Nagman Instruments Consortium

Comprehensive Calibration Solutions

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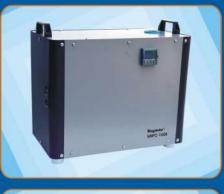• **Standards** • **Systems** • **Software**

50 *years of*

DISTINGUISHED SERVICE TO INDUSTRIES WORLDWIDE

NAGMAN

NAGMAN

ISO 9001:2015 Certificate

CE Certificate

IP Certificate

support@nagman.com • www.nagman.com

Dry Block - Ultra-Negative Temperature

UNFC-100E

Range	-100°C to +25°C
Resolution	0.01°C (+25 to -19.99°C)
	0.1°C (-20°C from -100°C)
Accuracy	±0.3°C
Stability	±0.05°C

Dry Block - Sub-Zero Temperature

R-40 / R-40 *Plus*

Range	-35°C from Ambient to 123°C /
	-35°C to 120°C (@ 22°C)
Resolution	0.1 °C
Accuracy	±1°C / ±0.5°C
Stability	±0.2°C

MTC 40 / MTC 40 *Plus*

Range	-40°C from Ambient to 123°C /
	-35°C to 120°C (@22°C)
Resolution	0.1°C
Accuracy	±0.3°C
Stability	±0.05°C
Measurement Capability	

Metcal 40 / Metcal 40 *Plus*

Range	-10°C to 120°C / -30°C to 120°C (@ 22°C)
Resolution	0.01°C
Accuracy	±0.2°C
Stability	±0.02°C
Measurement Capability	

DNV·GL

TYPE APPROVAL CERTIFICATE

Certificate No: TAA0000291
File No: 890.90
Job Id: 262.1-010655-3

This is to certify:
That the Test and Calibration Equipment

with type designation(s)
Temperature calibrators ETC 600 Series,350H/650H Series,MTC 350/650 Series ,Pressure calibrators MPCE Series, MPC series,PPC Series

Issued to
Nagman Instruments & Electronics (P) Ltd
Chennai, Tamil Nadu, India

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :
The instruments are only approved as portable test instruments. Traceable calibration certificates are available from the manufacturer.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Class Location see limitation on page 2

This Certificate is valid until 2024-03-11.
Issued at Hamburg on 2019-03-12

DNV GL local station: Chennai

Approval Engineer: Didier Girardin

Joannis Papanuskas
Head of Section

Dry Block - Low Temperature

350-H / 350-H2

Range	10°C above Ambient to 350°C
Resolution	0.1°C
Accuracy	±1°C / 1.2°C
Stability	±0.3°C / ±0.4°C

DNV·GL

MTC 350

Range	50°C to 350°C
Resolution	0.1°C
Accuracy	±0.4°C
Stability	±0.05°C
Measurement Capability	

DNV·GL

Dry Block - Medium Temperature

ETC 600

Range	50°C to 600°C
Resolution	1°C
Accuracy	±0.1% F.S. + 1 digit
Stability	±0.5°C

DNV·GL

650-H

Range	20°C above Amb. to 650°C
Resolution	0.1°C
Accuracy	±1.5°C
Stability	±0.5°C

DNV·GL

MTC 650

Range	50°C to 650°C
Resolution	0.1°C
Accuracy	±0.6°C
Stability	±0.05°C
Measurement Capability	

DNV·GL

Metcal 650

Range	50°C to 650°C
Resolution	0.01°C
Accuracy	±0.4°C
Stability	±0.04°C
Measurement Capability	

800-H

Range	50°C to 800°C
Resolution	0.1°C
Accuracy	Upto 600°C ±1.5°C; Above 600°C ±2.2°C
Stability	±0.5°C

Ranges from Ultra Negative to Very High Temperature

Dry Block - High / Very High Temperature

1200 HN

Range	300°C to 1200°C
Resolution	1°C
Accuracy	Better than ±3°C
Stability	Better than ±0.5°C (below 600°C)
Well Diameter	45 mm
Immersion Depth	150 mm

MTC 1200

Range	300°C to 1200°C
Resolution	1°C
Accuracy	±2°C
Stability	±0.5°C
Measurement Capability	

Metcal 1200

Range	150°C to 1200°C
Resolution	0.1°C
Accuracy	±2°C
Stability	±0.3°C
Measurement Capability	

1500 HN

Range	500°C to 1500°C
Resolution	1°C
Accuracy	±0.5% of Span*
Stability	±2°C
Ceramic Dry Block Dia 55 mm OD	
Probe Immersion Depth 250 mm	

* Typical Photos

TEMPERATURE SERIES

Stirred Baths (Liquid / Powder)

Micro Oil Bath   MOB 250

Range	20°C above Ambient to 250°C
Resolution	0.1°C
Accuracy	±0.6°C
Stability	±0.1°C

Micro Liquid Bath   MLB-30

Range	-30°C to 100°C
Resolution	0.1°C
Accuracy	±0.6°C
Stability	±0.2°C

Fluidized Bath   FB-06L

Range	20°C above Ambient to 600°C
Resolution	1°C
Accuracy	±1.5°C
Stability	±0.5°C

Hot Cold Bath   HC-DB-35

Range	-35°C from Amb. to +123°C (Cold Bath)
	50 to 350°C (Hot Bath)
Resolution	0.1°C
Accuracy	±1°C
Stability	±0.2°C

Black Body Calibration Sources

BBS-VL

Range	10°C to 45°C
Accuracy	Within 0.75% F.S.
Emissivity	0.98; Aperture Dia 30 mm
Stability	±0.5°C; Resolution 0.1°C

BBSL

Range	10°C above Ambient to 350°C
Accuracy	Within 0.5% F.S. (Min. 1°C)
Emissivity	0.98; Aperture Dia 25 mm
Stability	±0.5°C; Resolution 0.1°C

BBSM

Range	20°C above Ambient to 600°C
Accuracy	Within 0.5% F.S. (Min. 2°C)
Emissivity	0.98; Aperture Dia 25 mm
Stability	±0.5°C; Resolution 1°C

Ideal for Infrared Thermometer Calibration

BBSH

Range	500°C to 1200°C
Accuracy	Within 0.5% F.S. (Min. 3°C)
Emissivity	0.98; Aperture Dia 25 mm
Stability	±0.5°C; Resolution 1°C

BBSD (Dual Chamber)

Range	50 to 300°C (Chamber 1);
	250 to 600°C (Chamber 2)
Accuracy	Within 0.5% F.S. (Min. 1°C / 2°C)
Emissivity	0.98; Aperture Dia 25 mm
Stability	±0.5°C; Resolution 0.1°C / 1°C

IR Thermometers

NIT 55

Range	-50 to 550°C
Accuracy	±1.5°C
Resolution	0.1°C/°F
Repeatability	±1°C
Distance to Spot Size	12:1
Emissivity	0.1 ~ 1.0 adjustable

NIT 55E

Range	-50 to 550°C
Accuracy	$\geq$100°C ± 2°C
Resolution	0.1°C/°F
Repeatability	±1°C
Distance to Spot Size	12:1 16:1 50:1
Emissivity	0.1 ~ 1.0 adjustable
K Type Thermocouple Measurement Range -50 to 500°C	

NIT 75

Range	-50 to 750°C (-58 to 1382°F)
Accuracy	±1.5% or ±1.5°C
Resolution	0.1°C/°F
Repeatability	±1% or ±1°C
Distance to Spot Size	12:1
Emissivity	0.95 Preset, 0.1 ~ 1.0 adjustable

NIT 110 / NIT 160 / NIT 185

Range	-50 to 1100°C / 1600°C / 200 to 1850°C
Accuracy	±1.5°C
Resolution	0.1°C/°F
Repeatability	±1°C
Distance to Spot Size	50:1 / 50:1 / 80:1
Emissivity	0.95 Preset, 0.1 ~ 1.0 adjustable

Thermal Imager

Range	-20°C to 450°C
Accuracy	±2°C
Display Resolution	640 x 480
Display	3.5″ full angle TFT display screen
Image Resolution	320 × 240
Thermal Sensitivity	0.07°C
Emissivity	Adjustable from 0.01 to 1.0

Analog Gauges

APG Series

Ranges (in kg/cm² or bar)
0 to 1, 2.5, 4, 6, 10, 16, 25, 40, 60, 100, 160, 250, 400, 600, 1000
Accuracy ±0.25% F.S.
Beryllium Copper / SS316
3/8", 1/2" BSP / NPT Connection
Bottom or Back Mounted

Marine Indicators

MPCE-IN100

Ranges Pneumatic -1 to 2 / 10 / 25/ 35 / 40 / 60 bar
Hydraulic 0 to 70 & upto 1000 bar
Accuracy ±0.1% F.S.
Resolution Minimum 4½ digits
Display 7 Segment 5 Full Digit High Contrast
Customized LCD Display

DNV·GL

Digital Pressure Indicators

MPCE-I-P / MPC-I-P / MPC-I-P+ — Pneumatic (ABS Type Available)

Ranges -1 to 2 / 10 / 20 / 35 / 40 / 60 bar
Accuracy ±0.1% F.S. / ±0.05% F.S. / ±0.025% F.S.
Resolution Minimum 4½ / 5 / 5 digits
Display 7 Segment FSTN (Large) Display
Selectable Engineering Pressure Units

IP 52 RATED

MPCE-I-H / MPC-I-H / MPC-I-H+ — Hydraulic (ABS Type Available)

Ranges 0 to 70 / 100 / 200 / 250 / 350 / 700 / 1000 bar
Accuracy ±0.1% F.S. / ±0.05% F.S. / ±0.025% F.S.
Resolution Minimum 4½ / 5 / 5 digits
Display 7 Segment FSTN (Large) Display
Selectable Engineering Pressure Units

IP 52 RATED

Marine Calibrators

MPCE IN100 Series — Pneumatic

Ranges -0.90 to 2 / 10 / 25/ 35 / 40 / 60 bar
Accuracy ±0.1% F.S.
Resolution Minimum 4½ digits
Display 7 Segment 5 Full Digit High Contrast
Customized LCD Display

MPCE IN100 Series — Hydraulic

Ranges 0 to 70 / 100 / 200 / 350 / 700 / 1000 bar
Accuracy ±0.1% F.S.
Resolution Minimum 4½ digits
Display 7 Segment 5 Full Digit High Contrast
Customized LCD Display

Handheld Pressure Calibrators

MPCE-P / MPC-P / MPC-P+ — Pneumatic (ABS Type Available)

Ranges -0.90 to 2 / 10 / 20 / 35 / 40 / 60 bar
Accuracy ±0.1% F.S. / ±0.05% F.S. / ±0.025% F.S.
Resolution Minimum 4½ / 5 / 5 digits
Display 7 Segment FSTN (Large) Display

IP 52 RATED
DNV·GL

MPCE-H / MPC-H / MPC-H+ — Hydraulic (ABS Type Available)

Ranges 0 to 70 / 200 / 350 / 700 / 1000 bar
Accuracy ±0.1% F.S. / ±0.05% F.S. / ±0.025% F.S.
Resolution Minimum 4½ / 5 / 5 digits
Display 7 Segment FSTN (Large) Display

IP 52 RATED
DNV·GL

Portable Pressure Calibrators

PPC-P / PPC-P+ — Pneumatic

Ranges -0.85 to 2 / 7 / 10 / 20 bar
Accuracy ±0.05% F.S. / ±0.025% F.S.
Resolution Minimum 5 digits
Display Large Graphic Display

DNV·GL

PPC-H / PPC-H+ — Hydraulic

Ranges 0 to 200 / 400 bar
Accuracy ±0.05% F.S. / ±0.025% F.S.
Resolution Minimum 5 digits
Display Large Graphic Display

DNV·GL

PPC-D / PPC-D+ — Pneumatic & Hydraulic

Ranges -0.85 bar Vacuum to 20 bar (Pneumatic) &
0 to 400 bar (Hydraulic) (Oil)
Accuracy ±0.05% F.S. / ±0.025% F.S.
Resolution Minimum 5 digits
Display Large Graphic Display

DNV·GL

Pneumatic - Very Low — PPC-PL

Ranges -8500 to +10000 mmH₂O
Accuracy ±0.075% F.S.
Resolution Minimum 5 digits
Display Large Graphic Display

DNV·GL

Differential Pressure Manometer

DPM

Ranges 0 to 25 / 70 / 200 / 300 / 500 / 1000 / 2000 mbar
Accuracy ±0.2% F.S. (25/70 mbar)
±0.1% F.S. (200/300/500 mbar)
±0.05% F.S. (1000/2000 mbar)
Resolution Minimum 4½ / 5 / 5 digits
Display 7 Segment FSTN (Large) Display

IP 52 RATED

Portable Pressure Test Kit

CalNitro

Max Pressure 200 bar / 3000 psi
Pressure Control Thro' Precision Regulator
Pressure Gauges Dial Size: 63 mm (Analog)
Range 0 to 280 kg/cm2 & psi
Storage System 2L Nitrogen Cylinder with Needle Valve
Display 7 Segment FSTN (Large) Display

CalNitro

Semi-Automatic Pressure Calibrator — SAPC-20

Ranges -0.85 to 20 bar
Measurement Accuracy ±0.05% FS
Temperature Compensation 0 to 50°C (Automatic)
Resolution Minimum 5 Digits
Display Large Graphic Display
Pressure Units Kg/cm2, Bar, mBar, PSI, mH2O, mmH2O, cmH2O, inH2O, ftH2O, mmHg, inHg, Atm, Mpa, Kpa, Pa

* Typical Photos

PRESSURE SERIES

Hand Pumps

PHP 2, 10, 20, 35, 40, 60 — Pneumatic

Range   -0.9 bar Vacuum to 60 bar Pressure
Medium   Air
Sensitivity / Resolution Upto 1 mbar
Gauge / Indicator Connection Port 3/8" (F) BSP
Test Connection Port   1/4" (F) BSP

HHP 200, 400, 700, 1000 — Hydraulic

Ranges   Upto 200 / 400 // 700 / 1000 bar
Gauge / Indicator Connection Port 1/4"(F) // 3/8"(F) BSP
Test Connection Port   1/4" (F) BSP
Medium   Oil (Water Model Optional)
Oil Reservoir Material   Transparent Acrylic
Reservoir Capacity   100 cc

Other Pumps

Electrical Vacuum Pump — EVP 69

Structure   Double Stage; Power Electric
Colour   Blue
Voltage   220V / 50Hz
Free Air Displacement 6 CFM / 170 LPM
Ultimate Vacuum 2 x 10-1 Pa
Rotating Speed   2800 RPM
Power   3/4 HP
Oil Capacity   370 ml
Casting   Alloy Aluminium

Screw Pump Vernier — SPV-48

Maximum Range   1 bar
Medium   Air
Material of Constn.   Brass - Electroless Ni plating
Test Connection Port   4mm push fit hose to 1/4" BSP (F)
Master Connection   4mm push fit

Dead Weight Testers

H3000 — Hydraulic

Ranges   35 / 70 / 100 / 160 / 350 / 600 / 700 bar
Piston   Single / Dual
Accuracy   ±0.1% of Reading
Traceable to International Standards
Mild Steel/Non-Magnetic Stainless Steel Weights
Pressure generation thro' Priming Pump & Screw Ram

H6000 — Hydraulic

Ranges   35 / 70 / 100 / 160 / 350 / 600 / 700 bar
Piston   Single / Dual
Accuracy   ±0.05% of Reading
Traceable to International Standards
Non-Magnetic Stainless Steel Weights
Pressure generation thro' Priming Pump & Screw Ram

H6600 — Hydraulic

Ranges   35 / 70 / 100 / 160 / 350 / 600 / 700 bar
Piston   Single / Dual
Accuracy   ±0.025% of Reading
Traceable to International Standards
Non-Magnetic Stainless Steel Weights
Pressure generation thro' Priming Pump & Screw Ram

H6900 // H6990 — Hydraulic

Ranges   35 / 70 / 100 / 160 / 350 / 600 / 700 bar
Piston   Single / Dual
Accuracy   ±0.015% // ±0.01% of Reading
Traceabile to International Standards
Non-Magnetic Stainless Steel Weights
Pressure generation thro' Priming Pump & Screw Ram
DWTCal Calibration Software

Bellows Type — Hydraulic

Ranges   1000 / 1200 bar
Piston   Single / Dual
Accuracy   ±0.1 / ±0.05% / ±0.025% / ±0.015% / ±0.01%
            of Reading
Traceable to International Standards
Mild Steel/Non-Magnetic Stainless Steel Weights
Pressure generation thro' Priming Pump & Screw Ram
DWTCal Calibration Software

P8000 / P8600 — Pneumatic

Ranges   0.5 to 1 / 2 / 10 / 20 / 35 bar
Piston   Single
Accuracy   ±0.05% / ±0.025% of Reading
Traceable to International Standards
Non-Magnetic Stainless Steel Weights
Pressure generation thro' Priming Pump & Screw Ram

Comparators / Gauge Testers

GCL Series — Hydraulic

Ranges   0 to 250 / 350 bar
Type   Screw Pump
Pressure generation   Priming Pump for initial pressures
                    & Screw RAM Pump for high
                    pressures
Test Port Connection   1/2" BSP (F) Swivel
Medium   Oil (Optional : Water)

GCH Series — Hydraulic

Ranges   0 to 700 / 1400 / 2000 bar
Type   Screw Pump
Pressure generation   Priming Pump for initial pressures
                    & Screw RAM Pump for high
                    pressures
Test Port Connection   ½" BSP (F) Swivel
Medium   Oil (Optional : Water)

PCP Series — Pneumatic

Ranges   -0.95 to 4 / 6 / 10 bar (Std. Model)
                    70 / 100 / 140 / 200 bar
                    (Special Models
                     - with External 3 Stage
                     High Pressure Hand Pump)
Pressure generation   Screw RAM Pump
Pressure Medium   Air
Gauge / Indicator Connection Port ½" (F) BSP

SPV-48

* Typical Photos

Thermocouple Calibrator — Nagman 02+

Capability to Measure & Simulate Voltage & Thermocouple Readings
Compact, Light Weight Unit with Holster
Basic Accuracy : ±0.05% Reading
Selectable Temperature Output Readings (in °C / °F)
Measurement & Simulation of Thermocouple types R, S, B, E, K, J, T & N and Voltage - 1 V Simulation, 100 mV Measurement

RTD Calibrator — Nagman 03+

Portable, Handy, Easy to carry & Sturdy Case with grip.
Capability to Measure & Simulate Resistance & RTD Readings
Basic Accuracy : ±0.05% Reading
Compact, Light Weight Unit with Holster
Selectable Temperature Output Readings (in °C/°F)

Loop Calibrator — Nagman 05+

Capability to Measure & Simulate Voltage & Current Readings
Compact, Light Weight Unit with Holster
Capability to provide Loop Supply (24V) for Transmitters
Basic Accuracy : ±0.05% Reading

Temperature Calibrator — Nagman 14+

Capability to Measure & Simulate DC Voltages, Resistances, Thermocouples and RTD
Basic Accuracy : ±0.02% Reading
Compact, Light Weight Unit with Holster
5 digits display of Measurement & 6 digits display for Simulation
Dual LCD with white LED for backlight

V/mA Pressure Calibrator — Nagman 15+

Compact, Light Weight Unit with Holster
Capability to Measure & Simulate DC Voltages, DC Current & Frequency
Basic Accuracy : ±0.02% Reading
5 digits display of Measurement & 6 digits display for Simulation
Dual LCD with white LED for backlight

Loop Calibrator with Hart — 43H

Tool for communicating with Process Instruments.
Relying on an Open Communications Protocol, Hart Communicators Interface with Hart enabled 'Master' and 'Field' Devices.
Reads the Device's basic information, perform Diagnostic Testing & Calibration to fine-tune the most Hart Transmitter
Store upto 20 Hart Device Configuration data

Process Meter / Multimeter — 79A

Compact, Light Weight Unit with Holster
Measurement & Simulation of DC Voltage, DC Current, Resistance, Thermometer, RTD & Frequency.
Auto Ramp & Step Function
24V Loop Parameter function

Digital Multimeter — Benchtop & Handheld — N6581 / VC980+

6½ Resolution
3.5" Color Display
Screen Resolution Ratio 320*480
Customizable Display Interface
Bi-parameter Display
Conduct Remote Operation thro' Interfaces of IEEE 488, RS-232, LAN & USB Device.

MULTIFUNCTION PROCESS CALIBRATORS / CONTROLLERS

Nagman 25

Compact, Light Weight Unit with Holster
Capability to Measure & Simulate DC Voltages, DC Current, Frequency, Resistance, Thermocouples & RTDs
5 digits display of Measurement & 6 digits display for Simulation
Basic Accuracy : ±0.02% Reading
Dual LCD with white LED for backlight
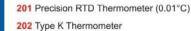Capability to perform Switch Test & Continuity Test

MFC 40 — With Pressure Module — CE

Compact & Portable
Capability to Measure & Simulate DC Voltages, DC Current, Resistance, Thermocouples & RTDs
Basic Accuracy: ± 0.025% reading
128 x 64 Graphic Display with backlight
In/Out Data Memory : 20 Values can be stored manually
USB Computer Interface
CE Certified Conforming to EN61010-1 EN61326-1 EN60529
Environment Testing Standards : JSS 5555 : 2000 Rev No. 2
Ingress Protection Rating : IP 55

IP 55 RATED

TEST, MEASURING & PROCESS CONTROL INSTRUMENTS

201 Precision RTD Thermometer (0.01°C)
202 Type K Thermometer
203 Dual Input Humidity Temperature Meter
204 Datalogger Dual Input Humidity Temperature Meter
205 Four Channels Datalogger
221 Sound Level Meter
222 Sound Level Calibrator
224 Moisture Meter (Grains)
231 Light Meter
241 TRMS Inrush Clamp Meter
242 TRMS AC DC Clamp Mete
243 TRMS AC DC Low Current Clamp Meter
244 TRMS Milli-Amp AC DC Clamp Meter (0.1mA)
245 TRMS AC DC Clamp Meter
246 TRMS AC Leakage Clamp Meter (0.001 mA)

261 Insulation Tester
262 Insulation Tester
263 Earth Resistance Tester
271 Hydrogen (H2) Gas Leak Detector
272 Carbon Monoxide (CO) Meter
274 Combustible Gas Detector
281 Digital Multimeter
283 Precision Digital Multimeter (True RMS)
284 Digital Smart Multimeter
286 Digital Tachometer
291 Hot Wire Anemometer
292 Vane Anemometer

* Typical Photos

CALIBRATION SYSTEMS / KITS & SOFTWARE

CAN BE CUSTOMIZED TO SUIT

Primary Standard — System 1100

Calibration of Pressure Gauges, Calibrators, Transducers, Transmitters, Indicators, Switches, Valves I/P, P/I Converters, etc. -- Both Hydraulic & Pneumatic

Electrical & Electronics — System 5000

Calibration of V/A Meters, Multimeters, AC/DC Signal Sources, Clamp Meters, Tachometers, Ohmmeters, Decade Boxes, Power Supplies, Multifunction Calibrators, Frequency / Signal Generators, Oscilloscopes, Frequency Meters, Timer Counters etc.

Temperature — System 7000

Calibration of Temperature Sensors, Indicators, Thermocouple and RTDs – Probes / Assemblies / Transmitters, Calibrators, Thermistors, Recorders, Switches etc.

Multifunction / Multiparameter — System 9600

Calibration of Electrical / Electronic Signal, Temperature & Pressure (Measurement & Generation) Applications. General Utilities like AC/DC Power Supplies, & Test / Measuring Calibration Instruments

Mobile Calibration System/Kit — Mobical Series

3 Types of Kits are available covering parameters viz.

Mobical EE : Electrical & Electronics
Mobical PT : Pressure & Temperature
Mobical PTES : Pressure, Temperature, Electrical & Electronics

Safety Valve Test Bench — NAG-SV50

Safety Valve Test Bench is a Very Easy, Safe, Accurate and Maintenance Free Operating Workshop Test Unit for Testing & Calibration of Pressure/Safety Relief Valve (Spring operated) in the Range of 0.5'' to 8'' (DN – 15 to 200 mm) according to the Common International Test Standards.

Calibration Software — Calman Plus

Powerful Tool for Calibration of Devices in Process Industries under present Quality Guidelines such as ISO 9000.
Calman Plus automates the process of Calibration making them quicker & easier.
Certificate generation, Record updation possible.

INFRARED PYROMETERS

Non-contact Infrared Temperature Measurements Solutions

METTLE Series
Intelligent High-Performance IR Pyrometers

Two color Ratio Pyrometers: Various Models to cover Temperature ranges from 250°C ~ 2600°C
Single color Pyrometers: Various Models to cover Temperature ranges from 150°C ~ 2500°C

- Accuracy: 0.5%, Resolution: 0.1°C; Adjustable Response time: 5ms ~ 99.99s
- Adjustable focus lens: standard focal length from 0.35m to infinity, near focal length from 0.2m to 0.5m
- Options to choose either Laminated Silicon or InGaAs detector (in both two-color and single-color versions)
- High brightness LED light source or visible green eyepiece aiming, clearly display the location and size of measured target.
- Two color pyrometers have both two-color and one-color measurement function
- Lens dirty detection function
- Industrial grade OLED screen as display interface
- 2 independent analog output, 2 alarm output, 1 channel level output and 1 channel RS485 communication interface
- Supports bus cascade connection of up to 26 pyrometers and realize network control through PC (in selected models)
- Water Cooling and Air Purge Jacket (optional)

FIBER Series
Fiber Optic Two Color / Single color IR Pyrometers

Two color / Single color Fiber optic IR Pyrometers Various Models to cover Temperature ranges from 600°C ~ 2500°C

- Consists of lens, fiber optics and processing components
- Manual adjustable focal lens, achromatic lens combination
- Suits for applications in harsh environment as moisture, dust, target size change, partial blockage and emissivity change
- Accuracy : 0.5%, Resolution :0.10, Response time 5ms ~ 99.99s adjustable
- Laser aiming to clearly show the position and size of measured target
- Both two-color and one-color temperature measurement functions
- Industrial-grade OLED screen is used as the display interface
- interfaces: 2 independent analog output, 2 alarm output, 1 level output and RS485 communication interface
- Anti-interference design such as software and hardware improves system stability
- Supports up to 26 pyrometers in bus cascade, and realizes networked control via PC

ROBUST Series
Sturdy & Compact Single color narrow band IR Pyrometers

Si (silicone photocell) detectors : Various Models to cover Temperature ranges from 600°C ~ 2500°C
InGaAs detectors : Various Models to cover Temperature ranges from 150°C ~ 2500°C

- Accuracy : up to 0.5%.,Resolution: 0.1°C , Response time: 5ms ~ 99.99s
- Manual adjustable focus
- Equipped with full range temperature compensation to avoid the influence of ambient
- Industrial OLED screen as display interface
- Programmable 4 types of analog output options,1 channel alarm output, 1 channel level output 1 channel RS485 communication interface
- Support bus cascade connection of up to 26 pyrometers, and realize network control through PC (in selected models)
- Built-in visible high brightness green light or eyepiece aiming (on select models)

MOXIE Series
Economy stand-alone Two Wire / Four Wire IR Pyrometers

Metal Housing, Optical Component and Special Integrated Circuit Stand-alone
General Purpose 8-14μm Pyrometers. Various models to cover ranges from 0 ~ 800°C

- Advanced digital design & Optical structure
- Various analog & digital signal output
- Spectral response: 8-14μm
- Accuracy: ±2°C or 1% whichever is higher
- Resolution: 0.1°
- Response time: ≤500ms
- Factory calibration with temperature compensation within full range
- Wide range of operation temperature
- Easy to install & maintain, low cost

* Typical Photos

PRESYS INSTRUMENTS

Universal Process Calibrator — MCS-12 / MCS-12-IS

Measures and generates mA, mV, volts, ohms, RTD, TC and Hz.
Simultaneous input and output operation.
Accuracy up to 0.01% full scale.
2-Wire Transmitter Power Supply: 12 Vdc / 30 mA.

IS Version

Universal Process Calibrator — MCS-XV Series

Measures & generates mA, mV, Volts, Ohms, RTD, TC, Hz.
Upto 4 pressure sensors, Ranges 250 mmH2O - 10000 psi
Full Hart Configurator.
Ethernet, Wi-Fi, Pen drive, **HART** & USB Host/Device.
Portable / Bench-top / Rack Mounted Models available.

Hart Field Communicator — FCY 15 / FCY 15-IS

Configurator Full HART with the latest Device Descriptions (DD's) Library updatable by user thro' USB port.
Allows inclusion of new DD's not registered in FieldComm
Access to setup entire instrument's parameters tree with HART Protocol, regardless of manufacturer or model
Has 24V power supply for 2 wire transmitters with internal resistor or 250 Ohms selectable
Input for measuring current, allowing the instrument trim & loop test without a calibrator
Colour display, 5.7" high visibility,
fully touch screen, friendly interface
HART configuration interface in two levels : Calibration HART & Full HART.

IS Version

Automatic Precision Pressure Controller — PCON-Y17

A Calibrator designed for the automated pressure control of a wide selection of ranges upto 3000 psi (Pneumatic) found in Instrumentation Applications.

Automatic Precision Pressure Controller — PCON-Y18

Provides a complete solution for the Test & Calibration of your Pressure. No extra Software or Computer is needed to generate the Calibration Test Report on the fly and the data are tamper proofed in accordance with 21 CFR Part 11.

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Presys, Brazil	Manufacturer of Temperature Calibrators, Automatic Pressure Controllers, Universal Process Calibrators with HART Capability, Work Stations for Pressure Safety / Relief Valves.
Meriam Process Technologies, U.S.A.	Multifunction Calibrator; HART Communicator; Temperature, Pressure & Loop Calibrators
AOIP (Eurotron), France	Benchtop / Field / Multifunction Calibrators (IS & Non-IS Versions), TC/RTD / Process Calibrators, Data Loggers, Flue Gas Analyzers etc.
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Extech Instruments, U.S.A.	A Wide Range / Variety of Cost Effective Test & Measuring Instruments.
Huber Instruments AG., Switzerland	Digital Handheld Manometers, Gauges, Altimeters & Absolute Pressure Barometers.
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ACIN Instrumenten BV, The Netherlands	Widest Range of Instruments for Measuring & Recording Pressure
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