Nagman Instruments Consortium Comprehensive
Calibration Solutions
thno'

• Standards • Systems • Software











ISO 9001:2015 Certificate CE Certificate IP Certificate IP Certificate













# Dry Block - Ultra-Negative Temperature

#### UNEC-100E

-100°C to +25°C Range Resolution 0.01°C (+25°C 7.00°C) 0.1°C (+25°C 7.00°C) 0.1°C (+20°C 7.00°C) 4.00°C 7.00°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

-40°C from Ambient to 123°C / Range

-35°C to 120°C (@22°C) Resolution 0.1°C

Accuracy ±0.3°C Stability ±0.05°C Stability Measurement Capability

# Metcal 40 / Metcal 40 Plus

-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

### **Dry Block - Low Temperature**

#### 350-H / 350-H2

10°C above Ambient to 350°C Range

Resolution 0.1°C

Accuracy ±1°C / 1.2°C Stability ±0.3°C / ±0.4°C

# DNV-GL

# Dry Block - Medium Temperature

# **ETC 600**

50°C to 600°C Range

Resolution 1°C

Accuracy ±0.1% F.S. + 1 digit Stability ±0.5°C

Stability

# DNV-GL

DNV-GL

#### MTC 650

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

Stability Measurement Capability

#### 800-H

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

# Dry Block - High / Very High Temperature

# 1200 HN

300°C to 1200°C Range

Resolution 1°C

Accuracy Better than ±3°C Stability

Better than ±0.5°C (below 600°C) eter 45 mm Well Diameter

Immersion Depth

# Metcal 1200

Range 150°C to 1200°C

Resolution 0.1°C Accuracy ±2°C Stability ±0.3°C Measurement Capability

\* Typical Photos

# DNV·GL Certificate No: TAA0000291 File No: 890.90 Job Id: 262.1-010655-3 YPE APPROVAL CERTIFICATE resignation(s) ure calibrators ETC 600 Series,350H/65 s MPCF Series MPC series PPC Series Nagman Instruments & Electronics (P) Ltd Chennai, Tamil Nadu, India tificate is valid until 2024-03-11. t Hamburg on 2019-03-12

#### MTC 350

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



# 650-H

Range 20°C above Amb. to 650°C

Resolution 0.1°C Accuracy ±1.5°C Stability ±0.5°C



#### Metcal 650

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



## MTC 1200

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

# **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

Fluidized Bath FB-06L

Range 20°C above Ambient to 600°C

Resolution 1°C Accuracy ±1.5°C Stability ±0.5°C

**Black Body Calibration Sources** 

**BBS-VL** 

10°C to 45°C Range Within 0.75% F.S. Accuracy

Emissivity 0.98; Aperture Dia 30 mm Stability ±0.5°C; Resolution

**BBSM** 

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

**BBSH** 

500°C to 1200°C Range

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

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 75** 

-50 to 750°C (-58 to 1382°F) Range

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

Thermal Imager

-20°C to 450°C Range ±2°C Accuracy Display Resolution 640 x 480

3.5" full angle TFT display screen

Display 3.5" tull angle ...
Image Resolution 320 × 240

Sensitivity 0.07°C

Emissivity Adjustable from 0.01 to 1.0

Micro Liquid Bath

Range -30°C to 100°C Resolution 0.1°C

Accuracy ±0.6°C Stability ±0.2°C

**Hot Cold Bath** 

MLB-30

HC-DB-35

-35°C from Amb. to +123°C (Cold Bath) Range 50 to 350°C (Hot Bath)

Resolution 0.1°C ±1°C Accuracy Stability ±0.2°C

**BBSL** 

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

> Ideal for Infrared **Thermometer** Calibration

**BBSD** (Dual Chamber)

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

Range -50 to 550°C Accuracy ≥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 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

NIT 55E



































# 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

**Digital Pressure Indicators** 

#### MPCE-I-P / MPC-I-P / MPC-I-P+ A85



Pneumatic

-1 to 2 / 10 / 20 / 35 / 40 / 60 bar Ranges

Accuracy ±0.1% F.S. / ±0.05% F.S. / ±0.025% F.S. IP 52

Resolution Minimum 4½ / 5 / 5 digits
Display 7 Segment FSTN (Large) Display Selectable Engineering Pressure Units

**Marine Calibrators** 

**MPCE IN100 Series** 

Pneumatic

Ranges -0.90 to 2 / 10 / 25/ 35 / 40 / 60 bar

±0.1% F.S. Accuracy

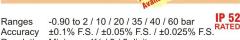
Resolution Minimum 41/2 digits

7 Segment 5 Full Digit High Contrast Display

Customized LCD Display

#### **Handheld Pressure Calibrators**

# MPCE-P / MPC-P / MPC-P+



Accuracy Resolution Minimum 41/2 / 5 / 5 digits

**Portable Pressure Calibrators** 

7 Segment FSTN (Large) Display

Pneumatic

DNV·GL

DNVGL

DNV·GL

PPC-P / PPC-P+ Pneumatic

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

Large Graphic Display Display

PPC-D / PPC-D+ Pneumatic & Hydraulic

-0.85 bar Vacuum to 20 bar (Pneumatic) & Ranges 0 to 400 bar (Hydraulic) (Oil)

±0.05% F.S. / ±0.025% F.S.

Resolution Minimum 5 digits Large Graphic Display Display

# **Differential Pressure Manometer**

#### DPM

0 to 25 / 70 / 200 / 300 / 500 / 1000 / 2000 mbar Ranges 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

7 Segment FSTN (Large) Display Display

#### **Semi-Automatic Pressure Calibrator** SAPC-20

-0.85 to 20 bar

Measurement Accuracy ±0.05% FS

Temperature Compensation 0 to 50°C (Automatic)

Resolution Minimum 5 Digits

Large Graphic Display

Pressure Units Kg/cm2, Bar, mBar, PSI, mH2O, mmH2O, cmH2O, inH2O, ftH2O, mmHg, inHg, Atm, Mpa, Kpa, Pa

Typical Photos

#### **Marine Indicators**

#### MPCE-IN100

Pneumatic -1 to 2 / 10 / 25/ 35 / 40 / 60 bar Ranges

Hydraulic 0 to 70 & upto 1000 bar

±0.1% F.S. Accuracy Resolution Minimum 41/2 digits

Display 7 Segment 5 Full Digit High Contrast

Customized LCD Display

# MPCE-I-H / MPC-I-H / MPC-I-H+ ABS TIRE



DNV-GL

0 to 70 / 100 / 200 / 250 / 350 / 700 / 1000 bar Ranges 0 to 70 / 100 / 200 / 200 / 300 / 300 / 500 ±0.1% F.S. / ±0.05% F.S. / ±0.025% F.S. Accuracy

Resolution Minimum 4½ / 5 / 5 digits 7 Segment FSTN (Large) Display Display

Selectable Engineering Pressure Units

#### **MPCE IN100 Series** Hydraulic

0 to 70 / 100 / 200 / 350 / 700 / 1000 bar Ranges

Accuracy ±0.1% F.S.

Resolution Minimum 41/2 digits

7 Segment 5 Full Digit High Contrast Display

Customized LCD Display

# MPCE-H / MPC-H / MPC-H+



Hydraulic

0 to 70 / 200 / 350 / 700 / 1000 bar Ranges ±0.1% F.S. / ±0.05% F.S. / ±0.025% F.S. Accuracy

Resolution Minimum 41/2 / 5 / 5 digits

Display 7 Segment FSTN (Large) Display

#### PPC-H / PPC-H+ Hydraulic

0 to 200 / 400 bar Ranges ±0.05% F.S. / ±0.025% F.S. Accuracy

Resolution Minimum 5 digits Display

Large Graphic Display

PPC-PL

# Pneumatic - Very Low

-8500 to +10000 mmH<sub>2</sub>O Ranges ±0.075% F.S. Accuracy

Resolution Minimum 5 digits Display Large Graphic Display

DNV·GL

DNAME

# Portable Pressure Test Kit

# CalNitro

Max Pressure Pressure Control Pressure Gauges Range

Storage System

Display

200 bar / 3000 psi Thro' Precision Regulator Dial Size: 63 mm (Analog) 0 to 280 kg/cm2 & psi

2L Nitrogen Cylinder with Needle Valve 7 Segment FSTN (Large) Display



# PRESSURE SERIES

# **Hand Pumps**

PHP 2, 10, 20, 35, 40, 60

Pneumatic

-0.9 bar Vacuum to 60 bar Pressure Range

Medium Air

Sensitivity / Resolution Upto 1 mbar

Gauge / Indicator Connection Port 3/8" (F) BSP

Test Connection Port 1/4" (F) BSP

Other Pumps

EVP 69 **Electrical Vacuum Pump** 

Double Stage; Power Electric Structure

Colour Blue 220V / 50Hz Voltage 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

Alloy Aluminium Casting

**Screw Pump Vernier** 

Reservoir Capacity

HHP 200, 400, 700, 1000

Test Connection Port 1/4" (F) BSP

Ranges

Medium

H6000

SPV-48

Hydraulic

Hydraulic

Maximum Range 1 bar Medium

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

Upto 200 / 400 // 700 / 1000 bar

Oil (Water Model Optional)

100 cc

Oil Reservoir Material Transparent Acrylic

Gauge / Indicator Connection Port 1/4"(F) // 3/8"(F) BSP

Master Connection

**Dead Weight Testers** 

H3000 Hydraulic

Ranges 35 / 70 / 100 / 160 / 350 / 600 / 700 bar

Piston Single / Dual ±0.1% of Reading Accuracy

Traceable to International Standards

Mild Steel/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

**Bellows Type** Hydraulic

1000 / 1200 bar Ranges

Single / Dual Piston

±0.1 / ±0.05% / ±0.025% / ±0.015% / ±0.01% Accuracy

of Reading

Traceable to International Standards

Mild Steel/Non-Magnetic Stainless Steel Weights Pressure generation thro' Priming Pump & Screw Ram

**DWTCal Calibration Software** 

Comparators / Gauge Testers

Ranges 35 / 70 / 100 / 160 / 350 / 600 / 700 bar

Piston Single / Dual ±0.05% of Reading Accuracy 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

 $\pm 0.\tilde{0}15\%$  //  $\pm 0.01\%$  of Reading Traceabile to International Standards Non-Magnetic Stainless Steel Weights

Pressure generation thro' Priming Pump & Screw Ram

**DWTCal Calibration Software** 

P8000 / P8600 Pneumatic

0.5 to 1 / 2 / 10 / 20 / 35 bar Ranges

Piston Single

±0.05% / ±0.025% of Reading Traceable to International Standards Non-Magnetic Stainless Steel Weights

Pressure generation thro' Priming Pump & Screw Ram

**GCL Series** Hydraulic

Ranges 0 to 250 / 350 bar

Туре Screw Pump Priming Pump for initial pressures Pressure generation

& Screw RAM Pump for high

pressures 1/2" BSP (F) Swivel

**Test Port Connection** Oil (Optional: Water) Medium

**PCP Series** Pneumatic

-0.95 to 4 / 6 / 10 bar (Std. Model) Ranges

70 / 100 / 140 / 200 bar (Special Models

with External 3 Stage High Pressure Hand Pump)

Screw RAM Pump Pressure generation

Pressure Medium

Gauge / Indicator Connection Port 1/2" (F) BSP

**GCH Series** 

Hydraulic

Ranges 0 to 700 / 1400 / 2000 bar

Type Pressure generation

Screw Pump Priming Pump for initial pressures & Screw RAM Pump for high

pressures ½" BSP (F) Swivel **Test Port Connection** Oil (Optional: Water) Medium



























# SIGNAL CALIBRATORS

#### **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

#### **Loop Calibrator**

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

#### 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

Dual LCD with white LED for backlight

#### **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

#### **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)

### **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

# **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

#### **Digital Multimeter**



N6581 / VC980+

61/2 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**



Compact & Portable Capability to Measure & Simulate DC Voltages, DC Current, Resistance, Thermocouples & RTDs Basic Accuracy: ± 0.025% reading **IP 55** 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

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

#### **Temperature**

System 7000

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

# 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

#### **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.

### **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.

# **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

# 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



# **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)

# **ROBUST Series**

Sturdy & Compact Single color narrow band IR Pyrometers

Si (silicone photocell) detectors : Various Models to cover Temperature ranges from  $600^{\circ}C \sim 2500^{\circ}C$ 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  $\sim 99.99s$
- 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
- Built-in visible high brightness green light or eyepiece aiming (on select models)

## **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  $\sim$  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

# **MOXIE Series**

Economy stand-alone Two Wire / Four Wire IR Pyrometers

Metal Housing, Optical Component and Special Integrated Circuit Stand-alone General Purpose 8-14 $\mu$ m 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
- Wide range of operation temperature
- Easy to install & maintain, low cost













#### Universal Process Calibrator

MCS-12 / MCS-12-IS

Universal Process Calibrator

MCS-XV Series

PCON-Y17

Measures and generates mA, mV, volts, ohms, RTD, TC

Simultaneous input and output operation. Accuracy up to 0.01% full scale.

2-Wire Transmitter Power Supply: 12 Vdc / 30 mA

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.

**Automatic Precision Pressure Controller** 

found in Instrumentation Applications.



#### **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.

**Automatic Precision Pressure Controller** PCON-Y18

A Calibrator designed for the automated pressure control

of a wide selection of ranges upto 3000 psi (Pneumatic)

Provides a complete solution for the Test & Calibration of vour 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



# **FOREIGN PRINCIPALS**

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.

Amarell GMBH & CO., Germany

General Purpose & Industrial Thermometers

D. Marchiori S.R.L., Italy

Various RVSM Air Data Test Set Modules for troubleshooting, leak testing & Certification of Aircraft Pitot-static

Systems.

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.

Practical Instrument Electronics, U.S.A

Multifunction & Single Function Calibrators - mA / Voltage / RTD / Thermocouple / Frequency

**ACIN Instrumenten BV, The Netherlands** 

Widest Range of Instruments for Measuring & Recording Pressure

ASP Sensors, U.S.A.

High Precision Reference RTDs

# Nagman Instruments Consortium

# Parent Company & our Associates



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