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Product Catalogue 2025





"Next-Gen Calibration. Powered by Sansel"

For more details please visit us on www.sansel.net

Humidity and Temperature Generator Model: HCAL 1104U



- 7" True colour TFT display with Touch screen
- lpha Control range from 5 to 60 °C / 3 to 95 % RH*
- ∠ Dew point temperature indication range -30°C to 45°C

- Semi Portable, Rugged & Onsite transportable
- lpha Stability better than \pm 0.05°C / 0.2 % RH **
- Fast raising & quick settling
- Calibration Software



- ✓ ISO IEC 17025 Accredited Calibration certificate
- 🗷 Inter changeable Acrylic door Provided on front side of the chamber with pg21 gland
- **External humidifier with 6 litres provided**
- \varnothing Humidification time 2 %RH / sec (50 to 90 % RH)
- \varnothing Dehumidifying Time 6 %RH / sec (50 to 10 % RH)
- ✓ Inner chamber constructed with SS 310

Precision Ultra Low Temperature Dry Block Calibrators with Automatic Calibration Software

Model: TCAL 1503/-100



- ∠ 4.3" True colour TFT display with Touch screen
- \varnothing Wide Models & Ranges TCAL 1503 / -100 (-100 to 40 °C), Portable & Rugged

- ∠ High Resolutions 0.01°C
- € 90 mins to reach -100°C
- Multi point Lookup table for Calibration
- **ZUUC** measure option provided
- **∠**Inbuilt DUC measure facility
- **Elight** weight & Onsite carriable
- Switch test facility provided
- **∠**Low power consumption less than 500W
- Stabilization time & status indication provided
- All Inter changeable insert to suit different diameter sensor
- Optional PC Interface with automatic calibration software



Precision Low Temperature Dry Block Calibrators with Automatic Calibration Software

Model: TCAL 1503 / -35 & TCAL 1503 / -40



- **∠4.3 inch True TFT DISPLAY with touch screen**
- \angle Range from -35* to 120 °C / -40* to 120 °C
- ∠ Block Stability Better than ± 0.03°C @ full range
- Axial Uniformity upto 40mm better than ± 0.2°C
- Æ Fast heating & cooling
- Metrology level performance
- **∠** Inbuilt measure facility
- **ZUUC** measure option provided
- **Stabilization time & status indication provided**
- ∠Inter changeable insert to suit different diameter sensor upto 30 mm

Precision Dry Block Temperature Calibrators with Automatic Calibration Software

Model: TCAL 1501 series

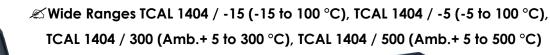


- ∠ 4.3" True colour TFT display with Touch screen
- ∠Wide Models & Ranges TCAL 1501 / -30 (-30 to 100 °C),
 TCAL 1501 / 300 (Amb. + 5 to 300 °C), TCAL 1501 / 600
 (Amb. + 5 to 600 °C), TCAL 1501 / 1200 (500 to 1200°C).
- **∠** Portable & Rugged
- ✓ High Resolutions from 0.01 to 0.1 °C**
- Multi point Lookup table for Calibration
- **ZUUC** measure option provided
- Inter changeable insert to suit different diameter sensor

Advanced Miniature Dry Block Temperature Calibrator

Model: TCAL 1404 series







- **E** Better Stability & uniformity
- Micro Controller Based Linearized High Accuracy
- ≤ Inter changeable insert to suit different diameter sensor up to 20 mm



See the actual size (Comparison with pencil)

(P.T.O)

Stopwatch Calibrator MFC-1900



- Stopwatch Range 10 micro sec to 48 hours with minimum resolution upto 10 micro sec(selectable)
- Quick-response timing engine minimal trigger-to-capture latency
- ∠Large 4.3" TFT true-colour touchscreen clear, intuitive operation
- Efront-panel START / STOP / RESET push-buttons instant manual triggering
- Potential-free contact outputs rear female banana ports mirror front-panel START /

 STOP / RESET states for easy integration with other equipment
- Multi-instrument modes calibrates stopwatches, optical tachometers (RPM), pulse counters; plus frequency simulate & measure
- ≝ Easy operation ideal for metrology labs, production lines, research & academic use
- ∠Universal AC input (100 280 VAC) global mains compatibility

High Temperature Dry Block Calibrator

Model: TCAL 1500 / 1500



- ∠ 4.3" True colour TFT display with Touch screen

- ≤Stability ± 0.2°C
- ✓ Interchangeable Multi hole thermo wells

- ≤ ISO / IEC 17025 Accredited calibration certificate

Liquid Temperature Bath

Model: TCAL 1501 / 250



- Heating Medium Silicon oil
- ∠ Portable, Rugged & on site carriable
- Better Stability & uniformity
- ∠ High Resolutions from 0.01 °C
- Multi point Lookup table for Calibration
- **Z** UUC measure option provided
- Multi hole provision for different type of thermometers, sensors, sensor with indicators etc.,.
- ∠ Large volume testing area 60mm Dia x 120mm Depth
- Magnetized stirring
- ≤ Optional PC Interface with automatic calibration software



Ultra Low Temperature Liquid Bath

Model: TCAL 1501 /-40 / -80



- ∠4.3" True colour TFT display with Touch screen
- ≤Semi Portable & Rugged
- ★ Heating / Cooling Medium Silicon oil / IPA
- **Example 2** Better Stability & uniformity
- Multi hole provision for different type of thermometers, sensors, sensor with indicators etc.,.

Semi Standard Platinum Resistance & Master Thermocouples

Model: SSPRT / MTC



- ✓ Temperature Ranges from -200 °C upto 1500 °C
- \angle Wide Models & Ranges SSPRT (-200 TO 660 °C), MTC (100 TO 1500 °C)
- Standard 6mm OD & available on different dimensions on request
- ≝Outer Sheath SS 316 / Inconel / High Alumina tube

 Outer Sheath SS 316 / Inconel / High Alumina tube
- **Migh Accuracy & Stability**
- Manufactured & Tested under strict quality control standards
- **∠**Cycled to Stability
- **∠** Low drift

Online pyrometer



- ✓ Very small sensing head of 14 mm diameter and 28 mm length fits everywhere and is usable up to 125 °C ambient temperature without cooling
- Miniaturized Infrared Thermometer with 1.0 μm respectively 1.6 μm wave length range for measurements of metals, of secondary metal processing, metal oxides and ceramic materials
- Short measuring wave length of 1.0 μm respectively 1.6 μm reduces error of temperature readings on surfaces with low or unknown emissivity

Infra Red Black Body Source

Model: BCAL 40 / 502 / 1202



- **E**Portable & Rugged
- **∠** Wide Ranges

BCAL 40 \rightarrow 0 to 100 °C / 32 to 212 °F BCAL 502 \rightarrow 50 to 500 °C BCAL 1202 \rightarrow 500 to 1200 °C

- **∠**Better Stability & uniformity
- **∠**0.95 Emissivity
- **ELarge Aperture area**
- Optional master pyrometer with stand in different temperature ranges available on request

High Temperature Infra Red Black Body Source

Model: BCAL 1502







- ∠4.3" True colour TFT display with Touch screen
- ∠ Portable & Rugged
- ∠ Range from 500 to 1500°C
- ∠ High Resolutions 0.1 °C
- **∠** Better Stability & uniformity
- **∠**0.95 Emissivity
- **∠** Large Aperture area

Multichannel TFT Touch Screen Datalogger with Software

Model: DL 96 / 97









- Multi colour TFT display
- Easy touch screen to configure & copy the datas
- 8, 16, 24, 32 Channel Inputs with fixed & Universal Inputs
- Analog Inputs like Thermocouple, RTD, mA, mV, V
- ✓ Internal Memory for Datas upto 25,000 records
- ∠ USB 2.0 for PEN drive data transfer
- Parallel port provided for direct printout the storage datas
- ∠ PC Interface through RS 485 or RS 232 or USB or Ethernet (TCP/IP)
- Common Alarm Output with H/L Settings for all channels

Precision Portable Hygrometer with Data Logger & Software

(Temperature, Humidity & Dew point) Model: HTD 200



- ∠ Large 2.8" TFT display with Touch screen

- Better Accuracy : ±0.2°C / ±0.8 % RH
- Built in rechargeable polymer Li-ion battery
- Alarm facility

- Protection class IP40
- lpha Storage environment range $\,$ -10 to 45 $^{\circ}$ C / 10 to 90% RH
- Ø Optional High temp. sensors available on request for temp. ranges -50 to 100°C/-100 to 200°C

Precision Portable Dew Point Meter with Data Logger & Software

(Dew point, Temperature, Humidity & Moisture Content) Model: DPM-202



- ∠ Large 2.8" TFT display with Touch screen

- \angle Better Accuracy : $\pm 1^{\circ}$ C(dp) von 20 to -20 $^{\circ}$ C (dp)

/ ± 2°C(dp) von -50 to -20°C (dp)

 $/ \pm 3^{\circ}C(dp) \text{ von } -50 \text{ to } -80^{\circ}C(dp)$

- Alarm facility
- ≤ Comfortable anti-slip grip, Portable & Rugged with carrying case
- ∠ Protection class IP40
- lphaStorage environment range -10 to 45 °C / 10 to 90% RH

Precision Portable Oil Moisture Meter with Data Logger & Software

(Temperature, Relative Humidity, Water activity & Water content x) Model: POM-203



- ∠ Large 2.8" TFT display with Touch screen
- \angle Ranges from 0 to 100°C(T) / 0 to 100% (rs) / 0 to 1 (aw)

- Built in rechargeable polymer Li-ion battery
- Alarm facility
- Comfortable anti-slip grip, Portable & Rugged with carrying case
- ∠ Protection class IP40
- Application environment range -10 to 60 °C / 0 to 100% RH (non condensed)
- lphaStorage environment range $\,$ -10 to 45 $\,^{\circ}$ C / 10 to 90% RH

Portable Master Air Velocity Meter

Model: PAM-204



- ∠ Large 2.8" TFT display with Touch screen
- Ranges from 0 to 20 m/s

- Built in rechargeable polymer Li-ion battery
- Alarm facility
- Comfortable anti-slip grip, Portable & Rugged with carrying case
- ∠ Protection class IP40
- Application environment range -10 to 60 °C / 0 to 100% RH (non condensed)
- lphaStorage environment range $\,$ -10 to 45 $^{\circ}$ C / 10 to 90% RH

Portable Master Temperature Indicator

Model: PTM 201 series



- ∠ Large 2.8" TFT display with Touch screen
- Master Universal input 6 digit indicator
- More resolution for RTD 0.001°C / for thermocouple 0.01°C
- RTD, Thermocouple, mA, Ohms, Voltage, mV input
- ≤ Inbuilt rechargeable polymer Li-ion battery
- Alarm facility
- Comfortable and anti-slip grip
- Portable & Rugged with carrying case
- ✓ ISO/IEC 17025 Accredited Calibration certificate

Tachometer Calibrators Model: RPMC 1700 series





- **∠CE** Quality certified
- Certified

RPMC 1700-2A \rightarrow 6000 / 1,02,000 rpm

RPMC 1700-3A \rightarrow 8000 / 1,20,000 rpm

RPMC 1700-4A \rightarrow 12,000 / 2,04,000 rpm

- ∠ Low noise
- Quick settling time
- Any odd value is settable for both contact & Non contact RPM
- Resolution up to 0.001 rpm
- **Z**Ultra stable motor with high precision encoder and drive
- ∠ Direct drive shaft (there is no gear)
- **∠**Compact size

(P.T.O)

Pressure Calibrators(low range) with Calibration Software MODEL: PCAL 1300 SERIES



- Pressure Ranges from -0.9 up to 2 bar
- Mide ranges 0 to 350mbar, 0 to 500 pa, -0.9 to 2 bar
- Absolute , Differential & gauge type available on request
- Air medium
- variety of Pneumatic pump available based on range requirements
- ∠ 2.8" 128 x 64 Dots COG Graphic LCD Display
- High bright white LED backlight
- ∠ 6 digit selectable resolution
- Better stability & repeatability
- ≤ 3 function keys & 4 navigation keys for easy operation
- ≤ Optional PC interface with semi Automatic calibration software
- Æ Easy one touch zero
- € High resolution RTD-PT 100 & mA measure inputs
- € Compact size & Rugged

Pressure Calibrators(pneumatic) with Calibration Software MODEL: PCAL 1300 SERIES



- Absolute, Differential & gauge type available on request
- Air medium
- Variety of Pneumatic pumps available based on range requirements
- € 2.8" 128 x 64 Dots COG Graphic LCD Display
- High bright white LED backlight
- 6 digit selectable resolution
- Better stability & repeatability
- € 3 function keys & 4 navigation keys for easy operation
- € Optional PC interface with semi Automatic calibration software
- ∠ High resolution RTD-PT 100 & mA measure inputs

Pressure Calibrators(hydraulic) with Calibration Software MODEL: PCAL 1300 SERIES



- Pressure Ranges from 0 up to 1000 bar
- ≤ Absolute , Differential & gauge type available on request
- Available in both water & Oil medium
- X Variety of Hydraulic pumps available based on range requirements
- ∠ 2.8" 128 x 64 Dots COG Graphic LCD Display
- High bright white LED backlight
- Better stability & repeatability
- ≤ 3 function keys & 4 navigation keys for easy operation
- Optional PC interface with semi Automatic calibration software
- **Easy** one touch zero

4, 5 & 5 1/2 Digit Process Indicator Model: PI 541A, PI 590-1, PI 542A



- \varnothing 4, 5 & 5 $\frac{1}{2}$ Digit 7 Seg LED (or) LCD display with Programmable resolution
- \varnothing 24 Bit ADC Resolution, Selectable Inputs mA, mV , Volt, Ω , RTD, TC
- **A** PI 541A Range -199999 to 199999 counts
- **E** PI 591 Range 20,000 to 40,000 counts
- PI 542A Range -1999 to 9999 counts
- 2 Alarm Output with Four Relay Status Selection
- Multi point Lookup table for Calibration
- Optional Opto Isolated Re Transmission Output.
- ∠ 24V DC External Sensor Supply
- Universal Supply Voltage 90 to 270V AC / DC

Jumbo Display Indicators for Temperature, Humidity, Pressure, Flow, Level







- € Humd. /Temp./ Pres in large display for long distance viewing
- ∠ 2", 4", 8" Available in Different Segment Sizes
- Different type of Mounting Wall, Hanging, Panel, "L"
 Clamping
- 4 / 6 Digit Seven Segment LED
- W UNIVERSAL / RTD / TC / mA / Volt / mV(any One Factory Presetable)
- Wide Input & Display Ranges
- 2 Relay Outputs with Configurable H / L Setting
- Re Transmission Output (Optional)
- 24 V DC Sensor Supply

Jumbo Display Indicators for RS 485 serial interface input, Timer, Counter, RPM, Frequency, Real time Clock



- **ZTime/** Clock / Count in large display for long distance viewing
- ≥ 2", 4", 8" Available in Different Segment Sizes
- Different type of Mounting Wall, Selling, Panel, "L" Clamping
- 🗷 4 / 6 Digit Seven Segment LED
- Wide Input & Display Ranges
- Programmable Scale factor, Exponent (For RPM indicator)
- 2 Relay Outputs with Configurable H / L Setting(except Clock)
- **K** Re Transmission Output (Optional)
- RS 485 serial interface with MODBUS RTU protocol (Optional)
- 24 V DC Sensor Supply

(P.T.O)

Online Water Quality Analyzer (Conductivity, Resistivity, TDS, Salinity, Tempetarure, PH & ORP)

Model: LA 1800 - series





- Multi parameter Conductivity, Resistivity, TDS, Salinity, Temperature, PH & ORP.
- Multi colour 3.5" TFT Touch screen display
- Wide measuring range
- Resolution 0.01 nS to 0.01S
- € pH range from -2 to 16 pH
- Programmable Auto / Manual temperature compensation
- Automatic multi point standard buffer calibration
- 2 Relay outputs with 4 relay status setting
- RS 485 Modbus RTU protocol
- ∠ Universal Supply Voltage 90 to 270 V AC / DC

Water Quality Analyzer(pH & ORP) Model: PH / ORP 60 SERIES



- ∠ 4 + 4 Digit 7 segment LED display

pH $600 - 1 \rightarrow -2$ to 16.00 pH

ORP 601 - 1 → - 1999 to +1999 ORP

pH 600 - 4 → 0 to 14.00 pH

- Programmable Auto / Manual Temperature Compensation
- ∠ Galvanically Isolated 4 20mA Output
- RS 485 serial interface with MODBUS RTU protocol
- Automatic 2 Point Standard Buffer Calibration
- Z 2 Relay Outputs with 4 Relay Status Setting
- Universal Supply Voltage 90 to 270V AC / DC (loop powered 24V DC for selected model)

Water Quality Analyzer(TDS, Conductivity, Salinity) Model: TDS / CC / SAL 60 SERIES



- 4 + 4 Digit 7 segment LED display
- Wide Models & measuring ranges

TDS $602 - 1 \rightarrow 1 - 20$ ppm, 5 - 200ppm, 10 to 2000ppm, 1 to 20ppt, 5 to 200ppt

CC $603 - 1 \rightarrow 1 - 20\mu$ S, 5 - 200 μ S, 10 to 2000 μ S, 1 to 20mS, 5 to 200mS

SAL $604 - 1 \rightarrow 1 - 20 \text{ ppt} / 5 - 200 \text{ ppt}$

- Programmable Auto / Manual Temperature Compensation
- ∠ Galvanically Isolated 4 20mA Output
- Automatic 2 Point Standard Buffer Calibration
- 2 Relay Outputs with 4 Relay Status Setting
- Universal Supply Voltage 90 to 270V AC / DC (loop powered 24V DC for selected model)

ph/ ORP/ TDS/ CONDUCTIVITY INDICATOR Model: pH 641 & TDS 642





- Economical & Easy to calibrate & Configure
- ∠ 4 Digit 0.5" 7 segment LED display
- Measure pH/ ORP / TDS / Conductivity / °C parameters
- Wide measuring range
- Variety of electrode fittings
- Easy front end two point buffer calibration
- ✓ Very high input impedance > 10¹² ohms
- ≤ Universal supply voltage 90 to 270V AC / DC

Online TDS, Conductivity, Temperature Probes



- Economical & Easy to fit
- Measures TDS / Conductivity / Temperature °C
- \varnothing 0.01, 0.1, 1 cell constant Electrodes are available
- Available with different types of Fitting & Housing
- ≤ Standard 5 meter cable
- Terminal connector for TDS & Conductivity

ONLINE pH, ORP & Temperature Probes



- Economical & Easy to fit
- Measures pH / ORP / Temperature ℃
- Available in different types of Fitting & Housing
- ≤ BNC Attachment for pH & ORP

Environmental Monitoring System (Humidity, Temperature & Pressure) Model: HTI 190,197, HTP196



- 4 Digit , 0.5" Seven Segment LED display
- ∠ Humidity range from 0 to 100% RH
- Barometric or Differential Pressure Range from 0 - 2000mbar / 0 - 50Pa
- \angle Resolution 0.01 or 0.1°C / 0.1 % RH / 1 mbar
- \angle Accuracy ±0.3°C / ± 1.5 %RH / ± 0.25 % FS
- Easy Mounting ,Compact Size and rugged



SANSEL INSTRUMENTS AND CONTROLS SANSEL CALIBRATION LABORATORIES LLP

ISO/IEC 17025 Accredited Calibration Laboratory by NABL CC - 2879 (Thermal, Mechanical, Electro-Technical, Dimension Parameters)

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