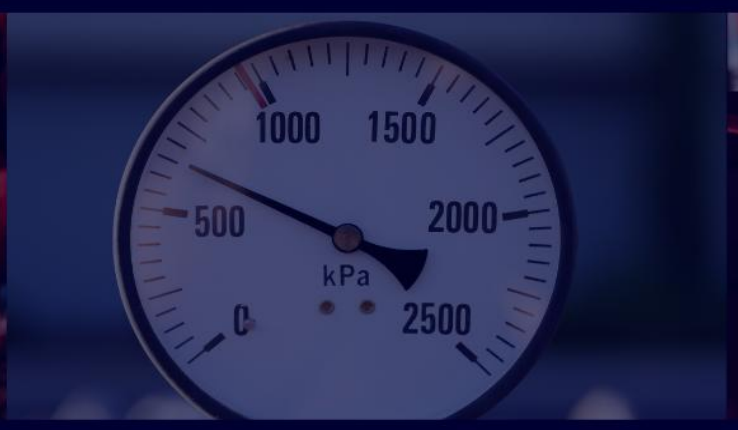
SANSEL®







Product Catalogue



“Next-Gen Instrumentation. Powered by SANSEL.”

For more details visit us on www.sansel.net

Sep 2026

About Us

SANSEL INSTRUMENTS AND CONTROLS is a leading organization that has established itself in the manufacture of Calibrators, Process Control Instruments and Analytical Instruments. And also we are ISO IEC 17025 Standard Accredited Calibration Laboratory approved by NABL, India, in the field of Thermal, Mechanical, Electro-Technical and Dimensional Parameters.



Successfully Serving our Products more than 70+ Countries Worldwide

10,000 +
Trusted Customers

70 +
Products in Range

98% +
Success Service Support

11,185 +
Miles Products Shipped

Industry Recognition

ISO 9001
Certified Company

Indian Manufacturing
Excellence

Reliable Industrial
Solutions

Engineering
Experience

Calibrators

Humidity & Temperature Generator

NEW !

Solid state, Portable technology



HCAL 1104U



Light weight

HCAL 1105U

Range	5 to 60 °C / 3 to 95 % RH*	5 to 60 °C / 5 to 95 % RH*
High Resolution	0.01 °C / %RH	0.01 °C / %RH
Stability	Better than ± 0.05°C / 0.2 %RH	Better than ± 0.1°C / 0.4 %RH
Uniformity	Better than ± 0.2°C / 0.3 % RH	Better than ± 0.3°C / 0.6 % RH
Display	7" True colour TFT Touch screen display	4.3" True colour TFT Touch screen display
Certificate	ISO IEC 17025 Accredited Calibration Certificate	

Features:

- Large chamber size (HCAL 1104U), Small chamber size (HCAL 1105U)
- 7" True colour TFT Touch screen display (HCAL 1104U), 4.3" True colour TFT Touch screen display (HCAL 1105U)
- Improved design to provide metrology level performance in terms of chamber stability and uniformity gradient
- Psychometric converted indication of Dew point, Wet bulb temperature etc.,.
- Fast raising and Quick settling
- Replaceable front door to suitable for multi brand probe & portable indicator calibration
- Semi portable and onsite transportable
- Ideal for lab and field calibration
- Solid state heating & cooling technology
- Optional calibration software to record, Data analysis & generate calibration reports

NEW

Precision Timer / Stopwatch Calibrator | TFC 1901



- Three independent operating modes on one platform — Precision Stopwatch/Timer Calibrator, Frequency/ Totalizer to time converter, and RPM Generator for non-contact Tachometer Calibration.
- 4.3" Multi colour TFT touchscreen display
- Range: Digital Electronic Stopwatch: 10 ms to 86400.00000 s; Mechanical Stopwatch & Industrial Timer: 1 s to 86400.00000 s.
- Range for RPM Generator : 0 to 204,000 RPM
- Better Resolution: 10 µs to 1 s (Selectable)
- High Precision 10 MHz OCXO/TCXO Time base option
- Auto-Stop mode (Master Mode only) with a programmable target time and selectable Up / Down counting
- Continuous totalizer run of 24 hours at 100 kHz without rollover (1.728×10^{10} pulses)
- Fully hardware-based pulse counting in Frequency Totalizer mode — every input pulse is captured directly, so none are ever missed or double-counted, even at the highest input rates

Accessory – Multi-Stopwatch Fixture | TFC-19F



- TFC-19F multi-stopwatch fixture to calibrates up to 5 stopwatches simultaneously, eliminating manual timing errors
- Easily Adjustable Mounting Option for Multibrand Stopwatches
- BNC connector option is provided to connect the Stopwatch fixture in series

Precision Low Temperature Dry Block Calibrators

Metrology - level performance



TCAL 1503/ -100



TCAL 1503/ -40



TCAL 1503/ -35

Range	-100 to 40 °C	-40* to 120 °C	-35* to 120 °C
High Resolution	0.01 °C		
Block Stability	Better than ± 0.05°C @(30 min)	Better than ± 0.03°C @ full range	
Uniformity	Improved Axial & Radial Uniformity	Radial Uniformity ± 0.02°C @ full range Axial Uniformity upto 40mm better than ± 0.2°C	
Display	4.3 inch True colour TFT Touch screen display		

NEW

Dry Block Temperature Calibrators

Metrology-grade EURAMET cg-13 requirements



TCAL 1405/ -30



TCAL 1405/ 600/ 1200

Range	-30 to 100°C	TCAL 1405 / 600 (Amb.+5 to 600°C), TCAL 1405 / 1200 (500 to 1200°C)
High Resolution	0.01 °C	TCAL 1405 / 600 (0.01 °C), TCAL 1405 / 1200 (0.1 °C)
Stability	± 0.03°C	TCAL 1405 / 600 (± 0.05°C), TCAL 1405 / 1200 (± 0.3°C)
Uniformity	Axial Uniformity upto 40mm : ± 0.06 °C (from -30 to 50 °C), ± 0.1 °C (from 51 to 100 °C) Radial Uniformity : ± 0.05°C	Better than ± 0.5°C
Display	3.5 inch True TFT Multicolour touch screen display	



TCAL 1500/ 1500

High Temperature Dry Block Calibrator

- Temperature Range from 500°C to 1500°C
- Resolution 0.1°C
- Stability ± 0.2°C
- Interchangeable Multi hole thermo wells
- Silicon carbide Heating element
- 4.3 Inch True Tft Display with Touch Screen
- ISO IEC 17025 Accredited Calibration Certificate

Miniature Dry Block Temperature Calibrator

Compact for On-site Calibration

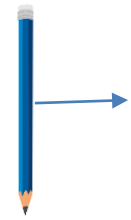


TCAL 1404/-15 /-5



TCAL 1404/300 /500

Range	TCAL 1404 / -15 (-15 to 120 °C), TCAL 1404 / -5 (-5 to 100 °C)	TCAL 1404 / 300 (Amb.+ 5 to 300 °C), TCAL 1404 / 500 (Amb.+ 5 to 500 °C)
High Resolution	0.01 °C	
Stability	± 0.03°C	TCAL 1404 / 300 (± 0.04°C), TCAL 1404 / 500 (± 0.08°C)
Radial Uniformity	Better than ± 0.03°C to ± 0.1°C	TCAL 1404 / 300 (Better than ± 0.05°C to ± 0.3°C), TCAL 1404 / 500 (Better than ± 0.1°C to ± 0.4°C)
Display	2.8 inch True Colour TFT Display with Touchscreen	



See the actual size
(Comparison with pencil)

- Rugged & Most compact Ideal for On-site Deployment
- Lightweight at Just 3.5 Kgs
- All four models deliver quick heating and rapid cooling time
- Built-in over-temperature safety cutoff ensures reliable and safe operation

Liquid Temperature Calibrators

Multi-hole inserts for sensor, indicator & thermometer calibration



TCAL 1501 / -80



TCAL 1501 / -40



TCAL 1501/ 250

Range	-80 to -40°C	-40 to 50°C	Amb.+5 to 250°C
High Resolution	0.01 °C		
Stability	± 0.03°C	± 0.05°C	± 0.03°C
Uniformity	± 0.2°C	± 0.2°C	Better than ± 0.15°C
Display	4.3 inch True colour TFT Touch screen display	3.5 inch True colour TFT Touch screen display	4.3 inch True colour TFT Touch screen display

Infrared Black Body Calibrators

Compact and rugged design for reliable field and laboratory calibration



BCAL 40



BCAL 502 / 1202



BCAL 1502

Range	Body Mode : 20 to 50 °C Surface Mode : 0 to 100 °C	BCAL 502 → 50 to 500 °C BCAL 1202 → 500 to 1200 °C	500 to 1500°C
High Resolution	0.01 °C	0.1 °C	
Stability	± 0.03°C	± 0.2°C	± 1°C
Uniformity	± 0.3°C	BCAL 502 (± 0.5°C@50°C, ± 1.7@250°C , ± 2.5@500°C), BCAL 1202 (Better than 0.5 % of reading)	± 1% of reading
Display	3.5 inch True TFT display with touch screen	BCAL 502 (4+4 Digit 7 segment LED Display), BCAL 1202 (4.3 inch True TFT display with touch screen)	4.3 inch True colour TFT Touch screen display



Online Pyrometer

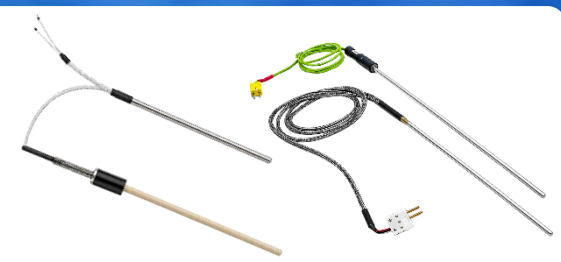
- Wide Temperature ranges from -50 °C to 2200 °C, measuring spots up from 1.8 mm and exposure times up from 1 ms
- Very small sensing head of 14 mm diameter and 28 mm length fits everywhere and is usable up to 125 °C ambient temperature without cooling



SSPRT

Semi Standard Platinum Resistance

- Temperature Ranges from -200 °C upto 660 °C
- Standard 6mm OD & available on different dimensions on request
- High Accuracy & Stability
- Fast response
- Manufactured & tested under strict quality control standards



MTC 01, 02

Master Thermocouples

- Temperature Ranges from 100 °C upto 1500 °C
- Standard 6mm OD & available on different dimensions on request
- High Accuracy & Stability
- Long life
- Wide temperature range

Tachometer Calibrators

Multi-hole inserts for sensor, indicator & thermometer calibration



RPMC 1700/ 2A



RPMC 1700/ 3A



RPMC 1700 /4A

Range	Contact mode : 6000 rpm Non – contact mode : 1,02,000 rpm	Contact mode : 8000 rpm Non – contact mode : 1,36,000 rpm	Contact mode : 12000 rpm Non – contact mode : 2,40,000 rpm
High Resolution	0.1 rpm	0.001 rpm	0.01 rpm
Display	4.3” True colour TFT Touch screen display	7” Multi color TFT Touch screen display	7” Multi color TFT Touch screen display
Stability Time	Within 5 seconds		
Motor	Ultra stable motor with high resolution Encoder & Drive		

Pressure Calibrators

Optional PC interface with semi Automatic calibration software



PCAL 1300/ 0.350



PCAL 1300/ (1/ 2)



PCAL 1300/ (20/ 30)

Range(bar)	± 350 mbar	PCAL 1300/ 1 (-0.9 up to 1 bar), PCAL 1300/ 2 (-0.9 up to 2 bar)	PCAL 1300/ 20 (-0.9 up to 20 bar), PCAL 1300/ 30 (-0.9 up to 30 bar)
Display	128 x 64 COG Graphic LCD with White LED Back light		
Accuracy	± 0.05% FS		
Resolution(bar)	6 digit user selectable		
Pressure media	Air medium		
Pump	Pneumatic pumps for various range requirements		

Compact size & Rugged



PCAL 1300/ 350



PCAL 1300/ 700



PCAL 1300/ 1000

Range(bar)	0 to 350 bar	0 to 700 bar	0 to 1000 bar
Display	128 x 64 COG Graphic LCD with White LED Back light		
Accuracy	± 0.05% FS		
Resolution(bar)	6 digit user selectable		
Pressure media	Oil and Water		
Pump	Hydraulic pumps for various range requirements		

Precision Portable meters



HTD 200

Precision Portable Hygrometer

- Ranges from -40 to 85 °C / 0 to 100% RH / psychometric Converted Dew point
- More resolution 0.01ºC / % RH
- Better Accuracy : ±0.2ºC / ±0.8 % RH
- Comfortable anti-slip grip, Portable & Rugged with carrying case
- Optional Data Logger – Configurable logging interval and PC data download via USB Type-C (Sansel-Soft-01)



PTM 201

Portable Master Temperature Indicator

- 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
- Optional Data Logger – Configurable logging interval and PC data download via USB Type-C (Sansel-Soft-01)



DPM 202

Precision Portable Dew Point Meter

- Ranges from -60...+60 °C (Dp), 0...100 % RH (RH), -40...70 °C(T)
- More resolution 0.01 °C / % RH
- Better Accuracy : ±2 °C(dp)
- Built in rechargeable polymer Li-ion battery | Alarm facility
- Optional Data Logger – Configurable logging interval and PC data download via USB Type-C (Sansel-Soft-01)



POM 203

Precision Portable Oil Moisture

- Ranges from -40 to 100 °C(T) / 0 to 100% (RS) / 0 to 1 (aw)
- More resolution 0.01 °C / 0.01 % RS
- Accuracy @ 20 °C (68 °F) in oil : ±0.2 °C (±0.36 °F)
- Optional Data Logger – Configurable logging interval and PC data download via USB Type-C (Sansel-Soft-01)



PAM 204

Portable Master Air Velocity Meter

- Ranges from 0 to 20 m/s
- More resolution 0.001 m/s / 1 fpm
- Better Accuracy : ± 5% of FS
- Application environment range -10 to 60 °C / 0 to 100% RH (non condensed)
- Optional Data Logger – Configurable logging interval and PC data download via USB Type-C (Sansel-Soft-01)



DL 96

Touch Screen Universal Input Multi Channel Data logger

- No.of channel - 8, 16 channel
- 3.5 inch Multi-Color Active Matrix Touch Screen Display
- Memory : 20000 Readings (per channel)
- Sampling Rate : 100 msec (per channel)
- Data Download : USB Pen Drive / PC / Dot Matrix Printer



DL 97

Touch Screen Universal Input Multi Channel Data logger

- No.of channel - 32 channel
- 8 inch Multi-Color Active Matrix Touch Screen Display
- Memory : 20000 Readings (per channel)
- Sampling Rate : 100 msec (per channel)
- Data Download : USB Pen Drive / PC / Dot Matrix Printer



PC 543

Universal Input Temperature / Process Controller

- Split architecture with DIN-rail control unit & remote display
- Resolution from 0.1 to 0.00001
- Blind controller operation
- The Fuzzy Logic PID control unit operates fully standalone, without any display or with detachable display, via RS-485 Modbus RTU with an HMI, PLC, or SCADA device
- Universal input — 19 selectable sensor types (RTD — PT10, PT50, PT100, PT200, PT400, PT500, PT1000; 8 Thermocouple types; Ohms; mV; mA; Voltage) from a single platform. No hardware selection is needed
- Dual independent control outputs — 8 selectable PID / ON-OFF control mode combinations
- Display unit available in multiple sizes — user-selectable at time of order
- Native Modbus RTU (RS-485, 2-wire) communication with a 220-register Modbus map
- Plug-and-play terminal connectors for fast, tool-free installation and servicing



PI 541A, PI 590-1, PI 542A

4, 5 & 5 ½ Digit Process Indicator

- High Accuracy with 24 Bit ADC Resolution
- Universal input : mA, mV, Volt, Ω , RTD, TC
- PI 541A Range -199999 to 199999 counts
- PI 591 Range -19999 to 40000 counts
- PI 542A Range -1999 to 9999 counts
- 4, 5 & 5 ½ Digit 7 Seg LED (or) LCD display with Programmable resolution
- Optional RS 485 MODBUS Protocol



PIJ 542 A1, PIJ 542D, PIJ 541 B1, DTJ 71A

Jumbo Process Indicators

Range	PIJ 542 A1(-1999 to 9999), PIJ 541 B1(-199999 to 199999), PIJ 542D (-1999 to 9999)
Resolution	PIJ 542 A1(0.1 / 1 °C / °F (optional 0.01 for RTD - PT 100 I/P up to 99.99 °C Factory pre-settable)), PIJ 541 B1(0.0001 / 0.001 / 0.01 / 0.1 / 1 (Selectable)),
Input	RS 485 MODBUS RTU Master/ Slave TC, RTD, mV, mA Indicator
Display	2”, 4”, 8” Available in Different Segment Sizes

Water Quality Analytical Instruments



HTI 191J, HTI 192 J, PIJ 542C1

Jumbo Humidity & Temperature Indicator

- Humidity/ Temperature/ Pressure in large display for long distance viewing
- 2", 4", 8" Available in Different Segment Sizes
- 4 / 6 Digit Seven Segment LED Display
- UNIVERSAL / RTD / TC / mA / Volt / mV(any One Factory Presentable)
- Re Transmission Output (Optional)



LA 1800 - series

Online Water Quality Analyzer

- Multi parameter – Conductivity, Resistivity, TDS, Salinity, Temperature, PH & ORP
- TFT Touch screen display
- Wide measuring range
- Conductivity range from 1 nS to 10 S
- Resolution 0.01 nS to 0.01S
- pH range from -2 to 16 pH
- Resolution 0.001pH



PH / ORP 60 Series

Water Quality Analyzer (pH & ORP)

- 4 + 4 Digit 7 segment LED display
- 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
- Galvanically Isolated 4 - 20mA Output
- Automatic 2 Point Standard Buffer Calibration
- 2 Relay Outputs with 4 Relay Status Setting

Online Analytical Probes



TDS / CC / SAL 60 Series

Water Quality Analyzer (TDS, Conductivity, Salinity)

- 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



Online TDS, Conductivity, Temperature Probes

- Wide measuring range 0-2000 ppm/ µS & 0-200 ppt/ mS / 0-150.0ºC
- 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
- Measures pH / ORP / Temperature ºC
- Wide measuring range 0 – 14.00 pH/ ± 1999 ORP / 0-150.0 °C
- Available in different types of Fitting & Housing
- Standard 5 meter cable
- BNC Attachment for pH & ORP

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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