

<u>& ISO/IEC 17025 Accredited Calibration Laboratory</u>





### Humidity and Temperature Generator Model: HCAL 11040



- 🖉 7" True colour TFT display with Touch screen
- Control range from 5 to 60 °C / 3 to 95 % RH\*
- ∠ Dew point temperature indication range -30°C to 45°C
- 📧 Optional Temp. range 0 to 80 °C
- 📧 Optional Dew point : -25 to 40 °C
- 🖉 Semi Portable, Rugged & Onsite transportable

- 🖉 Fast raising & quick settling
- 🖉 Calibration Software

- Solid state, Solid
- 🖉 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

  - 📧 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
- X Wide Models & Ranges TCAL 1503 / -100 (-100 to 40 °C),
  - Portable & Rugged
- & Metrology level performance
- ✓ High Resolutions 0.01°C
- ∠ Fast cooling
- 🖉 90 mins to reach -100°C

Multi point Lookup table for Calibration

- **KUUC** measure option provided
- 🖉 Light weight & Onsite carriable
- Switch test facility provided
- ∠Low power consumption less than 500W
- 🖉 Stabilization time & status indication provided
- 🖉 Inter changeable insert to suit different diameter sensor

### Precision Low Temperature Dry Block Calibrators with Automatic Calibration Software

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



- & Portable & Rugged

- ∕ Axial Uniformity upto 40mm better than ± 0.2°C
- ∠ Fast heating & cooling
- Metrology level performance
- &Inbuilt measure facility
- *K***UUC** measure option provided
- Stabilization time & status indication provided
- 🖉 Inter changeable insert to suit different diameter sensor upto 30 mm
- Soptional PC Interface with automatic calibration software

### 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 *«* Improved Axial & Radial Uniformity *«* High Resolutions from 0.01 to 0.1 °C\*\* *«* Multi point Lookup table for Calibration *«* UUC measure option provided *«* Inter changeable insert to suit different diameter sensor *«* Optional PC Interface with automatic calibration software

# Advanced Miniature Dry Block Temperature Calibrator

#### Model : TCAL 1404 series



🖄 2.8" True colour TFT display with Touch screen

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TCAL 1404 / 300 (Amb.+ 5 to 300 °C), TCAL 1404 / 500 (Amb.+ 5 to 500 °C)

- & Portable & Rugged
- 🖉 Range from -15 to 500°C \*
- ✗ High Resolution 0.01°C
- Better Stability & uniformity
- XNo Liquids, Safe dry Calibration
- Micro Controller Based Linearized High Accuracy

See the actual size (Comparison with pencil)

🖉 Inter changeable insert to suit different diameter sensor - up to 20 mm

# High Temperature Dry Block Calibrator

### Model: TCAL 1500 / 1500



- 🖉 4.3" True colour TFT display with Touch screen
- ✓ Temperature Range from 500°C to 1500°C
- ✓ Stability ± 0.2°C
- Interchangeable Multi hole thermo wells
- & Silicon carbide Heating element
- Power requirement 230VAC / 50Hz / 3500VA
- 🖉 Semi portable
- ∠ISO / IEC 17025 Accredited calibration certificate

### Liquid Temperature Bath Model: TCAL 1501 / 250

- 🖄 4.3" True colour TFT display with Touch screen
- \land Range from 50 to 250°C
- 📧 Heating Medium Silicon oil
- 📧 Portable, Rugged & on site carriable
- ${\mathscr K}$  Better Stability & uniformity
- ∠ High Resolutions from 0.01 °C
- 🔊 Multi point Lookup table for Calibration
- 🖉 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**



- 🖉 4.3" True colour TFT display with Touch screen
- Wide Models & Ranges TCAL 1501 / -40 (-40 to Amb.), TCAL 1501 / -80 (-80 to -40°C).
- 📧 Semi Portable & Rugged
- \land Range from -80\* to Amb. \*
- K Heating / Cooling Medium Silicon oil / IPA
- & Better Stability & uniformity
- Multi hole provision for different type of thermometers, sensors, sensor with indicators etc.,.

### Semi Standard Platinum Resistance & Master Thermocouples



- ✓ Temperature Ranges from -200 °C upto 1500 °C
- 🗷 Standard 6mm OD & available on different dimensions on request
- 🗷 Outer Sheath SS 316 / Inconel / High Alumina tube
- 📧 High Accuracy & Stability
- & Manufactured & Tested under strict quality control standards
- & Cycled to Stability
- 🗷 Fast response
- \land Low drift

### Infra Red Black Body Source Model : BCAL 40 / 502 / 1202



- & Portable & Rugged
- ∕ Kange from 0\* to 1200°C\*
- 🗷 Wide Ranges

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

- E Better Stability & uniformity
- 🖉 0.95 Emissivity
- 🗷 Large 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
- ∕ Kange from 500 to 1500°C
- ∠ High Resolutions 0.1 °C
- & Better Stability & uniformity
- ≈0.95 Emissivity
- *⊯* Large Aperture area

# **Online pyrometer**



- Wide Temperature ranges from -50 °C to 2200 °C, measuring spots up from 1.8 mm and exposure times up from 1 ms
- ✓ 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

### Precision Portable Hygrometer with Data Logger & Software

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



- 📧 Large 2.8" TFT display with Touch screen
- 🖉 Ranges from -40 to 85°C / 0 to 100% RH / psychometric Converted Dew point
- & More resolution 0.01°C / 0.01 % RH
- 🗷 Built in rechargeable polymer Li-ion battery
- 🖉 Alarm facility
- 🗷 Comfortable anti-slip grip, Portable & Rugged with carrying case
- Protection class IP40

# 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
- Kanges from -80 to 50°C(dp) / -20 to 70°C(T) / 0 to 100% RH
- ✓ Better Accuracy : ± 1°C(dp) von 20 to -20°C (dp)
  - / ± 2°C(dp) von -50 to -20°C (dp)
  - / ± 3°C(dp) von -50 to -80°C (dp)
- & Built in rechargeable polymer Li-ion battery
- \land Alarm facility
- & Comfortable anti-slip grip, Portable & Rugged with carrying case
- ∠ Protection class IP40
- ∕ Storage 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

- & Built in rechargeable polymer Li-ion battery
- \land 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)

### Portable Master Air Velocity Meter

Model: PAM-204



- 🖉 Large 2.8" TFT display with Touch screen
- 🗷 Ranges from 0 to 20 m/s
- A More resolution 0.001 m/s / 1 fps
- 🗷 Built in rechargeable polymer Li-ion battery
- \land 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)
- ∕ Storage environment range -10 to 45 °C / 10 to 90% RH

#### Portable Master Temperature Indicator

Model : PTM 201 series



- ∠ Karge 2.8" TFT display with Touch screen
- 🖉 Master Universal input 6 digit indicator
- K More resolution for RTD 0.001°C / for thermocouple 0.01°C
- K 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

### Tachometer Calibrators Model: RPMC 1700 series





CE Quality certified

**(** - Certified

*∞* True colour TFT display with Touch screen

- Kange Contact / Non contact :
  - RPMC 1700-2A → 6000 / 1,02,000 rpm
  - RPMC 1700-3A → 8000 / 1,36,000 rpm
  - RPMC 1700-4A → 10,000 / 1,70,000 rpm
- 🗷 Low noise
- 🖉 Quick settling time
- Any odd value is settable for both contact & Non contact RPM
- Resolution up to 0.001 rpm
- & Ultra stable motor with high precision encoder and drive
- Direct drive shaft (there is no gear)
- 🗷 Compact size

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



- 🖉 Pressure Ranges from -0.9 up to 2 bar
- 🖄 Wide 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
- 🖉 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



- 🖉 Pressure Ranges from -0.9 up to 35 bar
- 🖉 Wide ranges -0.9 to 35 bar
- Absolute , Differential & gauge type available on request
- \land Air medium
- X 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
- 🖉 Easy one touch zero
- X High resolution RTD-PT 100 & mA measure inputs
- 🗷 Compact size & Rugged

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



- 🖉 Pressure Ranges from 0 up to 1000 bar
- 🛎 Wide ranges 0 to 350 bar, 0 to 700 bar, 0 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
- 🛎 High resolution RTD-PT 100 & mA measure inputs
- 🖉 Compact size & Rugged

### 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
- S PC Interface through RS 485 or RS 232 or USB or Ethernet (TCP/IP)
- 🖉 Common Alarm Output with H/L Settings for all channels
- 🖉 Easy Mounting , Compact Size and rugged
- Supply 230V AC

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



- $\cancel{1}$  4, 5 & 5  $\frac{1}{2}$  Digit 7 Seg LED (or) LCD display with Programmable resolution
- $\not \! {\mathscr K}$  24 Bit ADC Resolution, Selectable Inputs mA, mV , Volt,  $\Omega$  , RTD, TC
- 🖉 PI 541A Range 199999 to 199999 counts
- All S91 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 RS 485 MODBUS Protocol
- 🖉 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
- MUNIVERSAL / 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)
- 🖉 RS 485 serial interface with MODBUS RTU protocol (Optional)
- 💉 24 V DC Sensor Supply

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



- 🗷 RS 485 MODBUS RTU Master / Slave indicator
- 📧 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

24 V DC Sensor Supply

- & Programmable Scale factor, Exponent (For RPM indicator)
- 🖉 Re Transmission Output (Optional)
- 🖉 RS 485 serial interface with MODBUS RTU protocol (Optional)

### 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
- K Resolution 0.01 nS to 0.01S
- \land pH range from -2 to 16 pH
- 🖉 Resolution 0.001pH
- 🖉 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



- 🖉 Wide Models & measuring ranges
  - pH 600 1 → -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
- 🖉 2 Relay Outputs with 4 Relay Status Setting
- Iniversal 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 → 1 20ppm, 5 200ppm, 10 to 2000ppm, 1 to 20ppt, 5 to 200ppt
  - CC 603 1 → 1 20µS, 5 200µS, 10 to 2000µS, 1 to 20mS, 5 to 200mS SAL 604 – 1 → 1 – 20 ppt / 5 – 200 ppt
- 🖉 Programmable Auto / Manual Temperature Compensation
- 📧 Galvanically Isolated 4 20mA Output
- 🖉 RS 485 serial interface with MODBUS RTU protocol
- 🖉 Automatic 2 Point Standard Buffer Calibration
- M 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
- ✓Variety of electrode fittings
- 🖉 Easy front end two point buffer calibration
- ✓Very high input impedance > 10<sup>12</sup> ohms
- ∠ Universal supply voltage 90 to 270V AC / DC

# **Online TDS, Conductivity, Temperature Probes**



- 🖉 Economical & Easy to fit
- Measures TDS / Conductivity / Temperature °C
- 🖉 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
- Custom 3 way connector for Temperature

### **ONLINE pH, ORP & Temperature Probes**



- 🖉 Economical & Easy to fit
- ∕ Wide measuring range 0 14.00 pH/ ± 1999 ORP / 0-150.0°C
- 🖉 Available in different types of Fitting & Housing
- 🖉 Standard 5 meter cable
- *K* **BNC Attachment for pH & ORP**

# Environmental Monitoring System (Humidity, Temperature & Pressure) Model : HTI 190,197, HTP 196



- 🖉 4 Digit , 0.5" Seven Segment LED display
- ✓ Temperature range 0 to 60°C (optional 40 to 125°C)
- 📧 Humidity range from 0 to 100% RH
- Barometric or Differential Pressure Range from
   0 2000mbar / 0- 50Pa
- $\bigstar$  Accuracy ±0.3°C / ± 1.5 %RH / ± 0.25 % FS
- $\not \! { \ensuremath{ \ensuremat{ \ensuremath{ \ensuremath{ \ensuremath{ \ensuremath{ \ensuremath$
- & Supply 90 to 270 V AC

### ISO/IEC 17025 Accredited Calibration Laboratory by NABL CC - 2879



SANSEL have rich experience of more than 25 years (since 2000) in the leading manufacturer of Process Control Instruments, Analytical/lab Instruments & Calibrators in south India. SANSEL's Products more than 15.00.000 instruments serving in industries in India and all over world. To meet need of customer requirement and to upgrade our manufacturing product, Calibration facility is established in accordance with the ISO/IEC 17025:2017. We are pleasure to inform you that our calibration lab has been Accredited by NATIONAL ACCREDITATION BOARD FOR TESTING AND CALIBRATION LABORATORIES (NABL) Department of science and technology, Government of India, New Delhi in the field of ELECTRO-TECHNICAL, THERMAL, MECHANICAL and DIMENSIONAL parameters provided with Best BMC and wide range of capabilities. Our calibration reports are acceptable to all ISO, ISI Certifying bodies, National and International organizations, Public and government sectors etc., We serve industries including, pharmaceutical, Medical, chemical, Water all system, Automobile, IT, Aeronautic and OEM Manufacturina.

# Accreditation scope for LAB & ON SITE



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