (drift protection)
Temperature Control	Intelligent Peltier system
Temperature Range	10 – 95°C
Pressure	0 – 10 bar (0 – 145 PSI)
Sample Size	Approx. 2 mL
Air Drying	Integrated air pump and humidity sensor
Application Compliance	European & American Pharmacopoeia & various ASTM & ISO standards

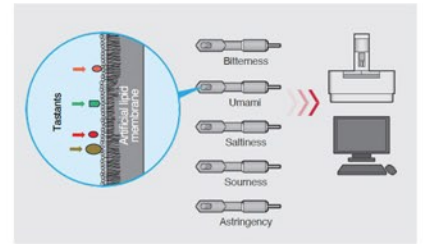
POLARIMETER



ADP450 Polarimeter		
	Angular (°A)	ISS (°Z)
Scales	-355 a +355 (selectable)	-225 à +255
Resolution	0.01/0.001	0.01/0.001
Accuracy	± 0.010	± 0.030
Precision	± 0.002	± 0.005
User Scales & Methods	PHR-MEAN statistical, Specific Rotation, Concentration, Inversion (A-B), Invert Sugar, User Defined	
Tube Length	10 to 200mm	
Optical Density	0.0 to 3.0 OD	
Temperature Range	15 – 35°C	
Temperature Accuracy	± 0.1°C	
Temperature Stability	± 0.2°C	

SENSORY ANALYSIS

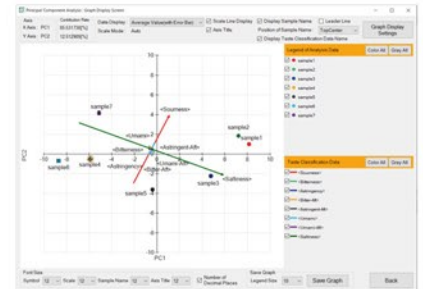
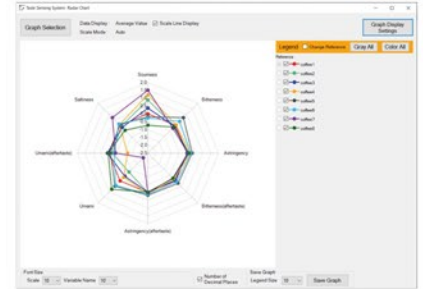
FULLY AUTOMATED TASTE SENSING SYSTEM ELECTRONIC TONGUE



TASTE SENSING SYSTEM

Model : TS-6000A

Number of samples	10
Required sample volume	70 ml (min. 35 ml depends on sample properties)
Dimensions	470 mm W x 540 mm D x 550 mm H
Weight	28 kg
Camera, LED lighting	Fitted as standard
Applications	Measurement, Analysis, Graphing, and Applied Statistics
Response mechanism	Membrane potential measurement (potentiometric measurement)
Sensor type	Artificial lipid/polymer membrane
Measurement object:	Drinks, solids, drugs, etc. (solids require prior dissolution)



SCOVILLE METER – CHILLI SPICINESS TESTER



FOODSENSE GEN4

FoodSense™ is a tiny box able to measure a range of food, beverage and water analytes, for quality and safety including: chillie, garlic, ginger, vanilla, pepper, wine and tumeric and E. coli.

Specific molecules/analytes detected includes: capsaicin, diallyl disulfide, pyruvate, anti-oxidants, curcumin, sulfite, piperine, pH, saltiness, E. coli etc.



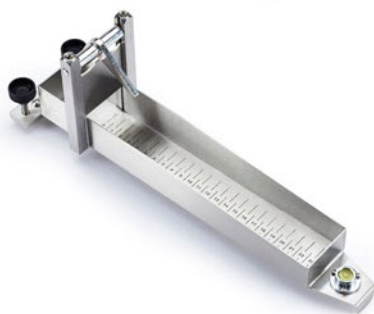
EASY TO USE



FAST ANALYSIS



WORK WITH ANDROID BASED



BOSTWICK VISCOSITY CONSISTOMETER, 24CM

For food manufacturing, processing and quality control

- Sample type such as sauces, jams, fillings, soups salad dressing and etc.
- Manufactured with acid resistant high quality 316 grade stainless steel
- Laser etched 0.5cm markings
- Adheres to the international ASTM F1080-93 standard
- Total length: 240mm
- Total width: 88mm
- Total height: 104mm



CANNED CVG-100 VACUUM GAUGE

Measure the vacuum pressure of sealed cans

- Consists of vacuum gauge, pierce point and rubber collar
- Measure range: 0 – 15 Psi / 0 – 76 cmHg
- Accuracy: 2.5%



CANNED CVG-200 VACUUM GAUGE

Measure the vacuum pressure of sealed cans

- Consists of holder, vacuum gauge, pierce point and rubber collar
- Measure range: 0 – 15 Psi / 0 – 76 cmHg
- Accuracy: 2.5%



CANNED MBT-300 HALL EFFECT THICKNESS GAUGE

Magnetic bottle thickness gauge

- Measure the thickness of non-magnetic material (plastic, glass, aluminum bottle)
- With more wearable probe
- More sizes of magnetic balls: 5.00mm and 7.00mm
- Larger measuring range, up to 25.4mm
- Rapid measurement, up to 16 times per second

TECSENSE TECPEN MAP

Mobile device for determination of O₂ / CO₂ in QC & production

- Application: In food packaging with modified gas atmosphere (MAP packaging)
- Optochemical O₂ sensor system for gaseous media
- High flexibility due to handy design
- Suitable for very low gas volumes
- Integrated memory and USB data transfer
- Replaceable particulate filter
- Automatically 0-point adjustment with every single start



Model	Description
TecPen MAP O ₂	Measurement range: 0-5% or 0-15% O ₂
TecPen MAP O ₂ /CO ₂ Combo	Measurement range: 0-5% O ₂ & 0-100% CO ₂

FOOD INSPECTION KIT



EBRO SALT METER

- Measure salt content in fluid and semi-solid food products (meat, sausage, ham, cheese, salads etc.)
- Sensor: Gold plated electrodes
- Accuracy: ± 1 digit
- Measure: Relative salt content
- Range: 0 to 100

Model	Description
SSX 210	Salt Meter with gold-plated electrodes



EBRO FOOD OIL METER

- Measure hot oil directly
- Determine frying oil quality
- Enables setting of ideal frying point
- Accuracy: $\pm 1^\circ\text{C} \pm 2\%$
- Measure: Total Polar materials (TPM)
- Range: 0 to 40% polar compounds

Model	Description
FOM 330	Food Oil Meter Set with signal lamp



BASIC INFRARED THERMOMETER

- Bright display backlight
- Distance: spot ratio = 12:1
- Accuracy: $\pm 2^\circ\text{C} + 0.05^\circ\text{C}$
- Measure: Temperature
- Range: -60°C to $+550^\circ\text{C}$

Model	Description
TFI 260	Basic Infrared Thermometer with circular laser pointer



DUAL-INFRARED / FOLD BACK THERMOMETER

- Display with backlight
- Display can be upside down for reading from both sides
- Double laser pointer
- Surface measurement with IR
- Sensor: Thermoelement type K
- Measure: Temperature
- Range: -50°C to $+250^\circ\text{C}$

Model	Description
TLC 750i	Thermometer with foldable penetration probe and infrared sensor



EBI 20 DATA LOGGER

- Memory capacity of 40,000 measurements
- Automatic recording of temperature / RH data
- No network connection required
- Waterproof
- LED alarm
- Min/max values on display
- Range: -30°C to $+70^\circ\text{C}$

Model	Description
EBI 20-T1	Temperature Data Logger
EBI 20-TH1	Temperature / Humidity Data Logger
EBI 20-TE1	Temperature Data Logger with external probe

MULTI-USE PDF DATA LOGGER



PROFICIENCY TESTING & CERTIFIED REFERENCE MATERIALS

PROFICIENCY TEST AND REFERENCE MATERIAL



SOLUTION FOR ACHIEVING REQUIREMENT OF ISO 17025; ISO 17034 ACCREDITATION

Proficiency Test (PT) and Certified Reference Material Tools	Quality Control (QC) Tools
Help you to meet your regulatory requirements, work smarter, demonstrate the quality of your testing services, and increase confidence in the accuracy of your testing regime in a cost-effective manner.	Help to prevent good product being discarded and stop non-conforming product being released

PROFICIENCY TEST PROGRAM

FOOD CHEMISTRY

Our programme covers the widest possible range of tests in real food samples, including nutritional components, metals, pesticides, toxins, allergens and a whole lot more

MICROBIOLOGY

Our test materials simulate real laboratory samples with varying levels of target pathogens, indicator microorganisms, spoilage organisms, and background flora.

WATER & ENVIRONMENT

For both chemical and microbiological analysis, our programme meets the UK Drinking Water Inspectorate requirements, and also covers waste waters and high salinity water

GM FOODS

Our Genetically Modified materials programme helps make sure your analysis meets the strict EU regulations on control of genetically modified foods, animal feed and tobacco.

FAPAS proficiency test program and schedule



CERTIFIED REFERENCE MATERIAL & STANDARD FOR INORGANIC CHEMISTRY



Inorganic Ventures' portfolio of certified reference materials (CRMs) are designed for use in ICP, ICP-MS, IC, atomic absorption, wet chemistry and QC applications.

Our products are engineered to be stable, compatible, NIST-traceable and are manufactured and tested under ISO 17034 & ISO 17025 guidelines.

- Up to 5 Years of Shelf Life
- Traceable to NIST SRMs
- Best technical support and resources
- Assayed by Validated ICP-OES procedures
- Trace metallic impurities determined by ICP and ICP-MS

Inorganic Ventures specialize in creating custom solutions, with more than 55,000 approved blends and counting.

Benefits of Customised CRM & Standards :

Potential issues building from single element stock products		BENEFITS OF ORDERING A CUSTOM	
High Preparation Costs		Save on labor and equipment costs. Ready for immediate use with no prep required.	✓
Documentation Responsibilities		All documentation and associated paperwork is handled for you and immediately available if you face an audit.	✓
Uncertainty and Instability		Certified, NIST traceable product from experts in elemental compatibility give you peace of mind.	✓
Storage and Transportation Issues		Transpiration Control Technology (TCT) provides up to a 5-year shelf life and allows for flexible storage by increasing allowable temperature range.	✓
Contamination		Take advantage of our clean bottles and starting materials.	✓

PERIODIC TABLE OF ELEMENTS
Chemical Group Block

PubChem

ISO 9001 CERTIFIED
ISO 17025 CERTIFIED
ISO 17034 CERTIFIED

PESTICIDE REFERENCE MATERIAL



Since 1975, Dr. Ehrenstorfer has led the way in producing pesticide reference standards to support your need for high-quality reference materials for food and environmental analysis.

The products of Dr. Ehrenstorfer are produced to the highest quality, with all analytical measurements performed under our ISO/IEC 17025 scope of accreditation and a leading product range manufactured according to our ISO 17034 accreditation. We use the most advanced analytical techniques to characterise our reference materials, so that you can rely on the scientific integrity of the data contained in your Certificate of Analysis.

DATA LOGGER FOR PROCESS VALIDATION AND ROUTINE CONTROL

FOR FOOD, MEDICAL & PHARMACEUTICAL INDUSTRIES

-ebro-
a xylem brand

- More than 25 years of experience with validation equipment
- TÜV Germany certified validation equipment
- Trainings Centrum in Germany
- FDA 21 CFR Part 11 compliant software
- IQ,OQ documents available
- Calibration laboratories available worldwide
- DAkkS accredited

EBI11 & EBI 12 SERIES

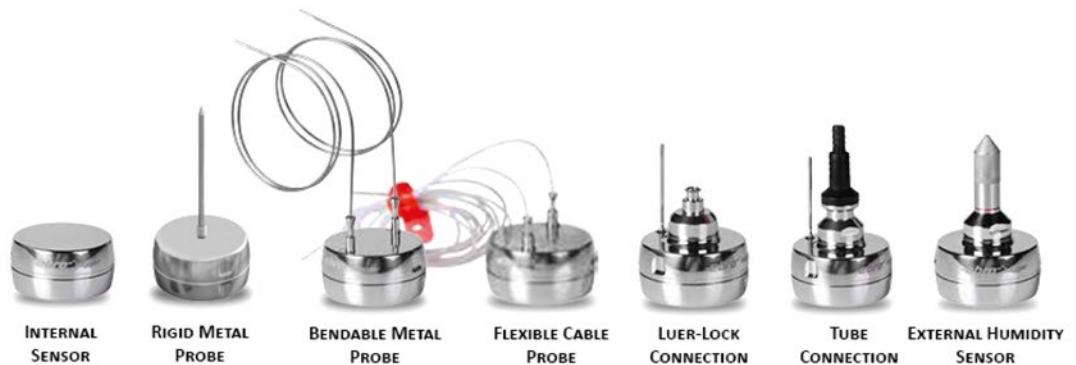
- Available in rigid probe, Bendable metal probe & flexible cable probes
- Measurement in temperature or pressure or conductivity
- Stainless Steel housing suitable for food industries use
- Mini size suitable put inside bottle/can/container for sterilization/pasteurization process
- PT1000 sensor with better accuracy $\pm 0.1^{\circ}\text{C}$
- All comes with factory calibration certificate
- Available with ATEX version logger

MINI HIGH TEMPERATURE DATA LOGGER EBI 11



Model	EBI11-T210	EBI11-T230-T233	EBI11-T235-T237	EBI11-T240	EBI11-P100
Measurement Range	-30 to 140°C	-30 to 150°C	-30 to 150°C	-30 to 150°C	-30 to 150°C 1 to 10,000mbar
Needle Length	20mm	0, 50 or 100mm	25, 80 or 165mm	250mm	nil
Probe Type	Pointed $\varnothing 3\text{mm}$	Pointed $\varnothing 3\text{mm}$	Blunt $\varnothing 1.95\text{mm}$	Bendable metal, $\varnothing 1.5\text{mm}$	nil

HIGH TEMPERATURE DATA LOGGER EBI 12



Model	EBI12-T100	EBI12-T21X EBI12-T23X EBI12-T43X	EBI12-T26X EBI12-T46X	EBI12-T22X EBI12-T24X EBI12-T4X1	EBI12-T490/47X EBI12-T690/671	EBI12-TP series
Measurement Range	-90 to 150°C	-55 to 150°C	-55 to 140°C	-200 to 200°C/ -200 to 400°C	-20 to 150°C	-30 to 150°C 1 to 10,000mbar
Probe type	Internal	Pointed $\varnothing 3\text{mm}$, various length	Rigid metal for bottles, axial, $\varnothing 6\text{mm}$, various length	Bendable metal, $\varnothing 1.5\text{mm}$, radial/axial, various length and external sensor	Flexible cable, $\varnothing 1.2\text{mm}$, radial/axial, various length and external sensor	Rigid metal, Luer-lock connection, M10 thread

DATA LOGGER FOR PROCESS VALIDATION AND ROUTINE CONTROL

FOR FOOD, MEDICAL & PHARMACEUTICAL INDUSTRIES



INTERFACE AND SOFTWARE FOR EBI11 & 12

SI 1100

Interface IF 100 with 2 ports for EBI 11 & 12

Winlog Pro Software

USB Connections

ELECTRONIC BOWIE&DICK-TEST

Model	EBI 16
Measurement range	-30 to 150°C 1 to 4,000mbar
Sensor Type	Pt1000 & Piezoresistive pressure sensor
Accordance to DIN EN 285 / ISO 17665 / ISO 11140-4	
Ensure the use of 1,000 cycles or 3 years without calibration or service	

VARIOUS ACCESSORIES FOR EBI 11 & 12 FOR SENSOR FIXING



AL 114	AL 115	EBI DA	EBI DA Set	EBI FL-S	EBI KV-3	EBI TIB 200
Can/Bag adapter Set for EBI 11	Bottle Adapter Set for EBI 11	Can Adapter for EBI 12	Can Adapter Set for EBI 12	Bottle Adapter for EBI 12	Compression Fitting on Glass jar for EBI 12	Thermal Insulation Box 160 x 160 x 60 mm



MULTI-CHANNEL TEMPERATURE DATA LOGGER

Monitoring high temperature during processing

Model	EBI 40-TC-01	EBI 40-TC-02	EBI TIB 400
Measurement range	-200 to 1200°C		Thermal Insulation Box 247 x 210 x 131 mm
Sensor Type	Thermocouple Type K or Type T, SMP connector		
Channel	6 Channel	12 Channel	

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WIRELESS DATA LOGGER SYSTEM

-ebro-
a xylem brand



EBI 25 WIRELESS DATA LOGGING SYSTEM



EBI 25-T	EBI 25-TE	EBI 25T-X	EBI 25-TH	EBI IF 400	Winlog.web Software
-30 to 60°C	-40 to 85°C	-200 to 199.9°C	-30 to 60°C 1 to 100% RH	Base Station to collect and stores date from Loggers and transfer to PC	Internet & Local Network use FDA21 CFR Part 11 compliance IQ/OQ documentation available

- 922 Mhz Radio Frequency transmission to interface (MCMC Approved frequency)
- Alarm notification via email or sms (optional)
- Daily, weekly or monthly report automatically email to defined user
- Winlog.mobile App to know all measurements at a glance within same network

STANDARD DATA LOGGER

EBI 20 STANDARD DATA LOGGER



Model	EBI 20-T1	EBI-20 TE1	EBI 20-TF	EBI 20-TH1	EBI 20-IF
Measurement range	-30 to 70°C	-30 to 70°C	0 to 100°C	30 to 70°C 0 to 100% RH	Interface to connect logger to PC for configuration and download, USB cable
Sensor/Probe type	Internal	External Pointed Ø3mm, 55mm	External Pointed Ø3mm, 55mm	Internal	
Software	Winlog Basic Software (Free)				

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USB DATA LOGGER



EBI 300/310 USB DATA LOGGER



Model	EBI 300	EBI 300 TE	EBI 300TH	EBI 310	EBI 300TE	EBI 300TH	EBI 300TX
Measurement range	-30 to 70°C	-30 to 70°C (in) -35 to 70°C (Ex)	-30 to 70°C 0 to 100% RH	-30 to 75°C (Pt 1000) ±0.2°C	-30 to 75°C (In) -200 to 250°C (Ex) (Pt 1000) ±0.2°C	-30 to 75°C (Pt 1000) ±0.2°C	-30 to 75°C (Pt 1000) ±0.2°C
Sensor/ Probe type	Internal	Internal & External Pointed Ø4mm, 50mm length	Internal & External	Internal	Internal & External Pointed Ø5mm, 50mm	Internal & External	2 Channel, Various probe

HANDHELD MONITORING DEVICES

HIGH ACCURACY CORE THERMOMETER & THERMOCOUPLE THERMOMETER



Model	TFN 410 Series	TFN 420	TFN 520 Series	TFN 530	TTX200
Measurement range	-50 to 300°C	-50 to 400°C	-50 to 300°C	-200 to 1200°C (Type J,K,T,E)	-20 to 200°C
Accuracy	± 0.3°C	± 0.3°C	± 0.3°C	± 0.3°C	± 0.5°C
Sensor & Probe type	Pt 1000 Fixed probe Pointed Ø3mm, 120mm length 60cm silicone cable	Pt 1000 Exchangeable probe with LEMO connector	Pt 100 Exchangeable probe with LEMO/SMP connector	Pt 100 2-Channel Exchangeable probe with LEMO connector	Pt 100 Fixed probe Pointed Ø3mm, 120mm length 60cm silicone cable

FOLDING & INFRARED THERMOMETER



Model	TLC 700	TLC 750i	TFI 260
Measurement range	-30 to 220°C	-50 to 250°C	-60 to 550°C
Accuracy	± 0.5°C	± 4°C (IR) ± 0.5°C	± 1.5°C
Sensor & Probe type	Pt 100 Foldable 70mm probe	Dual Sensor: Infrared double laser pointer Pt 100 Foldable 100mm probe	Infrared Circular laser pointer

FOOD OIL METER



Model	FOM 330
Measurement range	0 to 40% TPM (60 to 200°C)
Accuracy	± 2%
Signal Lamp for easy determine the result Hand protection with backstrap Oil-proof housing	

THERMAL PROCESS VALIDATION AND TEMPERATURE MAPPING SERVICES

FOR FOOD, MEDICAL & PHARMACEUTICAL INDUSTRIES

PROCESS VALIDATION Is a reproducible proof that a process permanently generates the required results. Validation is a clear demonstration that processes, equipment, materials, work steps or systems actually lead to the expected results.

TEMPERATURE MAPPING is a study to verify that the entire enclosed storage maintains at a temperature within the permitted levels.

Team Medical & Scientific Sdn. Bhd. offer thermal process validation & thermal mapping service with using Xylem, Ebro. TÜV Germany certified validation equipment. We work closely with Xylem Singapore's Validation Team and do help client in filling and obtain for FDA certification (FCE & SID).



PROCESS VALIDATION – FOOD SECTOR

- Full Water Autoclaves
- Spray Water Autoclaves
- Steam Autoclaves
- Pasteurization
- Freezers
- Smoke Chambers
- Ovens
- Continuous-flow Deep Fryer

STERILIZATION VALIDATION – PHARMACEUTICAL & MEDICAL SECTOR

Pharmaceuticals:

- Steam Sterilizers
- Hot Air Sterilizers
- Ethylene Oxide Sterilizers
- Stability Chambers
- Incubators
- Freezers
- Ultra Freezers
- Autoclaves

Medicals:

- Steam Sterilizers
- Plasma Sterilizers
- FO Sterilizers
- Washer Disinfectors
- Washer Disinfectors for endoscopes
- DAC
- Careclave



THERMAL MAPPING SERVICES

- Pharmaceutical or Healthcare Warehouses and Food Storage Rooms
- Storage Facilities; Blast Freezers, Freezers, Chillers and other Logistics
- Incubators, Refrigerators, Stability Cabinets and Environmental Chambers



REMOTE MONITORING STATION

MicroRX Water Level Station

- Non-vented ceramic water level sensor
- Integrated barometric pressure sensor
- Cloud-based monitoring and data access through HOBOLink
- Available in four depth ranges
- Available with stainless-steel or titanium sensor ends
- 3-point NIST-traceable calibration certificate included for the water pressure sensor

STEP 1 : Choose your Data Logger



Model : RX2103

HOBO Micro RX Water Level Station (Battery)



Model : RX2104

HOBO Micro RX Water Level Station (Solar)

STEP 2 : Choose cable length

Cable-RWL-xx

xx (length in meter) : 1, 2, 5, 10, 15, 30,

STEP 3 : Choose water level sensor



MX2001-04-SS-S	MX2001-01-SS-S	MX2001-02-SS-S	MX2001-03-SS-S	MX2001-04-Ti-S	MX2001-01-Ti-S
MX Water Level Sensor, 4m(13') Stainless Steel	MX Water Level Sensor, 9m(30') Stainless Steel	MX Water Level Sensor, 30m(100') Stainless Steel	MX Water Level Sensor, 76m(250') Stainless Steel	MX Water Level Sensor, 4m(13'), Titanium/Acetal	MX Water Level Sensor, 9m(30'), Titanium/Acetal

STEP 4 : Choose data plan

SP-610	User supplied SIM plan w/ 1 minute logging and 10 minute connections
SP-611	User supplied SIM plan w/ 30 minute logging and 6 hour connections

UNDER WATER MONITORING

STAND-ALONE BLUETOOTH DATA LOGGER



- Wireless data offload to mobile devices or Windows computers via Bluetooth (HOBObconnect)
- Integrated barometric pressure sensor enables direct water level readout
- Durable ceramic sensor
- Available with stainless steel or titanium sensor ends
- Available in four depth ranges
- 3-point NIST-traceable calibration certificate included for the water pressure sensor

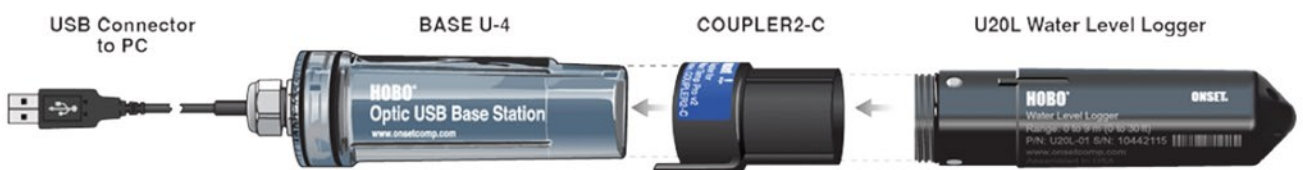


MX2001-04-SS	MX2001-01-SS	MX2001-02-SS-S	MX2001-03-SS-S	MX2001-03-SS	MX2001-04-Ti-S	MX2001-01-Ti-S
HOBO MX Water Level, 4m(13') Stainless Steel	HOBO MX Water Level, 9m(30') Stainless Steel	MX Water Level Sensor, 30m(100') Stainless Steel	MX Water Level Sensor, 76m(250') Stainless Steel	HOBO MX Water Level, 76m(250') Stainless Steel	HOBO MX Water Level, 4m(13'), Titanium	HOBO MX Water Level, 9m(30'), Titanium

STAND-ALONE OPTICAL DATA LOGGER



- Lightning protection; no long signal wires, and electronics are shielded
- Available in four depth ranges
- Available with stainless steel or titanium sensor ends
- Durable ceramic pressure sensor
- Requires HOBOWare Pro software and either a U-DTW-1 Waterproof Shuttle or the Base-U-4 Optic USB Base Station for configuration and data offload



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UNDER WATER MONITORING

WATER LEVEL SENSOR



Low Cost Water Level - Polypropylene Housing and Lanyard

U20L-04	HOBO Water Level (13 ft)
U20L-01	HOBO Water Level (30 ft)
U20L-02	HOBO Water Level (100 ft)



Stainless Steel

U20-001-04	HOBO Water Level (13 ft)
U20-001-01	HOBO Water Level (30 ft)
U20-001-02	HOBO Water Level (100 ft)
U20-001-03	HOBO Water Level (250 ft)



Titanium

U20-001-04-Ti	HOBO Water Level (13 ft) Titanium
U20-001-01-Ti	HOBO Water Level (30 ft) Titanium
U20-001-02-Ti	HOBO Water Level (100 ft) Titanium
U20-001-03-Ti	HOBO Water Level (250 ft) Titanium

HOBO WATER LEVEL DATA LOGGER DELUXE KIT

- HOBO data logger (3 available depth range) x 1
- HOBO data logger (13' range) for barometric pressure x 1
- HOBO waterproof shuttle x 1
- Carrying case x 1
- HOBOware Pro software x 1



KIT-D-U20-04	KIT-D-U20-01	KIT-D-U20-02
HOBO Water Level Deluxe Kit (13ft)	HOBO Water Level Deluxe Kit (30ft)	HOBO Water Level Deluxe Kit (100ft)

WATER TEMPERATURE MONITORING SYSTEM



Model	MX2201	MX2202	MX2203	MX2204	MX2205
Description	HOBO MX Pendant Temp	HOBO MX Temp/Light	HOBO TidbiT 400	HOBO TidbiT 5000	HOBO TidbiT MX2205
Temp Range	-20° to 70°C in air; -20° to 50°C in water				
Temp Range (Probe)	N/A			-40° to 100°C	
Light Range	N/A	0 to 167,731 lux	N/A		
Waterproof	30 meters (100 feet)		120 meters (400 feet)	1500 meters (5000 feet)	30 meters (100 feet)
Battery	CR2032 3V lithium, user replaceable		CR2032 3V lithium, user replaceable	Battery non-replaceable	Battery non-replaceable
Communication	Bluetooth				

UNDER WATER MONITORING

WATER TEMPERATURE MONITORING SYSTEM



Model	UA-001-64	UA-002-64	UTBI-001	U22-001
Description	HOBOWare Pendant Temp/Alarm, 64K	HOBOWare Pendant Temp/Light, 64K	Tidbitv2	HOBOWare Water Temp Pro v2
Temp Range	-20° to 70°C in air; -20° to 50°C in water		-20° to 70°C in air; maximum sustained temperature of 30°C in water	-40° to 70°C in air; maximum sustained temperature of 50°C in water
Light Range	N/A	0 to 167,731 lux		N/A
Waterproof	30 meters (100 feet)		304 meters (1000ft)	121 meters (400ft)
Battery	CR2032 3V lithium, user replaceable		3 Volt lithium, non-replaceable	2/3 AA, 3.6 Volt Lithium, factory-replaceable ONLY
Communication	Base Station : U-DTW-1 or Base-U-4 Software : HOBOWare Pro			

WATER QUALITY MONITORING SYSTEM



Model	MX2501	U24-001	U24-002-C	U26-001
Description	pH and Temperature Data Logger	HOBOWare Fresh Water Conductivity Data Logger	HOBOWare Salt Water Conductivity/Salinity Data Logger	HOBOWare Dissolved Oxygen Logger
Measurement Range	pH : 2.00 to 12.00 pH mV : -512 to 512 mV Temp : -2° to 50°C	Low Range: 0 to 1,000 μ S/cm Full Range: 0 to 10,000 μ S/cm	High range: 5000 to 55,000 uS/cm Low range: 100 to 10,000 uS/cm	DO : 0 to 30 mg/L Temp : -5 to 40°C
Waterproof	40 m (131.2 ft)	70 m (225 ft)		100 m (328 ft)
Battery	One AA 1.5 Volt, user-replaceable	3.6 V lithium battery; factory replaceable		
Communication	Bluetooth	Base Station : U-DTW-1 or Base-U-4 Software : HOBOWare Pro		

OUTDOOR DATA LOGGER

TEMPERATURE AND RELATIVE HUMIDITY STAND-ALONE DATA LOGGER (BLUETOOTH)



Model	MX2301A	MX2302A	MX2303	MX2304	MX2305
Description	Temp/RH (Built-in)	Temp/RH (External)	Temp (External x 2)	Temp (External)	Temp (Built-in)
Temp Range	-40 to 70°C		40 to 100°C , with tip and cable immersion in fresh water up to 50°C for one year		-40 to 70°C
RH Range	0 to 100% RH			N/A	
Communication	Bluetooth				

TEMPERATURE AND RELATIVE HUMIDITY STAND-ALONE DATA LOGGER



Model	U23-001A	U23-002A	U23-003	U23-004
Description	HOBO Pro v2 Temp/RH	HOBO Pro v2 6 ft Ext T/RH	HOBO Pro v2 2x 6 ft Ext Temp	HOBO Pro v2 Temp/6 ft Ext Temp
Temp Range	-40 to 70°C		0 to 100% RH	
RH Range	0 to 100% RH			N/A
Communication	Base Station : U-DTW-1 or Base-U-4 Software : HOBOWare Pro			

SOIL MOISTURE STAND-ALONE DATA LOGGER (BLUETOOTH)



Model	MX2306	MX2307
Description	HOBO MX Soil Moisture Logger	HOBO MX Soil Moisture and Temperature Logger
Soil Moisture: Volumetric Water Content (VWC)	0.00 to 0.64 m ³ /m ³ in mineral soils 0.00 to 0.70 m ³ /m ³ in soilless media	
Temp Range	N/A	40 to 100°C
Communication	Bluetooth	

STAND-ALONE DATA LOGGER



Rain Gauge - 0.2mm w/ Pendant Model : RG3-M

- Maximum rainfall rate: 12.7 cm (5 in.) per hour
- Calibration: Requires annual calibration: can be field calibrated or returned to the factory for re-calibration
- Tipping bucket mechanism: Stainless steel shaft with brass bearings

BLUETOOTH INDOOR DATA LOGGER

ONSET HOBO
Data Loggers

STAND-ALONE DATA LOGGER



Model	*MX100 (not upgradable to remote access)	MX1101	MX1102A
Description	Temperature Logger (Disposable)	Temp/RH logger	CO2 Logger
Temp Range	-30° to 70°C	-20° to 70°C	0° to 50°C
RH Range	N/A	1% to 90% RH	
CO2 Range	N/A		0 to 5,000 ppm
Communication	Bluetooth (upgradable to remote access using cloud through MX Gateway)		



Model	MX1104	MX1105
Description	Analog/Temp/RH/Light	4-Channel Analog
Temp Range	-20° to 70°C	
RH Range	0% to 100%	N/A
Light	0 to 167,731 lux	
Analog Sensor (Contact us for more details)	<ul style="list-style-type: none"> • 4-20 mA • AC Current • AC Voltage • Air Velocity • DC Amperage 	<ul style="list-style-type: none"> • DC Voltage • Differential Pressure • Gauge Pressure • Temperature
Communication	Bluetooth (upgradable to remote access using cloud through MX Gateway)	

REMOTE ACCESS TO YOUR DATA IN ONSET'S CLOUD-BASED HOBOLINK SOFTWARE

MX GATEWAY

Model : MX Gateway (MXGTW1)

- Transmits data from MX Bluetooth loggers within 100-foot range (up to 50 loggers)
- Wi-Fi & Ethernet connectivity



FREE HOBOLINK Software

- Alarm notification via email or SMS text message
- Instant visualisation of current and historical data (Custom Dashboard)
- Schedule automated delivery data
- Export exact date range and sensor needed
- Unlimited cloud storage via HOBOLink.com

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TEAMFOOD









TEAMMETER

TEAMBIO

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STAND-ALONE DATA LOGGER

HOBO U12 Stainless Steel Temp Logger (Food-grade 316 Series stainless steel)				
	Model : U12-015	Model : U12-015-02		
<ul style="list-style-type: none"> • Measurement Range : -40° to 125°C • Battery : 3 year typical use, factory replaceable • Pressure/Depth Rating : 2200 psi maximum 1500 m/4900 ft maximum) • Communication : USB Cable 				
HOBO UX100				
	Model : UX100-001	Model : UX100-003	Model : UX100-011A	
	Temp range : -20° to 70°C	Temp range : -20° to 70°C RH : 15% to 95% within 3.5% accuracy	Temp range : -20° to 70°C RH : 1% to 95% within 2.5% accuracy	
Power Source : One 3V CR2032 lithium battery and USB cable Communication : USB Cable				
HOBO UX120 (contact us for more details)				
	Model : UX100-014M	Model : UX120-006M	Model : UX120-014M	Model : UX120-018
	HOBO UX100 Thermocouple	HOBO UX120 4-Channel Analog Logger	HOBO UX120 4-Channel Thermocouple Logger	HOBO UX120 Plug Load Logger
	High-accuracy J, K, T, E, R, S, B, N thermocouple readings	Measure and record temperature, current, CO ₂ , voltage		Measures and records the power and energy consumption of 120V plug loads

BLUETOOTH COLD CHAIN DATA LOGGER

Comes with NIST Calibration Cert
Integrates with mobile and cloud platforms for a 21 CFR Part 11 compliant solution
Real-time alerts and automatic data downloads with optional CX Gateway device
Communication : Bluetooth

REFRIGERATION AND STORAGE

					
CX403	CX450	CX405	CX402-B2M CX402-B4M CX402-T2M CX402-T4M	CX402-T215 CX402-T230 CX402-T415 CX402-T430	CX703
Ambient Temperature Data Logger	Temp/Relative Humidity Data Logger	RTD Dry Ice Data Logger	Temperature (with Probe) Data Logger	Temperature with Glycol Bottle Data Logger	Cryogenic Multiple Use Data Logger
-	-	Temp : -30° to 70°C	-	-	Temp : -30° to 50°C
-	-	Temp probe : -95° to 50°C	Temp probe : -40° to 100°C	-	Temp probe : -200° to 50°C
-	RH : 0% to 95%	-	-	-	-

SHIPPING AND LOGISTIC

Temperature	Dry Ice	Cryogenic	Real Time
			
CX502 : Single Use CX503 : Multiple Use	CX602 : Single Use CX603 : Multiple Use	CX702 : Single Use CX703 : Multiple Use	CX1002 : Single Use CX1003 : Multiple Use
Temp : -30° to 70°C	Temp : -95° to 50°C	Temp : -200° to 50°C	Temp : -20° to 60°C

REMOTE ACCESS TO YOUR DATA IN ONSET'S CLOUD-BASED HOBOLINK SOFTWARE

CX GATEWAY

Model : INTEMP CX Gateway (CX5000)



- Transmits data from CX Bluetooth loggers within 100-foot range (up to 50 loggers)
- Wi-Fi & Ethernet connectivity

FREE HOBOLINK Software

- Automation
- Email & SMS Alert
- Command-Center Control



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TEAMSAFETY

TEAMFOOD

TEAMMETER

TEAMBIO

GENERAL LAB SUPPLIES

SERVICE, REPAIR & CALIBRATION

STEP 1 : Choose your Data Logger



Model	RX3000	RX2101 / RX2102 *RX2105 / RX2106	U30	H21-USB
Memory	32MB, 2 Millions measurements, continuous logging	16MB, 1 Millions measurements, continuous logging	512 KB, 330K measurements	
Internet Connection	Cellular (Sim Card)	Cellular (Sim Card)		USB
HOBONet Wireless Compatibility	Yes	**RX2105 / RX2106 Only		N/A
Inputs	10 (wired) + 50 (wireless)	*5 (wired) + 50 (wireless)	5 (wired), option expand to 10	5 (wired)
Mobile Alerts		Yes		N/A
Power Options	Solar	Solar or Battery	Solar	Battery

STEP 2 : Choose your Sensor (wired)

Model	Sensor		Model	Sensor	
S-BPA-CM10	Barometric Pressure Sensor w/10cm Cab		S-LIA-M003	PAR Sensor with 3m Cable	
S-LWA-M003	Leaf Wetness Smart Sensor		S-LIB-M003	Silicon Pyranometer Sensor w/3m Cable	
S-RGB-M002	Rain Gauge (0.2mm) with 2m Cable		S-WCG-M003	Ultrasonic Wind Smart Sensor	
S-RGF-M002	Davis (0.2mm) Rain Gauge Smart Sensor		S-WCF-M003	Davis Wind Speed & Direction Smart Sensor	
S-SMD-M005	Soil Moisture - 10HS		S-WSET-B	Wind Speed and Direction Sensor Set	
S-THC-M002	Temp/RH Sensor (12-bit) w/ 2m Cable		S-TMB-M002	Smart Temp Sensor 12-bit w/ 2m Cable	

Notes : please contact TMS for more details and accessories required, others parameters available

WEATHER STATION

ONSET

Choose your Sensor (HOBOnet wireless)

Frequency : 921 Mhz
 Approved by MCMC
 Applicable for :-
 RX3000 – add RXMOD-RXW-921
 RX2105 – battery
 RX2106 – solar



Model	Sensor		Model	Sensor	
RXW-LIA-921	HOBOnet PAR Sensor		RXW-LIB-921	HOBOnet Solar Radiation (Silicon Pyranometer) Sensor	
RXW-LWA-921	HOBOnet Leaf Wetness Sensor		RXW-RGF-921	HOBOnet Rainfall (metric)	
RXW-SMC-921	HOBOnet Soil Moisture EC-5 Sensor		RXW-SMD-921	HOBOnet Soil Moisture EC-5 Sensor	
RXW-T11-921	HOBOnet T11 Soil Moisture/Temp Sensor		RXW-T12-921	HOBOnet T12 Soil Moisture/Temp/EC Sensor	
RXW-THC-921	HOBOnet Temp/RH Sensor		RXW-THC-B-921	HOBOnet Wireless Temp/RH Sensor	
RXW-TMB-921	HOBOnet Wireless Temperature Sensor		RXW-WCF-921	HOBOnet Wind Speed and Direction	

Notes : please contact TMS for more details in specification

STEP 3 : Tripod Stand



M-TPB / M-TPA	M-TPB-KIT / M-TPA-KIT
2m TRIPOD / 3m TRIPOD	Complete 2M Tripod kit / Complete 3M Tripod kit

STEP 4 : Choose Data Plan – for remote monitoring (RX series only)

SP-610	User supplied SIM plan w/ 1 minute logging and 10 minute connections
SP-611	User supplied SIM plan w/ 30 minute logging and 6 hour connections

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STEP 1 : Choose your Data Logger



Model	ZL6 Basic	ZL6
Sensor Port	6	6
Automatic Upload to Zentra Cloud	N/A	4G Cellular (Hourly Data Upload)
GPS	N/A	Yes
Battery	AA Battery	AA Battery (with integrated solar panel)
Measurement Interval	1 hour	5 min to 12 hours
Reference Barometer	N/A	Built-in
Data Storage	2 MB	8 MB

STEP 2 : Choose your Sensors

CLIMATE MONITORING

Model	Sensor
ATMOS 22	<p>Ultrasonic Anemometer (Wind Speed, Wind Gust, Wind Direction)</p> <p>Wind Accuracy : the greater of 0.3 m/s or 3% of measurement</p>



Model	Sensor
INFRARED TEMPERATURE SENSORS (IRT)	<p>Monitors surface temperature by measuring the thermal energy radiated from any surface within its field of view</p>



ATMOS 14	<p>Four measurements in one sensor (RH, TEMP, VAPOR PRESSURE, BAROMETRIC PRESSURE)</p>
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PYR (PYRANOMETER) SENSOR	<p>Total solar radiation sensor (pyranometer)</p> <p>Spectral range 380 – 1120 nm</p> <p>Measurement range 0 to 1750 W m⁻² (0 – 350 mV)</p>
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PHYTOS 31	<p>Measures both the onset and duration of wetness on a simulated leaf, which in turn predicts when the onset of certain diseases or infections may occur.</p>
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FULL-SPECTRUM PAR SENSOR	<p>Measures the Photosynthetic Photon Flux Density (PPFD)</p> <p>Spectral range 389 to 692 nm</p> <p>Measurement range: 0 to 4000 μmol m⁻² s⁻¹</p>
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Notes : please contact TMS for more details in specification

SOIL MOISTURE

Model	Sensor
TEROS 10	<p>Soil Moisture</p> <p>430 mL volume of influence</p>



Model	Sensor
TEROS 11/*12	<p>Soil Moisture / Temp / *Electrical Conductance (EC)</p> <p>Increased volume of influence (1010 mL)</p>

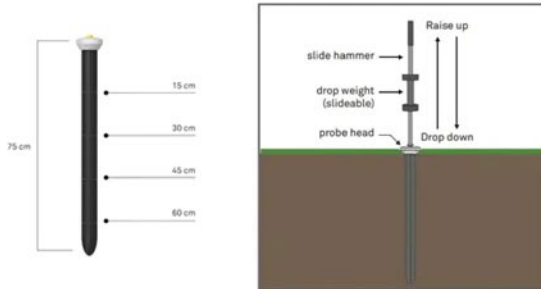


ENVIRONMENTAL MONITORING SYSTEM



SOIL MOISTURE PROFILE PROBE

Model	Sensor
TEROS 54	Multi-depth soil moisture profile probe measures water content and temperature Sensors provide profile measurements throughout and around most root zones



SOIL WATER POTENTIAL

Model	Sensor
TEROS 21	Full-range (-5 to -100,000 kPa) water potential sensor
TEROS 31	Laboratory Tensiometer Range : -85 kPa to +50 kPa
TEROS 32	Advanced Field Tensiometer Direct measurement, no need calibration, refilled without removing it from soil



Notes : please contact TMS for more details in specification

ALL IN ONE WEATHER STATION

ATMOS 41W



- A true wireless weather station ideal for long-term, remote installations
- No moving parts
- Tipping spoon added for dual rainfall measurement
- Addition of electrical conductivity measurement for rainfall
- Built-in solar panel
- Built-in Data Logger
- Measurements : Solar Radiation , Relative Humidity , Air Temperature , Vapor Pressure , Barometric Pressure , Wind Direction , Precipitation/Rain, Precipitation/Rain EC

ATMOS 41



- 12 weather sensors into a single, compact all- in-one device.
- Measures air temperature, relative humidity, vapor pressure, barometric pressure, wind speed, gust and direction, solar radiation, precipitation/rain , lightning strike counter and distance
- Data Logger sold separately (ZL6)

SOIL LABORATORY INSTRUMENT

HYPROP (SOIL MOISTURE CHARACTERISTIC CURVE)



- HYPROP 2 is capable of generating a moisture characteristic curve and determining the unsaturated hydraulic conductivity of soil samples in only days versus months.
- Completely automated
- Can be combined with WP4C data for complete SWCC across all water potential ranges
- Accuracy: ± 1.5 hPa (0 hPa to 820 hPa)
- Resolution: 0.01 hPa
- Measurement range for tensiometers: +20 hPa to -1200 hPa / -2400 hPa

WP4C WATER POTENTIAL METER (Soil Water Characteristic Curve)



- WP4C determines the relative humidity
- of the air above a sample in a sealed chamber (conforms to ASTM D6836)
- Primary measure of water potential
- Measures the combined matric and osmotic potentials
- Can be combined with HYPROP for complete SWCC across all water potential ranges
- Range: 0 to -300 MPa
- Accuracy: ± 0.05 MPa from 0 to -5 MPa; 1% from -5 to -300 MPa

KSAT (Soil Saturated Hydraulic Conductivity)



- Determines saturated hydraulic conductivity measurements in the lab.
- Completely automated
- Directly calculates Ksat
- Uses both constant and falling head methods
- Complies with DIN 19683-9 and DIN 18130-1
- Measurable KSAT values (min.): 0.01 cm/d (0.004 in/d)
- Measurable KSAT values (max.): 5000 cm/d (196 in/d)
- Hydraulic conductivity (Ks) of the porous plate: $K_s = 14000$ cm/d (5512 in/d)

MINI DISC INFILTRMETER Unsaturated Hydraulic Conductivity



- Quickly test unsaturated hydraulic conductivity and infiltration rates
- Reservoir Chamber Volume : 95ml
- Suction Range : Min 0.5cm / Max 7.0cm
- Mariotte Chamber Volume 40ml
- Compliance : EM ISO/IEC 17050:2010

SATURO Saturated Hydraulic Conductivity



- Fully automated infiltrimeter, portable
- Capable of unattended measurement
- Infiltration rate range: 0.0038 cm/hr to 115 cm/hr
- Infiltration rate resolution: 0.0038 cm/hr
- Infiltration rate accuracy: ± 5 % of reading
- Water level: Maintained at 5 cm
- Pressure head ranges: 0 to 40 cm

PARIO (Soil Particle Size Analyzer)



- Calculates the particle size distribution by Stokes' law
- Autonomous operation
- Fast measurement time: 2.5h +/- 0.5% error
- No physical disturbance of suspension during measurement
- No manual reading or calculation errors - Direct measurement of clay content
- Particle size range: 2-63 μm

VARIOS

Automated Thermal Dryout Curves



- Generates thermal dryout curves automatically,
- Two measurement methods: continuous and point by point
- Conforms to industry standards ASTM D5334
- Temperature measurement accuracy +/- 0.1 °C and resolution 0.01 °C
- Use the HYPROP/VARIOS Connector to calculate soil moisture release curves and thermal dryout curves simultaneously.

THERMAL PROPERTIES ANALYZER

Model	Description
TEMPOS	Thermal Properties Analyzer Data storage 2,048 measurements in flash memory (both raw and processed data are stored for download) Portable : use in the field or in the lab



Choose the sensor :-

- KS-3**
(6cm small single needle)
- Conductivity: 0.02–2.00 W/(m · K)
 - Resistivity: 50 – 5000 °C · cm/W



- SH-3**
(3cm dual-needle)
- Conductivity: 0.02–2.00 W/(m · K)
 - Diffusivity: 0.1–1.0 mm²/s
 - Resistivity: 50 – 5000 °C · cm/W
 - Volumetric specific heat capacity: 0.5–4.2 MJ/m



- TR-3**
(10cm large single needle)
- Conductivity: 0.1–4.0 W/(m · K)
 - Resistivity: 25–1,000 °C · cm/W



- RK-3**
(6 cm thick single needle)
- Conductivity: 0.1–6.0 W/(m · K)
 - Resistivity: 17–1,000 °C · cm/W



PLANT CANOPY MEASUREMENT



CANOPY INTERCEPTION AND LEAF AREA INDEX

Model : LP-80

- Data storage capacity 1 MB RAM (over 2,000 measurements)
- Number of sensors 80
- PAR range 0 to 2,500 $\mu\text{mol m}^{-2} \text{s}^{-1}$
- Resolution 1 $\mu\text{mol m}^{-2} \text{s}^{-1}$



LEAF POROMETER

Model : SC-1

- Range: 0 to 1,000 $\text{mmol}/(\text{m}^2 \text{s})$
- Resolution: 0.1 $\text{mmol}/(\text{m}^2 \text{s})$
- Accuracy: $\pm 10\%$ of measurement from 0 to 500 $\text{mmol}/(\text{m}^2 \text{s})$

ULTRASONIC PROCESSOR



750 WATT ULTRASONIC PROCESSOR, VCX750

20KHz, 750 Watt Programmable Ultrasonic Processor with Timer and Pulser

- Unit with 13 mm probe and CV33 convertor
- Processing volume 0.2- 1 Liter (continuous up to 10 Liter)
- Real Time display with elapsed time indicator and energy monitor

Model	Description
VCX 750	750 Watt Ultrasonic Processor

500 WATT ULTRASONIC PROCESSOR, VCX500

20KHz, 500 Watt Programmable Ultrasonic Processor with Timer and Pulser

- Unit with 13 mm probe and CV33 convertor
- Processing volume 0.2- 1 Liter (continuous up to 10 Liter)
- Real Time display with elapsed time indicator and energy monitor

Model	Description
VCX 500	500 Watt Ultrasonic Processor

130 WATT ULTRASONIC PROCESSOR, VCX130

20KHz, 130 Watt Programmable Ultrasonic Processor with Timer and Pulser

- Unit with 6 mm probe and CV188 Converter
- Processing Volume 10-50 ml
- Real Time display with elapsed time & energy

Model	Description
VCX 130	130 Watt Processor with Timer & Pulser

130 WATT ULTRASONIC PROCESSOR, VCX130PB

20KHz, 130 Watt Programmable Ultrasonic Processor with Pulser Button

- Unit with 6 mm probe and CV188 Converter
- Processing Volume 10-50 ml
- Real Time display with elapsed time & energy

Model	Description
VCX 130PB	130 Watt Processor with Pulser Button



1500 WATT/2500 WATT ULTRASONIC PROCESSOR

20KHz, 750 Watt Programmable Ultrasonic Processor with Timer and Pulser

- Unit with 1" diameter, 10" long probe with a 100µm maximum amplitude
- Processing Volume 1 -10 Liter
- Energy setpoint, Pulse mode & Wattage display

Model	Description
VCX 1500	1500 Watt Ultrasonic Processor
VCX 2500	2500 Watt Ultrasonic Processor



SOUND ENCLOSURE CHILLER

Wide range of accessories :

- Difference sizes of probe
- Cup horn
- Flow cell
- Stand and Enclosure
- Chiller and etc.

Model	Description
630-0451	Sound Enclosure for VCX130
630-0427	Sound Enclosure for VCX750/500
830-00905	400 Watt Chiller, to control temp. range 5-45 oC

ULTRASONIC BATH



ULTRASONIC CLEANER

Various sizes of 40 KHz of ultrasonic cleaner

- Exterior is made of black titanium, interior is SUS304
- Inner tank is with stamping forming, with no welding
- Set for half wave and sweep functions
- Quality Certificate, CE, EMC, RoHS, FCC

Model	Description	Model	Description
ASUSC N-80	0.8 L, 35 W Ultrasonic Bath	ASUSC N-10	10.0 L, 240 W Ultrasonic Bath
ASUSC N-02	2.0 L, 60 W Ultrasonic Bath	ASUSC N-15	15.0 L, 360 W Ultrasonic Bath
ASUSC N-03	3.0 L, 120 W Ultrasonic Bath	ASUSC N-22	22.0 L, 480 W Ultrasonic Bath
ASUSC N-06	6.0 L, 180 W Ultrasonic Bath	ASUSC N-30	30.0 L, 600 W Ultrasonic Bath

SHAKING INCUBATOR



BENCHTOP SHAKER



LS-Z

INCUBATOR SHAKER



Kuhner Kelvin



LT-X



ISF1-Z

The Kuhner Technology

- Special Direct Drive technology allows the shaking diameter to be easily changed and the speed of the motor is the same as the speed of the containers being shaken
- Precise temperature control at a low energy requirement and even temperature distribution
- Peltier technology for fast cooling & heating
- Humidification by an electrically heated water bath with automatic water refill reduce evaporation
- Essential CO₂ control for cell cultures max up to 20% CO₂
- Essential O₂ regulation for stem cells as optional
- separate displays for each process parameter or touchscreen display in available
- Efficient scale up from lab scale to production scale – using the orbitally shaken bioreactors by Kuhner

SHAKING BIOREACTOR



LAB SCALE TO PRODUCTION SCALE



SB10-X

From 1.5 litres to 4.5 litres
and
4 litres up to 12 litres



SB50-X

from 15 litres up to 50 litres



SB200-X

From 50 litres up to 200 litres



SB2500-Z

from 500 litres up to 2500 litres

Orbital Shaken Bioreactor for Single-use Bags

- Various capacity from 1.5L to 2500L
- Single use bioreactor system
- Cultivation of human, mammalian and plant cells
- Fast, simple set up
- Easy scale-up
- Online measurement of pH and DO
- Qualification for GMP production processes

FIBER OPTIC SENSOR

FIBER OPTIC OXYGEN METER

O₂ °C



O₂ °C



O₂ °C



O₂ °C



Microx 4/Fibox 4	OXY-1 SMA/ST	OXY-4 SMA/ST	Wireless O ₂ Measurement System
Stand alone with display & splash-proof 1 ppb to 100 % oxygen Easy calibration via barcode scan Temperature, pressure and salinity compensation 16 GB internal memory 1 ppb to 100 % oxygen For use with non-invasive sensors, dipping probes and flow-through cells	Small & Compact Single channel Available with Bluetooth connection Temperature, pressure and salinity compensation USB-powered 1ppb - 100 % oxygen For use with non-invasive sensors, dipping probes and flow-through cells PreSens Measurement Studio 2 software	4 channel Small & Compact	PreSens Wireless Studio app (Android & IOS) Battery operated 0.5ppmv - 100 % oxygen For use with dipping probes only

FIBER OPTIC CARBON DIOXIDE METER

CO₂ °C



FIBER OPTIC PH METER

pH °C



CO2-1 SMA/ST	pH-1 SMA HP5	pH-1 SMA LG1
1 - 25 % CO ₂	pH 5.5 – 8.5	pH 4.0 – 7.5
USB-powered For use with non-invasive sensors, dipping probes and flow-through cells PreSens Measurement Studio 2 software		

FIBER OPTIC MULTI-CHANNEL OR MULTI-PARAMETER METER

CO₂ pH O₂ °C



O₂ pH CO₂ °C



O₂ BM pH / CO₂



O₂ OUR pH



O₂ pH CO₂



MCR-O1P1C1	OXY-1, CO ₂ -1 & pH-1	SFR Vario	SFR Shake Flask Reader	VisiSens TD 2D Mapping System
O ₂ , pH & CO ₂	O ₂ , pH & CO ₂	OUR, Biomass, O ₂ , pH & CO ₂	OUR, O ₂ & pH	O ₂ , pH & CO ₂
Benchtop bioreactor monitoring, respirometry or microfluidics	Benchtop bioreactor monitoring, respirometry or microfluidics	Yeast, Microbial Growth Phases	Shake Flasks, Cultivation Tubes and T-flasks	Visualizes spatial and temporal changes of analyte concentrations in cell culture, or tissues, in root systems, or when phenotyping crop plants

FIBER OPTIC SENSOR TYPE



Sensor Spot	Dipping Probe	Microsensor	Flow Through Sensor	Imaging Sensor Foil
Non-invasive without consumption of O ₂ Various diameter Optional Self-adhesive or ready-to-use consumables	Standard probe or Special probe for integrated purpose	High Resolution Sensor. Profiling, needle-type with push sensor or fixed sensor	Single-use, Autoclavable and integrated Metal Flow through cell	2D read-out Contactless, direct sensing or through transparent walls

HEAL FORCE – WATER PURIFICATION SYSTEM

- Certified to ISO9001 and EU CE



Model	Smart-Plus NE(T)	Smart-Mini
Feed Water		
Source	Tap Water	Tap Water
Conductivity (µm/cm)	<400	<400
Purification Water (Class III)		
Productivity Rate (L/H)	30	15
Ion Rejection	>95%	>95%
Bacteria Rejection	>99%	>99%
Conductivity(µm/cm)	<20	<20
High Quality Purification Water (Class II)		
Productivity Rate (L/H)	15	-
Resistivity (25°C)	10 MΩ.cm	-
TOC	<30 ppb	-
Dissolved Organic	<0.1 ppm	-
Ultrapurification Water (Class I)		
Resistivity (25°C)	18.2 MΩ.cm	18.2 MΩ.cm
TOC	<5 ppb	1~5 ppb
Conductivity (25°C)(µm/cm)	0.055	0.055
Endotoxin (Pyrogen)	<0.001 EU/mL	N/A
Particulate (≥0.02µm)	≤1 pc/mL	≤1 pc/mL
Bacteria	≤1 cfu/mL	≤1 cfu/mL
RNase/DNase	Free	N/A
Features	<ul style="list-style-type: none"> • Touch screen control • EDI module • TOC detection • Remote water dispenser 	<ul style="list-style-type: none"> • Compact • Small Volume

HEAL FORCE – CO₂ INCUBATOR



- 180°C high temperature dry heat sterilization
- HEPA air filter - ≥99.95% efficiency for particle size ≥0.3µm (100 grade air cleanliness)
- Forced convection circulating air
- Humidification design of chassis reservoir
- Data traceability and remote management
- 8-inch touch screen operation
- TCD/IR CO₂ sensor

Model	HF180
Capacity	185L
Temp. Control Sensor	PT1000
CO ₂ Control (% CO ₂)	±0.1%
Inlet Pressure (MPa)	0.1
CO ₂ Range (% CO ₂)	0 to 20%
Relative Humidity	≥95%

HEAL FORCE – CENTRIFUGE



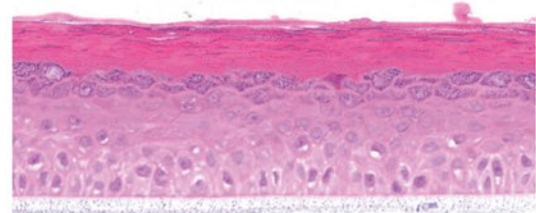
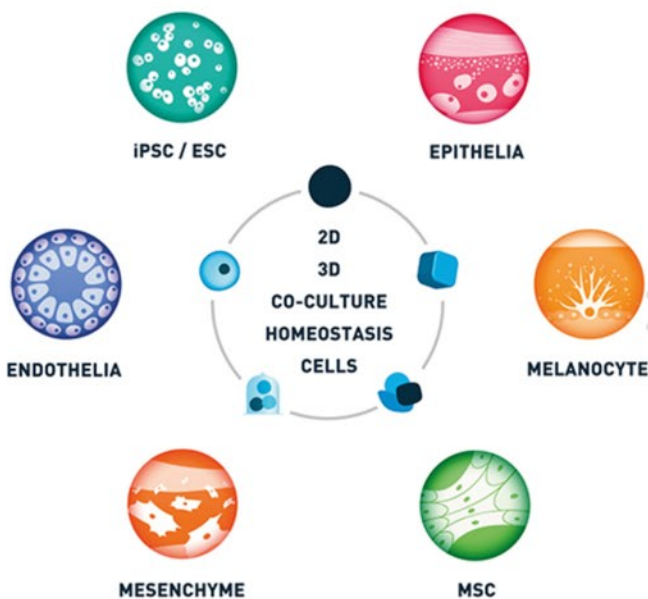
- Maintenance-free brushless induction drive
- Interchangeable swing-bucket and high-speed fixed-angle rotors
- User-friendly interface
- Automatic rotor identification
- Electronic imbalance detection
- High quality rotors – ultraduralumin , aerosoltight auto-cyclavable (121°C, 20 minutes)

Model	Neofuge 1600R*/1600
Speed (rpm)	300-1500
Max. RCF (xg)	23646
Max. Capacity	4x400mL
Programs	10
Temperature Range*	-10 to 40°C*
Refrigerant*	R404a (CFC-Free)*
Run Time	0-9 hrs 59 mins
Control	Microprocessor

PRIMARY CELL



BRIDGING TRANSLATIONAL RESEARCH TO CLINICAL APPLICATION AND CELL THERAPY



PRECISION CELL CULTURE: ISOLATE, CULTURE & ASSAY IN VITRO CELL SYSTEMS

- Model Specific Cell Behaviour with In Vivo-like Assay Responsiveness and Sensitivity
- One Universal Base Formulation for a Seamless Transition Across Multiple Applications
- Chemically Defined Components Offering Accurate and Highly Reproducible 2D/3D Models
- Higher Certified Media to Support Establishment of Clinical Applications
- www.cellntec.com

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World's Largest Human & Animal Normal Cell Provider

Human Cells	Adrenal Cortical Cells, Annulus Fibrosus Cells, Astrocytes ,Cardiac Myocytes, Chondrocytes, Endothelial Cells, Epithelial Cells, Fibroblasts, Hair Cells, Hepatocytes, Keratinocytes, Keratocytes, Leydig Cells, Macrophages, Melanocytes, Meningeal Cells, Mesangial Cells, Mesenchymal Stem Cells, Microglia, Mononuclear Cells, Neural Stem Cells, Neurons, Nucleus Pulposus Cells, Oligodendrocytes, Osteoblasts, Pericytes, Perineurial, Preadipocytes, Sertoli Cells, Schwann Cells, Skeletal Muscle Cells, Smooth Muscle Cells, Stellate Cells, Synoviocytes, Trabecular Meshwork Cells, Trophoblasts, Urothelial Cells
Animal Cells	Rat, Mouse, Porcine, Horse, Dog, Bovine & Rabbit Cells
Hematopoietic Cells	Human Lymphatic Mononuclear Cells, Human Liver Mononuclear Cells, Human Hepatic Macrophages, Mouse & Rat Macrophages, Lymphatic Mononuclear Cells Hepatic Macrophages, Splenocytes, Splenic Macrophages, Lymphatic Mononuclear Cells, Splenic Macrophages , Mouse Bone Marrow Mononuclear Cells
Human Pluripotent Stem Cells	HiPSC-derived Neural Stem Cells, Human Pluripotent Stem Cell Cardiomyocyte Differentiation, Cardiomyocyte Selective Medium, HPSC Neural Induction Medium, H9-derived Cardiomyocytes
Human Mesenchymal Stem Cells	Human Amniotic Mesenchymal & Chorionic Mesenchymal Stromal Cells, Human Bone Marrow-derived, Adipose-derived, Liver-derived, Umbilical, Pulmonary & Vertebral Mesenchymal Stem Cells

CELL CULTURE MEDIA & REAGENTS

Specialty Medium & Supplements	Medium & Supplement for growing of all the above Primary cells in standard, low serum, serum free, animal component free, condition medium or special custom order.
Classical Medium	DMEM, DMEM with high Glucose, DMEM/F12, RPMI 1640, IMDM
Reagents	For Cell Culture (TE, TN, Cell Freezing ...), Cell Transfection (Epifactagen, Endofectagen...), Extracellular Matrix (Poly-L-Lysine, Collagen I...), Molecular Biology (GoldNStart TaqGreen qPCR Master Mix, SpeedNA Isolation Kit...), cDNA Quality Evaluation (GeneQuery™ Human cDNA Evaluation Kit, Deluxe, 100 reactions...), qPCR Reagents (One-Step GoldNStart TaqGreen RT-qPCR Master Mix, 4x...)

GENETICS & GENOMICS KITS

qPCR Array Kits	qPCR array kit relating to specific human cell type and body system
HLA Typing Kits	GeneQuery™ HLA PCR+Sanger SBT Typing Kits (Sequence-Based Typing (SBT) method)
Aging Markers	Absolute Human Telomere Length Quantification qPCR Assay Kit, Telomerase Activity Quantification qPCR Assay Kit...
DNA Methylation Quantification	Human Global DNA Methylation Quantification qPCR Assay Kit

CELL BASED ASSAY KITS

3D Cell Culture	3D Blood Brain Barrier (BBB) Model , 3D Cerebral Cortical Model, 3D Liver Fibrosis Model, 3D Liver Fibrogenesis Angiogenesis Model, 3D Osteogenesis-Angiogenesis Coupling Spheroid, 3D Osteoblast Spheroid, 3D Spheroids on Human Brain, Liver, Lung & Skeletal Primary Cells.
Cell Analysis	LDH Cytotoxicity Assay, HeLa Cell Contamination Detection Kit, MTT Cell Viability & Proliferation Assay ...
Enzyme Activities	Glutathione Peroxidase Assay, Superoxide Dismutase Assay, Glucose-6-phosphate Dehydrogenase Assay, Pyruvate dehydrogenase Assay ...
Metabolism Assays	Glucose-6-phosphate Assay, Colorimetric Calcium Assay, Total Glutathione Assay ...
Organelle Analysis	Cytochrome C Oxidase Assay, Mitochondria Isolation Kit, Malate Dehydrogenase Assay ...
Oxidative Stress	Colorimetric Nitric Oxide Assay, Catalase Activity Assay, NAD/NADH Assay ...
Growth Factors, Proteins & ELISA Kit Classical Medium	Human, Mouse, Rat, Bovine Recombinant Proteins & ELISA Kits

CELL LINE & MICROORGANISM PURE CULTURES

TMS is a trustable company for importing human cell lines, animal cell lines, bacteria and microorganisms.

WHY?

- ✓ 12 years experience since 2003
- ✓ Obtain legal import license and proper documentation to prevent customs clearance delay
- ✓ Immediate delivery with proper handling, and temperature control
- ✓ Access to Worldwide Cell Bank

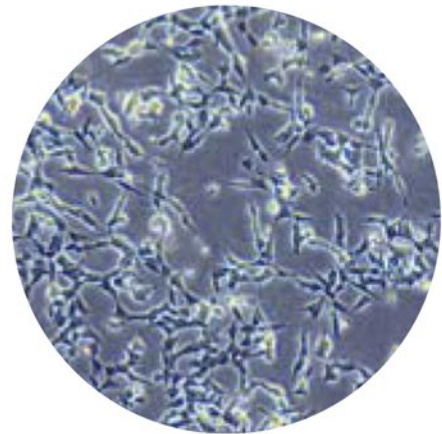
TYPE OF CULTURE

Human cell lines

- Breast cancer cell lines
- Feeder cells
- HaCaT cells
- Urinary bladder cancer cell lines
- Skin cancer cell lines
- HeLa Kyoto fluorescently tagged
- Brain cancer cell lines
- Hämatopoietic cells
- Bone cancer cell lines
- Colon cancer cell lines
- Head-Neck cancer cell lines
- Liver cancer cell lines
- Lung cancer cell lines
- Gastric cancer cell lines
- Adrenal gland cancer cell lines
- Kidney cancer cell lines
- Oral cells
- Pancreas cancer cell lines
- Human Primary cells
- Prostate cancer cell lines
- Reproductive system cancer cell lines
- Soft tissue cancer cell lines

Animal cell lines

- Bovine cell lines
- Canine cell lines
- Hamster cell lines
- Chicken cell lines
- Insect cell line
- Mouse cell lines
- Opossum cell line
- Potoroo cell lines
- Rat cell lines
- Pig cell lines



Microorganisms

- The DSMZ microbial collections contain over 31,000 cultures representing some 10,000 species and 2,000 genera in total.



- JCM maintains approximately 25,600 strains as of Nov. 2017, and the approximate numbers of the available strains from JCM are: 11,700 strains of aerobic and anaerobic bacteria including actinomycetes, 530 strains of archaea, and 5,200 strains of fungi including yeasts (in total ca. 17,500 strains). Strains held at JCM are limited to those classified in Risk Group 1 or 2.



MOLECULAR BIOLOGY

ANTIBODIES

Over 800,000 antibodies. Primary, secondary, polyclonal, monoclonal



SMALL MOLECULES

Small molecules include agonists, antagonists, activators and inhibitors, ion channel modulators, and hormones.



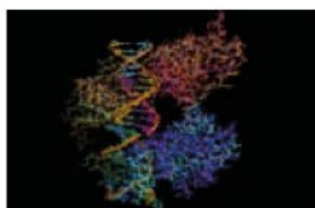
ELISA KITS

Each kit is created with knowledge, experience and precision so your research can fulfil its potential.



PROTEINS

Our validated proteins are suitable for a wide range of research applications.



PROTEOMICS

Complete proteomics portfolio featuring items for protein extraction, isolation and protein chromatography, to protein labeling and conjugation and subsequent protein detection (Western blot and Mass spec)

BIOASSAYS

Extensive library of antibodies, recombinant proteins and ELISAs for assay development and protein detection. Assays for cell health, SAM methyltransferase, proteases, phosphatases and reporter assays

DNA & RNA

Large selection of genomic DNA and plasmid DNA extraction products. RNA isolation and clean up reagents. Affordable PCR reagents, including Taq and dNTPS. Yeast DNA isolation and transformation kits

SCIENCE EDU KITS

Over 70 hands-on science teaching kits for AP biology, life sciences and biotechnology education. For teaching techniques routinely used in today's labs. Plug'n'play into courses or design a course.

TISSUE CULTURE PLASTIC CONSUMABLES



Centrifuge Tubes

Centrifugal strength: 20,000 G
DNase/RNase/DNA/pyrogen-free, Sterilized

4-632-01	15ml Centrifuge Tube Alpha, 50pcs x 8 bags (400pcs)
4-632-02	50ml Centrifuge Tube Alpha, 20pcs x 10 bags (200pcs)



Tissue Culture Plates

Surface Treated, Pyrogen-free, Sterilized, with lid

2-8588-01	6 Well Tissue Culture Plate, 50pcs
2-8588-02	12 Well Tissue Culture Plate, 50pcs
2-8588-03	24 Well Tissue Culture Plate, 50pcs
2-8588-04	48 Well Tissue Culture Plate, 50pcs
2-8588-05	96 Well Tissue Culture Plate, 100pcs



Tissue Culture Flasks

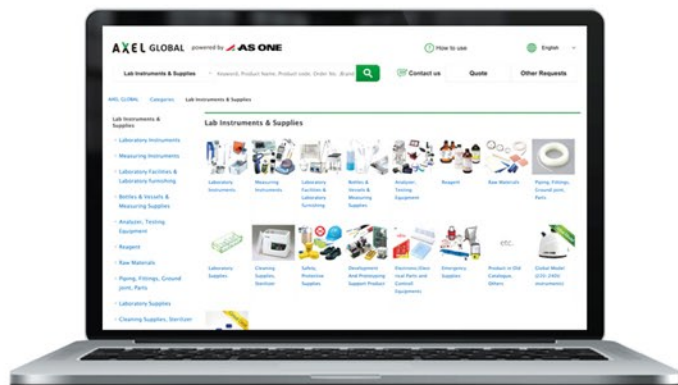
Surface Treated, Vent Cap, Pyrogen-free, Sterilized

2-8589-01	25cm ² Tissue Culture Flask, 10pcs x 20 bags (200pcs)
2-8589-02	75cm ² Tissue Culture Flask, 5pcs x 20 bags (100pcs)
2-8589-03	175cm ² Tissue Culture Flask, 5pcs x 8 bags (40pcs)

AS ONE E-CATALOGUE JAPAN QUALITY PRODUCT SELECTION



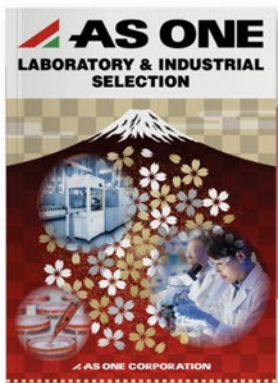
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CONTENTS

TEAMSAFETY

TEAMFOOD

TEAMMETER

TEAMBIO

GENERAL
LAB SUPPLIES

SERVICE, REPAIR
& CALIBRATION

TMS CALIBRATION, TESTING & REPAIR SERVICES



VALIDATION & TESTING

Providing validation testing for thermal mapping, thermal validation for retorts & sterilizers

Serv/LEV	Description
Serv/Process	Thermal Process Validation Service for Food Industries
Serv/Steriliser	Thermal Sterilisation Validation Service for Pharmaceutical & Hospital
Serv/ThermalMap	Thermal Mapping for Storage Room and Chiller

We also provide safety testing & compliance services according to DOSH and DOE

Serv/LEV	Description
Serv/CHRA	Chemical Hazard Risk Assessment Services
Serv/DOE	Chimney/Stack DOE submission service
Serv/LEV	LEV Testing according to DOSH
Serv/FilterSaturation	Filter Saturation Testing for Activated Carbon Filter
Serv/BSC&LFC	BSC & LFC filter replacement/testing service



CALIBRATION

Calibration for various equipment such as data loggers, water activity meter and gas sensors.

Serv/LEV	Description
Cal/AwMeter	Calibration of Water Activity Meter (Meter Food, Aqualab), include Slope Adjustment, Firmware update, and certificate
Cal/DataLog	Calibration of data logger (Ebro), drift adjustment, firmware update and certificate
Cal/GasSensor	Calibration of Gas Sensor (Analox), with reference gas, and certificate

INSTALLATION AND FILTER REPLACEMENT

Installation, relocation and filter replacement for equipment, especially for ductless fume hood and vented storage cabinets

Serv/LEV	Description
Serv/Filter Replacement	Filter Replacement & Disposal Service
Serv/PM	Annual PM Service for Equipment
Serv/Relocation	Relocation of Fume Hood and Storage Cabinet



TROUBLESHOOTING AND REPAIR

Instrument breaks down ? Let our professional engineer inspect and provide repair options and solution.

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We provide trainings for wide range of instruments, customer safety awareness talk/events, and consultation for laboratories. The service include walkthrough chemical vapours & safety inspection.



For more inquiries, please contact our Service Team at

Email : servicecoordinator@tms-lab.com
 Phone : +603-7832 0736 / +6011-6206 3808

TMS BROCHURE SOFTCOPY



VERSION 2024/25



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