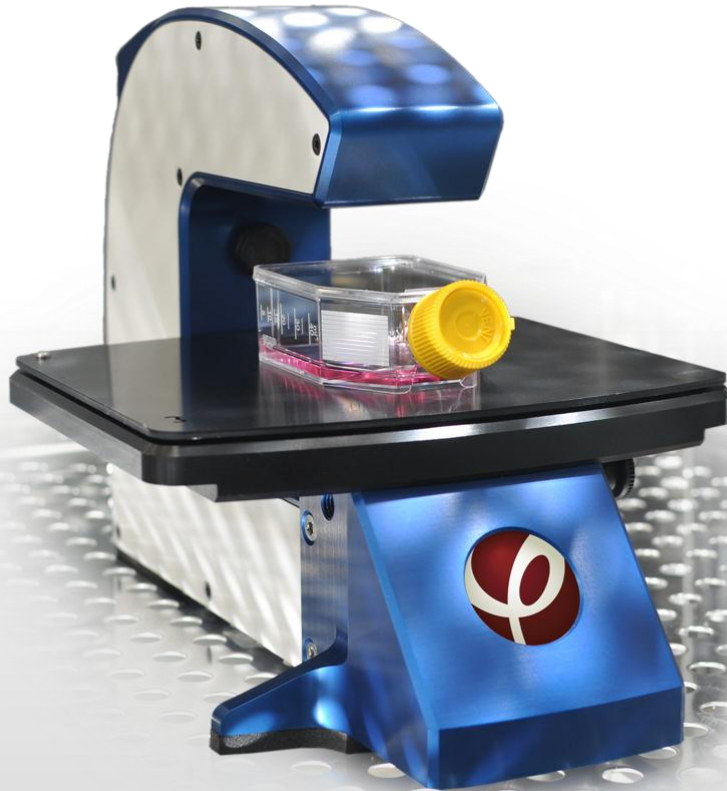




THISTLE SCIENTIFIC

WHERE CUSTOMER CARE COMES NATURALLY

Quality Products For Life Science Research



analytikjena
An Endress+Hauser Company

CS **Cleaver**
Scientific Ltd

DORNIER
LabTech Systems

ibidi
cells in focus

LIFEONICS
Sensing life

NEXT
ADVANCE

Phase
Holographic Imaging

LABOGENE

UVITEC
CAMBRIDGE

CONTACT YOUR LOCAL REPRESENTATIVE FOR FURTHER INFORMATION, DEMONSTRATIONS & PRICING
ALTERNATIVELY CONTACT OUR SALES OFFICE AT enquiries@thistlescientific.co.uk TEL: 01698 338844



ScanLaf - THE BENCHMARK IN BIOLOGICAL SAFETY CABINET DESIGN.



- Energy efficient & environmentally friendly
- Class 1, 2, laminar flow & PCR cabinet
- Many options available
- Innovative design
- Superb construction
- Unsurpassed reliability

ScanVac - HIGH SPECIFICATION FREEZE DRYERS & CONCENTRATORS



Scan me for
details on the
ScanVac range

- Large condenser with high ice capacity
- -55°C or -110°C models
- Read-out of condenser temperature and pressure
- Compact design only 40-50cm² footprint, depending on model
- Acrylic Chamber with height adjustable stainless steel shelves
- Vacuum manifold tree also available
- Connections available for 8x ¾" rubber valves for flask drying

Contact us to arrange a visit to discuss specifications

TOUCH SCREEN BIOMETRA THERMAL CYCLERS

TONE



Scan us for further details
on the Biometra range

TADVANCED



TRIO



- TAdvanced Thermal Cycler with high-speed exchangeable sample block with unbeatable ramping rate 8°C/s (*Silver block option*)

- TRIO Thermal Cycler; 3 independent blocks & heated lids in one housing;

3 options available

- 3x 48 well (0.2ml tubes)
- 3x 30 well (0.5ml tubes)
- 3x combi block (0.2 & 0.5ml tubes)

- TOne Thermal Cycler with fixed block & rapid ramping rate of 4°C/s

- Low-noise operation (< 45dB)

- High Performance Smart Lid reliable contact pressure, even temperature distribution between samples improves temperature uniformity

- Unsurpassed absolute temperature uniformity and no over or undershooting for maximum reproducibility

- Accurate adjustment of gradient temperature profile with "Linear Gradient Tool"

- Comfortable 7" touch screen with intuitive software interface

- Flexible assignment of rights for users

Contact us for further information or to arrange a Demo



NEW qTOWER³ REAL-TIME PCR THERMAL CYCLER



- Stand-alone operation with integrated 10" tablet (*qTOWER³ Touch*) or PC controlled (*qTOWER³*)
- 12 Colour, FRET & Protein Modules can be installed or exchanged
- Adaptable to new applications at any time by adding filter modules
- Patented high performance optical system with a **10 year warranty**
- Short scan times of 6 sec for an entire plate, irrespective of the number of dyes detected
- Novel light source with 4 robust LEDs (RGBW)
- Illumination & detection of all 96 wells individually with no edge effect due to fibre optic shuttle
- Heating rates of 8°C/sec and cooling rates of 6°C/sec
- Ideal temperature homogeneity and unmatched control accuracy ($\pm 0.1^{\circ}\text{C}$)
- Simple programming of even gradient temperatures possible with a **Linear Gradient Tool (LGT)**

Contact us for further information or to arrange a Demo



Scan me for further details



Fully Automated Nucleic Acid Extraction

**Automated protocols for bacteria, viruses, human, animal and plant tissues.
Easily process complex forensic samples and highly processed food samples**

- Can be used with a wide range of extraction kits for isolating DNA & RNA
- Nucleic acid adsorption onto magnetic or paramagnetic particles
- Combined magnetic/heating unit for automated process and collection of bound nucleic acids
- Prefilled reagent strips and/or plates for processing between 1 and 16 samples in parallel
- Sealed reagent cartridges simplify and speed up the process
- Elution volume can be automatically set between 20µl and 500µl
- Isolated nucleic acids transferred to storage tubes with lids
- 1ml pipette tips with integrated aerosol filter provide reliable protection for the dispensing unit
- Reagent cartridges do not need to be opened manually: instrument pierces seals
- Stand-alone operation with integrated 10" Tablet

Contact us for further information or to arrange a Demo



Cultivate cells under continuous unidirectional, oscillating, and pulsatile flow

- Defined shear stress in long-term cell culture
- Live cell imaging and immunofluorescence for analysing shear stress response
- Mimicking shear stress conditions in microcapillary, venous, and arterial flow
- Stop flow experiments & 3D cell culturing



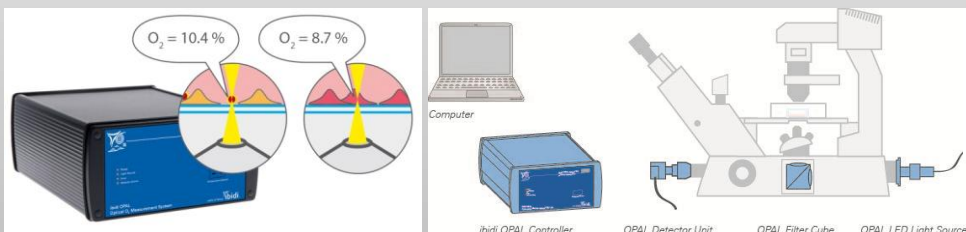
IBIDI HEATING & GAS INCUBATION SYSTEMS

Complete stage top incubator for live cell imaging (CO₂, O₂ humidity control)



- Applications **include high resolution, TIRF, DIC & confocal microscopy**
- Full incubator conditions on inverted microscopy platforms
- Excellent sample illumination with no condensation due to heated lid
- Stable gas incubation without evaporation

OPAL- OPTICAL O₂ MEASUREMENT SYSTEM



Scan me for further details

Connects to all modern inverted fluorescence microscopes

- Measure oxygen concentrations inside the cell and in the media with oxygen-sensitive beads & cell-permeable fluorophores
- 2D cell culture, compact 3D cell spheroid & tissue compatible

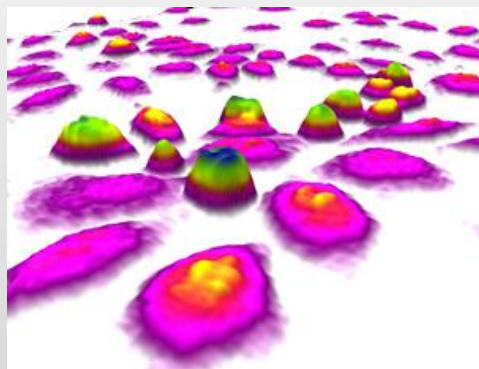


Phase shift for non-invasive & quantifiable imaging of living cells

No staining needed to capture holographic phase images

Using the HoloMonitor M4 Imaging System and software's advanced cell tracking, has clearly show that by drug treatment alone, cell movement of breast cancer cells can be ameliorated. Phase holographic microscopy uniquely provides high content imaging of live cells without using stains, dyes or tracking agents.

<http://www.nature.com/articles/ncomms14483>



QUANTITATIVE MEASUREMENTS

Measure cytometric parameters such as cell volume, thickness, area, texture & irregularity in real-time

HIGH TEMPORAL RESOLUTION

Time-lapse imaging does not miss important cellular events

LABEL-FREE SAMPLES

Cells continuously monitored & analysed in cell culture, without phototoxic effects

LONG-TERM EVALUATION

Long-term kinetic cellular analysis with low intensity, single wavelength laser generates no heat & reduces the risk of photo-damage

MOTORISED STAGE

Time-lapse recording at multiple locations in parallel, within the same culture or in different cultures

DIGITAL AUTO-FOCUS

- Record a sequence of holograms, digitally auto-focussed & assemble into time-lapse movies
- Images are generated at various focal planes from the same hologram & is insensitive to focus drift.
- The focal plane can be refocused after recording for global monitoring and analysis of the cell

Boston Children's Hospital have used the M4 HoloMonitor Imaging System to study living bone cancer cells and for the first time successfully distinguished aggressive bone cancer cells that promote blood vessel formation from the harmless non-promoting counterparts. <http://www.phiab.se/commentary/commentary-170410>

proSET One



proSET Evo



proSET Parallel



Versatile, cost & space saving fermentation systems

- True parallel system, one controller for two vessels (*proSET Parallel*)
- Intuitive user interface with easy touch screen programming
- Duo heating system for thermostat and dry heating compatibility
- Extensive range of reactor vessels & sizes available



INTRODUCING SMOD

Smart Measuring Optical Device

- Smart *in-situ* flask sampling
- Real time reporting
- OD measurements
- Temperature measurements

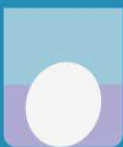


***Efficient cell culture monitoring
Optimise product harvesting
without opening the flasks***

Experiment set-up



Remove from
docking station



Rinse in
sterilizing agent



Dunk in
culture media



Incubate
your cultures



Results on your lab PC
and mobile devices



NEW Alliance 9.7
CHROMA



NEW Alliance Mini HD9
AUTO



NEW Alliance Mini HD9
TOUCH



**Gel documentation, Western blots, Multiplexing, Bio-fluorescence
& Luciferase capability all in one system**

- 12.4 inch touch screen for stand-alone operation (*Mini HD9 TOUCH only*)
- 9 Megapixel native resolution camera with 1 inch sensor
- 18 Megapixel image resolution
- Fully automatic focus and exposure with 1-touch image acquisition
- Extremely bright fixed lens (f:0,90)
- Multi-position filter wheel
- Unique 3 Stage Peltier cooling system -60°C
- Dynamic range up to 4.8 orders of magnitude
- UVIpure high-contrast transilluminator for minimal signal-loss
- Blue SafeLight option available
- Chroma Multi-Wavelength modules for extended fluorescent applications



*Combinations of epi-fluorescent
Blue, Green, Red/NIR & Infrared
options are all available*



BULLET BLENDER – SAMPLE HOMOGENISATION

No special holders, clamp plates or fiddly locking rings

CONSISTENT AND HIGH YIELD RESULTS

Prepares up to 24 samples
(tissue, cells, solid material)

BLITZ THROUGH THE TOUGHEST SAMPLES

Blitz through tough samples like **nematode eggs**
and **yeast cells**

SAMPLES STAY COOL

Minimal sample heating as the tubes vibrate
vigorously in air during rapid bursts of agitation

SO EASY TO USE

1. Sample + beads + buffer in standard tubes
2. Load the tubes into the BULLET BLENDER
3. Set run time and speed. **START**



GO FOR GOLD

*The Bullet Blender Gold combines
dry ice cooling to keep samples at 4°C*



INFINITY ROCKER

STACKABLE ROCKING PLATFORM

ADJUSTABLE: tilt angle adjustable from $\pm 1^\circ - 18^\circ$

SPEED RANGE: rocking 0.1 - 80 cycles per minute

TEMP RANGE: Cold room or incubator use (4°C - 40°C)

SPEED CONTROL: microprocessor controlled speed

GRIP: textured neoprene rubber mat

Scan me for further details of
the Infinity Rocker



**Ultra quiet, ideal for many applications including:
mixing, gel staining, blotting, cell culture, hybridization, washing, etc. .**

4 Year Warranty and Programmable

Incubate & wash blots and gels with microprocessor control for precise timing and dispensing.



- Incubate, stain & wash blots & gels during meetings, lunch, overnight, or over weekends
- Automated reagent dispensing with a minimum volume of 3.5ml per blot & **individual reagent recovery**
- Only requires an electrical outlet **NO** vacuum, pressurized air/gas, or additional pumps required

Scan me for further details of the BlotBot range



- BlotBot 240 holds 2 midi blots, 4 mini blots or strips
- BlotBot 120 holds 1 midi blot, 2 mini blots or strips
- Westerns/Northern/Southern processed in a consistent manner every time
- Simply add your buffers and reagents and the BlotBot carries out your existing protocol



Throw out your timers! Don't babysit your blots again!

Contact us for further information or to arrange a Demo



*Scan me for
further details
& options for
the Piro robot*

PIRO – PERSONAL PIPETTING ROBOT

Easy to program for many liquid handling applications



SMALL SIZE – BIG SPACE **(600 x 515 x 470mm)**

- 16 deck positions for;
12 SBS plates and 4 tube racks
- 95mm depth for deep well plates and tubes
- 384-well plate setup without running out of tips

EASE OF USE

- Drag and drop programming
- Sample normalisation
- Rearrange plate formats
- Set up a run in 2 minutes

TRACEABILITY

- Compatible with LIMS-Systems
- Intelligent pipetting from database
- Start a run from an Excel spreadsheet
- Fully controlled data tracking

VERSATILITY

- Interchangeable pipette heads
Pipette Head 200: (1µl - 180µl)
Pipette Head 1000: (5µl - 1000µl)
- Assign various functions to one plate
- Interchangeable deck positions
- Adjustable pipette performance
- Highest x, y, z-axis precision

Contact us for further information or to arrange a Demo