

### Welcome to Temperature, Process & Pressure Instruments Product Line Overview Catalog



### **About Temperature & Process Instruments**

We strive to bring you the latest innovative technologies from leading manufacturers of temperature and process instrumentation. Our product lines include:

**Accurate Thermal Systems LLC** - ThermCal 130 and ThermCal 400 Portable Dri Block Calibrators and FTBSL6 Fluidized Temperature Sand Bath

Athena Controls - 1/16 and 1/4 Autotune Temperature and Process Controllers and SSR

**Novus Automation -** Head Mnounted Programmable Transmitters, Relative Humidity and Temperature Transmitters, Portable Thermocouple, RTD and Process Meters and Controllers

Optris Infrared Sensing - Portable and Fixed Mounted Industrial Infrared Thermometers

**Sauerman** - Indoor Air Quality Meters, Flue Gas Combustion Analyzers Portable Humidity, Dewpoint and Air Flow Instruments, Solar Radiation and Lux Meters

**Seitron Americas:** Residential, Commercial and Industrial Flue Gas Combustion Analyzers. Portable Gas Leak Detectors

**Test Products International (TPI)** - Industrial Refrigerant, Combustible Gas Leak Detectors, Combustion Analyzers, Digital Multimeter, Portable Humidity and Air Flow Meters

Ordering is easy fast and secure just go to our web site at:

### https://www.tnp-instruments.com

and Click on the Online Store Link, for your convenience we accept the following credit cards











### Welcome to Temperature, Process & Pressure Instruments Product Line Overview Catalog

### **Table of Contents**

### Portable Dry Block and Fluidized Sand Bath Thermocouple and RTD Sensor Calibrators

- ▶ ThermCal 130 Low Temperature Portable Dry Block Calibrator
- ▶ ThermCal 400 Portable Dry Block Medium Temperature Calibrator
- ▶ FTBSL6 Fluidized Temperature Bath Calibrator

### Combustion Gas Analyzer for Residential & Commercial HVAC Boilers

- DC710 Flue Gas Analyzer.
- ▶ S500-3 Three Gas Residential Combustion Analyzer
- ▶ TPI 709 Two Gas Combustion Flue Gas Analyze
- ▶ Novo 1 2 Gas Flue Combustion Analyzer Measure Oxygen, Carbon Monoxide, Carbon Dioxide
- ▶ Novo 3 3 Gas Flue Gas Combustion Analyzer Measure Oxygen, Carbon Monoxide, Nitric Oxide
- ▶ Novo 4 Models N (NO) or S (SO) Portable 4 Gas Flue Gas Combustion Analyzer
- ▶ SI CA030 Series 2 or 3 Gas Flue Combustion Analyzer Multifunctional Analyzer
- ▶ SI CA130 Series 2 or 3 Gas Flue Combustion Analyzer Multifunctional Analyzer
- ▶ SI CA230 Series 2, 3 or 4 Gas Flue Combustion Analyzer Multifunctional Analyzer
- ▶ S6000 Series Industrial Portable Multifunctional Emission Combustion Flue Gas Analyzers with Five or Six Gas Sensors with Built-In Printer
- ▶ S9000 Multifunctional Emission Combustion Flue Gas Analyzers

### Hand Held and Portable Indoor Air Quality (IAQ) and Test Instruments

- ▶ AQ-Expert Portable Indoor Air Quality Monitor
- AQ Pro Series Indoor Air Quality Monitor Instrument for Environmental Test and Measurement
- ▶ AQ Comfort Series Indoor Air Quality Monitor Instrument for Environmental Test and Measurement
- ▶ TPI 1010A Multifunction Indoor Air Quality Measure CO2, CO, RH and % Outside Air
- ▶ TPI 1008A Indoor Air Quality (IAQ) Meter Measure Carbon Dioxide and Ambient Temperature
- ▶ CO-50 Carbon Monoxide Meter with Intergral Probe
- ▶ AMI 310 Multifunction Indoor Air Quality Meter Optional Interchangeable Add On Sensors and Probes Modules
- ▶ CO-110S Carbon Monoxide and Temperature Meter
- ▶ AQ 110S Indoor Air Quality (IAQ) Meter Measure Carbon Dioxide and Ambient Temperature

### Thermo-Anemometers Hot-Wire or Vane Style Air Flow Instruments

- ▶ TPI 556C1 Digital Air Velocity / Air Flow Meter
- ▶ TPI 575C1 Combination Vane and Hot Wire Anemometer
- ▶ TPI 597C1 Digital Hygrometer/Psychrometer
- LV-130S 4" (100mm) Diameter Fixed Vane Thermo-Anemometer Displays Velocity and Temperature
- ▶ LV-111S 0.55" (14mm) Diameter Vane Probe Thermo-Anemometer Displays Velocity and Temperaturer
- LV-117S Portable Thermo-Anemometer with 2.75" Diameter Vane Probe
- LV-110S 4" (100mm) Vane Probe Thermo-Anemometer
- ▶ VT-115S Portable Hot-Wire Thermo-Anemometer with Telescopic Probe
- LV-117S Portable Thermo-Anemometer with 2.75" Diameter Vane Probe

### **Humidity, Dew Point, Temperature/Humidity Transmitter Instruments**

- ▶ HD-50 Hand Held Relative Humidity and Ambient Temperature Thermo-Hygrometer
- ▶ HD-110 Hand Held Relative Humidity, Dew Point and Ambient Temperature Thermo-Hygrometer
- ▶ TPI 597C1 Hand Held Digital Hygrometer/Psychrometer
- ▶ RHT-WM Wall Mounted Temperature and Humidity Transmitter 2-wire Output Transmitter
- ▶ RHT-DM Duct Mounted Humidity and Temperature 2-wire Output Transmitter
- ▶ RHT-Climate-WM Wall Mounted Humidity and Temperature 2-wire Transmitter
- ▶ RHT-Climate-DM Duct Mounted Humidity and Temperature 2-wire 4 to 20mA or 0 to 10Vdc Transmitter



Т

### Welcome to Temperature, Process & Pressure Instruments Product Line Overview Catalog

### **Temperature and Process Controllers and Panel Meters**

- ▶ Legecy Series 16 1/16 DIN PID Autotune Controller
- ▶ 16C 1/16 DIN Autotune PID Controller with 8 Segment Ramp and Soak
- ▶ Legacy Series 25 1/4 DIN Universal Autotune Temperature/Process Controller
- ▶ OTC 25 1/4 DIN Single Loop Temperature Controller
- > ZC and PC Series Solid State SSRContactors Power Controller
- ▶ N1030 1/16 DIN Shallow Depth Auto Tune Programmable Temperature Controller
- ▶ N1020 1/32 DIN Auto Tune Programmable Temperature Controller
- ▶ N1500 Programmable Thermocouple, RTD and milliamp 1/8 DIN Panel Meter
- ▶ N1540 1/8 DIN Programmable Temperature Process Panel Meter with USB Communication Port

### Head Mounted and DIN Rail 2-wire 4 to 20mA Programmable Temperature Transmitters

- ▶ Mp82710H HART® Protocol Head Mounted Programmable 2-Wire 4 to 20mA Temperature Transmitter
- ▶ Mp82710 Head Mounted Programmable 2-Wire 4 to 20mA Temperature Transmitter
- ▶ Mp82810 Thermocouple and RTD Linearized 2-wire 4 to 20mA Temperature Transmitter
- ▶ Mp82830-T Programmable Head Mounted Thermocouple Linearized Transmitter 2-Wire 4 to 20mA Output
- ▶ Mp82830-R Programmable Head Mounted 2-Wire 4 to 20mA Temperature Transmitter Pt100 RTD Input
- ▶ TxIsoPack-USB Head Mounted Programmable Temperature Transmitter
- ▶ TxBlock-USB Head Mounted Programmable Temperature Transmitter
- ▶ Mp88710H HART® Protocol Din Rail Mounted Programmable 2-Wire 4 to 20mA Temperature Transmitter
- ▶ Mp88710 Din Rail Mounted Programmable 2-Wire 4 to 20mA Temperature Transmitter
- ▶ Mp88810 Programmable Din Rail Mounted Thermocouple and RTD Linearized Temperature Transmitter 2-Wire 4 to 20mA Output

#### **Fixed Mounted Industrial Infrared Thermometers**

- ▶ OPTCS-TCLT15 Compact Industrial Fixed Mounted Infrared Thermometer with 0 to 5V or 0 to 10V Output
- ▶ OPTCSMV LT/LTH Series Micro Sensor Fixed Mounted Infrared Thermometer with V/mV Output
- ▶ OPTCSMA-LT, Micro Sensor Fixed Mounted Infrared Thermometer with Analog 4 to 20mA Output
- ▶ CX Two-Wire Industrial Infrared Sensor Fixed Mounted Infrared Thermometer with Analog 4 to 20mA Output
- ▶ OPTCTLT15F CTfast LT15F Fast Response Non-Contact Infrared Temperature Measurement Thermometer
- ▶ OPTCTLT25F CTfast LT25F Fast Response Infrared Temperature Measurement Thermometer
- ▶ CT LT02 Compact Infrared Thermometer Sensor with LCD Display
- ▶ CT LT15 Compact Infrared Thermometer Sensor with LCD Display
- ▶ CT LT22 Compact Infrared Thermometer Sensor with LCD Display
- ▶ OPTCTLT02H CTHot Industrial Infrared Thermometer with High Ambient Temperature Sensor
- ▶ OPTCTLT10H CTHot Industrial Infrared Thermometer with High Ambient Temperature Sensor

#### Handheld and Portable Non-Contact Infrared Thermometers

- ▶ PTLST-20-1M/2M Portable Documenting Infrared Thermometer
- ▶ PLMS-PRO Handheld Portable Non-Contact Infrared Thermometer with Laser Sighting
- ▶ PLMS-PLUS Handheld Portable Non-Contact Infrared Thermometer with Laser Sighting and Adjustable Emissivity
- ▶ PLMS Handheld Portable Infrared Thermometer with Laser Sighting and Fixed Emissivity

#### Industrial Portable Refrigerant and Combustible Gas Leak Detectors

- ▶ Industrial TPI 750A Portable Refrigerant Leak Detector With 0.02 Oz/yr. Sensitivity
- Industrial TPI 753A Portable Refrigerant Leak Detector with 0.1 Oz/yr. Sensitivity
- Industrial 7899 Hand Held Combustible Gas Leak Detector with Easy To Read Large LCD Display
- ▶ Industrial TPI 720B Economical Portable Combustible Gas Leak Detector
- ▶ TPI 721 Portable Combustible Gas Leak Detector with Bargraph LCD Display
- ▶ TPI 775 Multifunction Hand Held Combustible Gas Detector and Ambient Carbon Monoxide



### Welcome to Temperature, Process & Pressure Instruments Product Line Overview Catalog

#### SL and LX Series Solarimeter Solar Radiation and LUX Meters

- ▶ TPI 510 Solar Irradiance Meter Handheld
- ▶ SL-100 Solarimeter Portable Solar Radiation Meter, Measurement for Solar Panels
- ▶ SL-200 Solarimeter Solar Radiation Meter with 30 Day Datalogging Capability
- ▶ LX-100 Hand Held Lux Meter Measure Illuminance in Foot Candles or LUX
- LX-200 Hand Held Lux Meter Measure Illuminance in Foot Candles or LUX with Datalogging

### **Pressure Calibration Instrumentation**

- ▶ TPI 621 Dual Input Differential Manometer
- ▶ TPI 623 Dual Input High Resolution Digital Manometer
- ▶ TPI 665 Differential Pressure Manometer
- ▶ TPI 665L Differential Pressure Manometer Can Be Used In Non-Corrosive Liquid Applications

### Industrial Test Tools Tachometers, Moisture Meters, Clamp-On and DMM

- ▶ TPI 505 Combination Contact/Non-Contact Tachometer
- ▶ TPI 505L Combination Contact/Non-Contact Tachometer
- ▶ TPI 183A True RMS Digital Multimeter Industrial 4000 Count True RMS Multimeter
- ▶ TPI 296 AC/DC True RMS Digital Clamp Meter Industrial True RMS 700 Amp Clamp-On Meter and DMM



T

## Portable Dry Block Thermocouple and RTD Temperature Calibrator

ThermCal 400 Portable Dry Block Temperature Calibrator Easily Calibrate your Thermocouples, RTD's and Bi-Metal Thermometers Temperature Sensors

#### **Features**

- Laboratory grade performance at an economical price
- ▶ Wide temperature range of ambient +5°C/9°F to 400°C/752°F
- ▶ Store and recall up to 8 set-points
- Fast heat up and cool down
- ▶ Interchangeable Calibration Blocks
- Includes traceable calibration with data and calibration label
- ▶ Only 10 lbs. with insert
- ▶ Adjustable ramp rate for reliable thermal switch testing
- Advanced all digital controller with large bright display



https://www.tnp-instruments.com/thermcal400\_portable\_dry\_block\_calibrator.html



#### **Features**

- ► Temperature range (ambient of 20°C) Operates -4°F to 266°F (-20°C to 130°C)
- Use as an Ice Point Reference Standard
- ▶ Store and recall up to 8 set-points
- Fast heat up and cool down
- ▶ Removable probe inserts for flexibility & many probe sizes
- Includes traceable calibration with data and calibration label
- ▶ Only 17 lbs. with insert
- ▶ CE marked for safety
- ▶ Advanced all digital controller with large bright display

For more information visit our web site at:

https://www.tnp-instruments.com/ats3080-thermcal-130-block-calibrator.html

## FTBSL6 Fluidized Temperature Bath Calibrator Easily Calibrate your Thermocouples, RTD's Sensors and Bi-Metal Thermometers Temperature Sensors

#### **Features**

- ▶ Wide temperature range 50°C (122°F) to 605°C (1121°F)
- ▶ Advanced PID temperature control
- ▶ Fully automatic Fluidizing air control
- ▶ Flexible lid for immersing parts basket and temperature probes for calibration
- ▶ Compact size for placement on standard lab benches
- ▶ Compact working volume 5.3" diameter by 6" depth

For more information visit our web site at:

https://www.tnp-instruments.com/FTBSL6-fluidized-temperature-bath.html







S500-3-NO/NOx Flue Gas Combustion Analyzer

Multifunction Combustion Flue Gas Analyzer for Complete Boiler and
Burners Set-Ups, Servicing & Maintenance

**Features** 

- ► PAPERLESS-GO GREEN MODEL Android & Apple APP for Smart Phones & Tablets for Saving & Emailing Reports
- ▶ Combustion Analyzer for Oxygen (O2), Carbon Dioxide (CO2), Carbon Monoxide (CO), Nitric Oxide (NO), Nitrogen Oxides (NOX), Excess Air, Efficiency along with all of the necessary temperature, draft, and pressure measurements
- ▶ Outdoor Air Temp Measurement (High Efficiency & Condensing Boilers)
- ▶ 12 Programmed Fuels & Oils (Including Bio-Fuel)
- ▶ Graphic White LED backlit White / Black

For more information visit our web site at:

https://www.tnp-instruments.com/E500-Basic-NO-NOx-combustion-



### DC710 Flue Gas Analyzer.

When Combined with Smartphone & App: Easy, Affordable & Remote Operation!

**Features** 

- ▶ Measure CO, and Temperature Differential
- ▶ Calculate CO2, CO Air Free, Excess Air, and Combustion Efficiency
- ▶ Operate remotely via Bluetooth using your Smartphone or tablet and the free TPI app. No need for long probe hoses you can be at the control center with your smartphone, while the DC710 does the work at the stack.
- ▶ TPI View App

Use the TPI View App to display real time readings in numeric and graph format. Job Management allows you to create multiple JOBS and attach multiple REPORTS to each Job! Give each report a different reference/name; save to an existing JOB or create a NEW one!

DC710: instrument only (smart phone not included)
For more information visit our web site at:

https://www.tnp-instruments.com/dc710-flue-gas-combustion-analyzer.html





TPI 709 Combustion Efficiency Analyzer with High Resolution Differential Manometer

#### **Features**

- ▶ Measure Carbon Monoxide (CO), Oxygen (02) and Carbon Dioxide (CO2) Calculates VCmbustion efficiency
- **▶** Calculates Boiler Combustion Efficiency
- ▶ Built-in differential manometer with 0.001" H2O resolution
- ▶ Store function to save up to 50 readings
- ▶ Ten selectable fuels: Natural Gas, LPG, Light Oil, Heavy Oil, Bituminous Coal, Anthracite Coal, Coke, Butane, Wood, Bagasse
- ▶ Optional A740 IR printer available for hard copies of test results

For more information visit our web site at:

https://www.tnp-instruments.com/tpi-709-flue-gas-combustion-analyzer.html



### TPI 709A740 Combustion Efficiency Analyzer with High Resolution Differential Manometer with A740 Infrared Printer

#### **Features**

- ▶ Measure Carbon Monoxide (CO), Oxygen (02) and Carbon Dioxide (CO2) Calculates VCmbustion efficiency
- **▶** Calculates Boiler Combustion Efficiency
- ▶ Built-in differential manometer with 0.001" H2O resolution
- ▶ Store function to save up to 50 readings
- ▶ Ten selectable fuels: Natural Gas, LPG, Light Oil, Heavy Oil, Bituminous Coal, Anthracite Coal, Coke, Butane, Wood, Bagasse
- ▶ A740 IR printer included for hard copies of test results

For more information visit our web site at:

https://www.tnp-instruments.com/tpi-709a740-flue-gas-combustion-analyzer.html





New Novo 1 - 2 Gas Boiler Flue Gas Combustion Analyzer Measure Oxygen, Carbon Monoxide, Carbon Dioxide

#### **Features**

- ▶ Measure Oxygen (O₂), Carbon Monoxide (CO) and Calculates Carbon Dioxide (CO<sub>2</sub>)
- ▶ New 7" Touch Full Color Graphic Display Screen for Easy Menu **Navigation**
- ▶ New Dual Range (Low/High) Sensor Technology

▶ New 100 MB for Complete Analysis Memory

- ▶ New Dedicated Probe with One Simple Connection Easy Plug-n-Play Design
- ▶ New Gas probe with 12" (300 mm) Interchangeable Tip
- ▶ New Integrated Water Trap with LED Backlight for Easy Maintenance
- For more information visit our web site at:

https://www.tnp-instruments.com/Novo-1-Two-Gas-Combustion-Analyzer.html

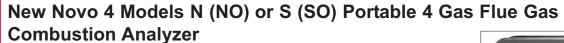


### New Novo 3 Portable 3 Gas Flue Gas Combustion Analyzer Measure Oxygen, Carbon Monoxide, Nitric Oxide

#### **Features**

- ▶ Measure Oxygen (O₂), Carbon Monoxide (CO), Nitric Oxide (NO) and Nitrogen Oxide (NOx) and Carbon Dioxide (CO<sub>2</sub>)
- ▶ New 7" Touch Full Color Graphic Display Screen for Easy **Menu Navigation**
- ▶ New Dual Range (Low/High) Sensor Technology
- ▶ New Dedicated Probe with One Simple Connection Easy Plug-n-Play Design
- New Gas probe with 12" (300 mm) Interchangeable Tip
- ▶ 15 Preprogrammed Fuels Including Natural Gas, Oil, Propane and Biofuels
- ▶ Differential Flue Gas and Ambient Air Temperatures For more information visit our web site at:

https://www.tnp-instruments.com/Novo-3-Three-Gas-Combustion-Analyzer.html



### **Features**

- ▶ Two Models to Choose From Model N Nitric Oxide (NO), Nitrogen Dioxide (NO2) or Model S - Sulfur Dioxide (SO2), Nitric Oxide (NO), Nitrogen Oxide (NOx)
- ▶ New 7" Touch Full Color Graphic Display Screen for Easy Menu Navigation
- ▶ New Dual Range (Low/High) Sensor Technology
- ▶ New Dedicated Probe with One Simple Connection Easy Plug-n-Play Design
- ▶ New Gas probe with 12" (300 mm) Interchangeable Tip For more information visit our web site at:

https://www.tnp-instruments.com/Novo-4N-Four-Gas-Combustion-Analyzer.html https://www.tnp-instruments.com/Novo-4S-Four-Gas-Combustion-Analyzer.html



Temperature & Process Instruments Inc.



New Si-CA 030 - 2 Gas - Flue Gas Combustion Analyzer Kits Measure Oxygen, Carbon Monoxide, Carbon Dioxide

### **Features**

- ▶ Choose from 4 Different Kits
- ▶ Combustion Analyzer Measure Oxygen (O2), Carbon Dioxide (CO2, Carbon Monoxide (CO), Excess Air, Efficiency along with all of the necessary temperature, draft, and pressure measurements
- Color screen, 2.8" (7.1 cm), 320 x 240 pixels with backlight
- ▶ Carbon Monoxide (CO) Safety Monitoring in Ambient Air
- ▶ Carbon Monoxide Sensor 0 to 8,000 ppm
- ▶ Standard Flue Gas Test Probe 7" (180mm) with 6.5' (2m) dual hose
- ▶ Free Apps for iOS & Android Mobile Devices
- ▶ Data Saving, Including Automatic Logging
- ▶ Report Creation in PDF, CSV (for Excel) and XML Formats
- ▶ Databases for Customers, Operators, and Equipment



https://www.tnp-instruments.com/si-ca-030-2-gas-combustion-analyzer.html



Si-CA 030 3 Gas - Flue Gas Combustion Analyzer Series Kits, Measure Nitric Oxide (NO), NOx (calculated), Oxygen (O2), Carbon Monoxide (CO) Gases

#### **Features**

- ▶ Choose from 4 Different Kits
- ▶ Combustion Analyzer Measure Nitric Oxide (NO), NOx (calculated), Oxygen (O2), Carbon Dioxide (CO2, Carbon Monoxide (CO), Excess Air, Efficiency along with all of the necessary temperature, draft, and pressure measurements
- ▶ Color screen, 2.8" (7.1 cm), 320 x 240 pixels with backlight
- ▶ Carbon Monoxide (CO) Safety Monitoring in Ambient Air
- ▶ Carbon Monoxide Sensor 0 to 8,000 ppm
- ▶ Standard Flue Gas Test Probe 7" (180mm) with 6.5' (2m) dual hose
- ▶ Free Apps for iOS & Android Mobile Devices
- ▶ Data Saving, Including Automatic Logging
- ▶ Report Creation in PDF, CSV (for Excel) and XML Formats
- ▶ Databases for Customers, Operators, and Equipment

### For more information visit our web site at:

https://www.tnp-instruments.com/si-ca-030-3-gas-combustion-analyzer.html



Ordering is easy, fast and secure just go to our web site at:

https://www.tnp-instruments.com

and Click on the Online Store Link, for your convenience we accept the following credit cards







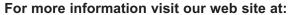




New Si-CA 130-2 Two Gas Series Flue Gas Combustion Analyzers Measure Oxygen, Carbon Monoxide, Calculate Carbon Dioxide

### **Features**

- ▶ Choose from 4 Different Kits
- ▶ 4.3" (10.9 cm) Large Color Touch Screen with Graphing
- ▶ Combustion Analyzer for Oxygen (O2), Carbon Dioxide (CO2), Carbon Monoxide (CO), Excess Air, Efficiency along with all of the necessary Temperature, Draft, and Pressure Measurements
- ▶ CO Sensor 0 to 8000 ppm
- ▶ Standard Flue Gas Test Probe 7" (180mm) with 6.5' (2m) Dual Hose Optional 12" (300mm) Available
- ▶ Data Management with Automatic Logging and Eeport Creation Through App/PC software
- ▶ Field replaceable precalibrated sensors
- ▶ Free Apps for iOS & Android Mobile Devices
- ▶ Data Saving, Including Automatic Logging
- ▶ Report Creation in PDF, CSV (for Excel) and XML Formats
- ▶ Databases for Customers, Operators, and Equipment



https://www.tnp-instruments.com/si-ca-130-2-gas-combustion-analyzer.html



New Si-CA 130-3 Three Gas Series Flue Gas Combustion Analyzer Kits Measure Nitric Oxide (NO), Oxygen (O2), Carbon Monoxide (CO), Calculate Carbon Dioxide (CO2)

#### **Features**

- **▶** Choose from Four Models
- ▶ Nitric Oxide (NO) 0 to 5000 ppm and NOx (calculated) 0 to 7500 ppm
- ▶ Combustion Analyzer for Nitric Oxide (NO), Oxygen (O2), Carbon Dioxide (CO2), Carbon Monoxide (CO), Excess Air, Efficiency along with all of the necessary temperature, draft, and pressure measurements
- ▶ 4.3" (10.9 cm) Large Color Touch Screen with Graphing
- ▶ CO Sensor 0 to 8000 ppm
- ▶ Standard Flue Gas Test Probe 7" (180mm) with 6.5' (2m) dual hose Optional 12" (300mm) Available
- ▶ Data Management with Automatic Logging and Eeport Creation Through App/PC software
- ▶ Field replaceable precalibrated sensors
- ▶ Free Apps for iOS & Android Mobile Devices
- ▶ Data Saving, Including Automatic Logging
- ▶ Report Creation in PDF, CSV (for Excel) and XML Formats
- ▶ Databases for Customers, Operators, and Equipment

For more information visit our web site at:

https://www.tnp-instruments.com/si-ca-130-3-gas-combustion-analyzer.html

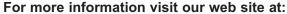




New Si-CA 230 - 2 Gas Flue Gas Combustion Analyzer Measure Oxygen, Carbon Monoxide, Calculate Carbon Dioxide (CO2)

#### **Features**

- ▶ 4.3" (10.9 cm) Large Color Touch Screen with Graphing
- Combustion Analyzer for Oxygen (O2), Carbon Dioxide (CO2), Carbon Monoxide (CO), Excess Air, Efficiency along with all of the necessary Temperature, Draft, and Pressure Measurements
- ▶ CO Dilution Auto-range with Measurements to 50,000 ppm
- ▶ Standard Flue Gas Test Probe 12" (300mm) with 10' (3m) Dual Hose
- ▶ Data Management with Automatic Logging and Eeport Creation Through App/PC software
- ▶ Field replaceable precalibrated sensors
- ▶ Free Apps for iOS & Android Mobile Devices
- ▶ Data Saving, Including Automatic Logging
- ▶ Report Creation in PDF, CSV (for Excel) and XML Formats
- ▶ Databases for Customers, Operators, and Equipment



https://www.tnp-instruments.com/si-ca-130-2-gas-combustion-analyzer.html



New Si-CA 230 - 3 Gas Series Flue Gas Combustion Analyzers Measure Nitric Oxide, Oxygen, Carbon Monoxide and Calculate Carbon Dioxide

Features Includes all of the above of the two gas model plus:

- Nitric Oxide (NO) 0 to 5000 ppm and NOx (calculated) 0 to 7500 ppm
- ▶ Optional Low Nitric Oxide (NO) 0 to 300 ppm Model Available

For more information visit our web site at:

https://www.tnp-instruments.com/si-ca-230-3-gas-combustion-analyzer.html

New Si-CA 230 - 4 Gas Series Flue Gas Combustion Analyzers Measure Sulfur Dioxide (SO2), Nitric Oxide (NO), Oxygen (O2), Carbon Monoxide (CO) Calculate Carbon Dioxide

Features Includes all of the above of the two gas model plus:

- ▶ Sulfur Dioxide (SO2) 0 to 5000 ppm
- ▶ Optional Low Sulfur Dioxide (SO2) 0 to 100 ppm Model Available

For more information visit our web site at:

https://www.tnp-instruments.com/si-ca-230-4so2-flue-gas-combustion-analyzer.html

New Si-CA 230 - 4 Gas Series Flue Gas Combustion Analyzers Measure CxHy (Hydrocarbons), Nitric Oxide (NO), Oxygen (O2), Carbon Monoxide (CO) Calculate Carbon Dioxide

Features Includes all of the above of the two gas model plus:

▶ CxHy (Hydrocarbons) 0 to 5%

For more information visit our web site at:

https://www.tnp-instruments.com/si-ca-230-4nc-CxHy-flue-gas-combustion-analyzer.html

Temperature & Process Instruments Inc.

Visit us on the web at www.tnp-instruments.com
1767 Central Avenue \* Suite 112 \* Yonkers \* NY \* USA \* 10710 \* Phone: (914)673-0333 Fax: (866) 292-1456



## Five Gas Sensor Portable Emission and Combustion Gas Analyzers for Industrial Applications

### S6000 Series 5 Gas Sensor Combustion Analyzer

#### **Features**

- ▶ 5 or 6 Gas Sensor Models Availablie
- ▶ Measure O2 , CO, NO, NH3 , NO2 , CO2, SO2, CxHy (HC), H2, H2S, CH4
- ▶ Efficiency, Excess Air and CO2 Calculations
- ▶ Dilution Pump For CO Auto-Range Measurements Up To 50,000 ppm
- ▶ Stack Gas & Air Temperature Measurements
- ▶ Draft & Differential Pressure Measurements
- ▶ External Water Trap for Condensate Removal
- ▶ ALL Gas Sensors are Pre-Calibrated & Field Replaceable
- ▶ 2000 Test Internal Memory
- **▶** Bluetooth Connectivity
- ▶ New Full COLOR Graphic Display
- ▶ Built-In Impact Printer (non-thermal)
- ▶ New Smartphone Real Time + QRcode App (iOS, Android)

For more information visit our web site at:

https://www.tnp-instruments.com/industrial-combustion-emissions-analyzer.html



### S6000-5DS Five Gas Industrial Combustion Gas Emissions Analyzer

Features Includes all of the above of the Five gas model plus:

▶ Measure Oxygen (O2), Carbon Monoxide (CO), Nitric Oxide (NO), Nitrogen Oxides (NOx), Nitrogen Dioxide (NO2), Sulfer Dioxide (SO2) and Calulates Carbon Dioxide (CO2)

For more information visit our web site at:

https://www.tnp-instruments.com/e6000-5ds-flue-gas-combustion-analyzer.html

### S6000-5DC Five Gas Industrial Combustion Emissions Analyzer

Features Includes all of the above of the Five gas model plus:

▶ Measure Oxygen (O2), Carbon Monoxide (CO), Nitric Oxide (NO), Nitrogen Oxides (NOx) Nitrogen Dioxide (NO2), CxH/HC and Calculates Carbon Dioxide (CO2)

For more information visit our web site at:

https://www.tnp-instruments.com/e6000-5dc-flue-gas-combustion-analyzer.html

### S6000-5SC Five Gas Industrial Combustion & Emissions Analyzer

Features Includes all of the above of the Five gas model plus:

▶ Measure Oxygen (O2), Carbon Monoxide (CO), Nitric Oxide (NO), Nitrogen Oxides (NOx), Sulfur Dioxide (SO2), CxHy/HC and Calculates Carbon Dioxide (CO2)

For more information visit our web site at:

https://www.tnp-instruments.com/e4500-s-flue-gas-combustion-analyzer.html

### S6000-5SH Five Gas Industrial Combustion & Emissions Analyzer

Includes all of the above of the Five gas model plus:

▶ Measure Oxygen (O2), Carbon Monoxide (CO), Nitric Oxide (NO), Nitrogen Oxides (NOx), Sulfur Dioxide (SO2), Hydrogen Sulfide (H2S) and Calculates Carbon Dioxide (CO2)

For more information visit our web site at:

https://www.tnp-instruments.com/e6000-5sh-flue-gas-combustion-analyzer.html



### Six Gas Sensor Portable Emission and Combustion Gas Analyzers for Industrial Applications

S6000-6DSH Six Gas Industrial Combustion Gas & Emissions Analyzer Measure O2, CO, NO/NOx, NO2, SO2, & H2S Gas Sensors

#### **Features**

- ▶ 6 Gas Sensor Models Availablie
- ▶ Measure Oxygen (O2), Carbon Monoxide (CO), Nitric Oxide (NO), Nitrogen Oxides (NOx), NO2, Sulfur Dioxide (SO2), Hydrogen Sulfide H2S and Calculates Carbon Dioxide (CO2)
- ▶ Efficiency, Excess Air and CO2 Calculations
- ▶ Dilution Pump For CO Auto-Range Measurements Up To 50,000 ppm
- ▶ Draft and Differential Pressure Measurements
- ▶ Stack Gas & Air Temperature Measurements
- ▶ Full Color Graphic Display Screen
- ▶ Built-In Impact Printer (non-fading paper)
- ▶ Internal Memory (up to 2000 tests) Data Logging with time and date stamp
- ▶ PC Software Package with USB & Bluetooth Communications
- ▶ 12 Selectable Fuel/Oil Types Including Bio-Heat 5%
- ▶ External Water Trap for Condensate Removal
- ▶ ALL Gas Sensors are Pre-Calibrated & Field Replaceable
- ▶ 2000 Test Internal Memory
- **▶** Bluetooth Connectivity
- ▶ New Smartphone Real Time + QRcode App (iOS, Android)

For more information visit our web site at:

https://www.tnp-instruments.com/e6000-6dsh-flue-gas-combustion-analyzer.html

### S6000-6DSC Six Gas Industrial Combustion Gas & Emissions Analyzer Measure O2, CO, NO/NOx, NO2, SO2, and CxHy/HC

### **Features**

- ▶ 6 Gas Sensor Models Availablie
- ▶ Measure Oxygen (O2), Carbon Monoxide (CO), Nitric Oxide (NO), Nitrogen Oxides (NOx), NO2, Sulfur Dioxide (SO2), CxHy/HC and Calculates Carbon Dioxide (CO2)
- ▶ Efficiency, Excess Air and CO2 Calculations
- ▶ Dilution Pump For CO Auto-Range Measurements Up To 50,000 ppm
- ▶ Draft and Differential Pressure Measurements
- ▶ Stack Gas & Air Temperature Measurements
- ▶ Full Color Graphic Display Screen
- ▶ Built-In Impact Printer (non-fading paper)
- ▶ Internal Memory (up to 2000 tests) Data Logging with time and date stamp
- ▶ PC Software Package with USB & Bluetooth Communications
- ▶ 12 Selectable Fuel/Oil Types Including Bio-Heat 5%
- **▶** External Water Trap for Condensate Removal
- ▶ ALL Gas Sensors are Pre-Calibrated & Field Replaceable
- ▶ 2000 Test Internal Memory
- **▶** Bluetooth Connectivity
- ▶ New Smartphone Real Time + QRcode App (iOS, Android)

#### For more information visit our web site at:

https://www.tnp-instruments.com/e6000-6dsc-flue-gas-combustion-analyzer.html





## Five & Six Gas Sensor Portable Emission and Combustion Gas Analyzers for Industrial Applications

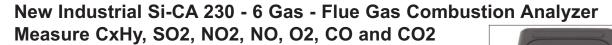
New Industrial Si-CA 230 - 5 Gas - Flue Gas Combustion Analyzer Measure Sulfur Dioxide (SO2), NO, NO2, O2, CO and CO2

#### **Features**

- ▶ 4.3" (10.9 cm) Large Color Touch Screen with Graphing
- ▶ Measure Hydrocarbons (CxHy), Sulfur Dioxide (SO2), Nitric Oxide (NO), Oxygen (O2), Carbon Monoxide (CO), and calculated Carbon Dioxide (CO2)
- ▶ Optional Model with Low Sulfur Dioxide (SO2), Nitrogen Dioxide (NO2), Nitric Oxide (NO) Sensors Available
- ► Carbon Monoxide (CO) and Carbon Dioxide (CO2) Monitoring in Ambient Air
- ▶ Carbon Monoxide (H2 comp.) Sensor 0 to 10,000 ppm
- ▶ Data Management with Automatic Logging and Report Creation
- ▶ PC Software with Wireless and USB Connectivity
- ▶ Draft and Differential Pressure Measurements
- ▶ One Touch Pump On/Off with Purge
- ▶ Customizable Gas Analysis Screen
- ▶ Field Replaceable Precalibrated Sensors
- ▶ Optional Wireless Printer Available



https://www.tnp-instruments.com/si-ca-230-5nds-flue-gas-combustion-analyzer.html



### **Features**

- ▶ 4.3" (10.9 cm) Large Color Touch Screen with Graphing
- ▶ Measure Hydrocarbons (CxHy), Sulfur Dioxide (SO2), Nitrogen Dioxide (NO2), Nitric Oxide (NO), Oxygen (O2), Carbon Monoxide (CO), and calculated Nitrogen Oxides (NOx), Carbon Dioxide (CO2)
- ▶ Carbon Monoxide (CO) and Carbon Dioxide (CO2) Monitoring in Ambient Air
- ▶ Carbon Monoxide (H2 comp.) Sensor 0 to 10,000 ppm
- ▶ Data Management with Automatic Logging and Report Creation
- ▶ PC Software with Wireless and USB Connectivity
- Draft and Differential Pressure Measurements
- ▶ Field Replaceable Precalibrated Sensors
- ▶ Optional Wireless Printer Available

For more information visit our web site at:

https://www.tnp-instruments.com/si-ca-230-6NDSC-flue-gas-combustion-analyzer.html

### New Industrial Si-CA 230 - 6 Gas - Flue Gas Combustion Analyzer Measure CxHy, SO2, NO2, NO, O2, CO and CO2

Features Includes all of the above of the Six gas model plus:

- ▶ Measure Oxygen (O2), Carbon Monoxide (CO), Nitric Oxide (NO), Nitrogen Oxides (NOx), Sulfur Dioxide (SO2), CxHy/HC and Calculates Carbon Dioxide (CO2)
- ▶ Optional Model Measure Hydrogen Sulfide (H2S), Low Sulfur Dioxide (SO2), Low Nitrogen Dioxide (NO2), Low Nitric Oxide (NO), Oxygen (O2), Carbon Monoxide (CO) and calculated Nitrogen Oxides (NOx), Carbon Dioxide (CO2)

For more information visit our web site at:

https://www.tnp-instruments.com/si-ca-230-6-flue-gas-combustion-analyzer.html





### **S9000 Series Industrial Emissions Analyzer**

The Portable S9000 is a high-end industrial emissions analyzer, mainly used for industrial burners, cogeneration, gas turbines, industrial ovens and processes, laboratories and generally everywhere the need is to measure and register for long periods the gas emissions, in compliance with existing EPA protocols and Regulations. It can be configured with Built in Chiller and Probe with heated head.

#### S9000 Portable Features

- ▶ Ability to simultaneously measure up to 12 different gases, with up to 9 single gas measuring sensors and one infrared bench (NDIR) for High CO, Direct CO2 & Hydrocarbons (HC)
- ▶ Measurable gases: O2, CO, CO2, CxHy, NO, NO2, SO2, H2S, H2, NH3 with different ranges and accuracies
- ▶ Heated probe and head available
- ▶ Standard fuels in memory: methane, LPG, propane, butane, light oil, heavy oil, biogas, wood, pellets, coal. Up to 16 additional fuels can be added by the user
- ▶ Pump for gas sample and 2nd dilution pump for CO cell protection
- ▶ Withstand very high stack temperatures
- ▶ Positive, negative and Pressure Differential measurement
- ▶ Gas sampling probes of different type and length / heated head and hose probe
- ▶ Double particulate filter system
- ▶ Standard expansion water trap or Peltier

Please call us 914-673-0333 more information, specification and to obtain a quote.

The Rack Mounted S9000 is ideal to continous measurement of industrial emissions. Thanks to its rack mounting, it is ideal for research and development environments as well as process monitoring.

### **S9000 Rack Mounted Features**

- ▶ Serial communication port type RS485 according to protocol MODBUS® RTU USB Communication
- ▶ 4 to 20 mA isolated output
- ▶ Output signal: from 4 to 20mA scalable up to 10% of the measurement range of the chosen sensor. Other calibrations beyond this limit on request
- ▶ 4 alarm relays outputs
- ▶ Heated probes available up to 20 ft (6m) connection
- **▶** Efficiency calculations
- **▶** Condensing efficiency calculation
- ▶ PCI efficiency calculation
- ▶ PCS efficiency calculation
- ▶ 15 default fuels
- ▶ 32 programmable fuels
- ▶ CO sensor protected by an automatic dilution system
- b up to 6 gas sensors in total
- ▶ NDIR bench (measuring up to 3 gases)
- ▶ Electrochemical gas measurement sensors (up to 3)

- Stack temperature measurement (2 temperatures)
- ► Ambient or Primary Air Source Temperature
- ▶ Thermal Compensation
- ▶ Draft in the stack with automatic autozero
- **▶** Measurement of the differential pressure
- ▶ Stack Air Velocity measurement with the use of Pitot tube
- ▶ Suction pump flow rate measurement



Please call us 914-673-0333 more information, specification and to obtain a quote.



AQ-Expert Portable Indoor Air Quality Monitor Providing the latest in Monitoring for IAQ testing in Hospitals, Buildings, Schools, Labs, Clean Rooms, Airports

#### **Features**

- ▶ Available in two models, CO2 range PPM or 0 to 20%
- ▶ Up to 11 Multiple Parameters CO2, CO, % RH, Temp, VOC, O2, NO2, Ozone, SO2, H2S, Barometric Pressure
- ▶ Active Internal Sampling Pump
- ▶ Large Internal Memory for REAL-TIME Continuous Data Logging for Graphs, Data Review, IAQ reports
- ▶ Wireless Communications with Bluetooth For more information visit our web site at:

https://www.tnp-instruments.com/AQ\_expert\_portable\_indoor\_air\_quality\_meter.html



### AQ PRO Environmental Indoor Air Quality Meter Customize with UP TO 3 Gas Sensor Parameters

Multiple Parameters - Up to 6 Simultaneously (Customize to YOUR Needs) CO2, CO, % RH, Temp, Formaldehyde (CH2O), O2, NO, SO2, H2S, NO/NOx, Barometric Pressure, Air Velocity

#### **Features**

- ▶ REAL-TIME Continuous Data Logging for Graphs, Data Review, IAQ reports
- ▶ Wireless Communications with Bluetooth
- ▶ Active Internal Sampling Pump
- ▶ PC Software & USB Included
- ▶ Barometric Air Pressure
- ▶ Light Weight, Durable, and Easy-to-Transport Design
- **▶** Large Internal Memory
- ▶ Li-Ion Rechargeable Battery

For more information visit our web site at:

https://www.tnp-instruments.com/AQ-PRO-indoor-air-quality-meter.html



### AQ VOC Environmental Indoor Air Quality Meter Kit WITH Volatile Organic Compounds (VOC) Sensor

Choice of (1) VOCs Sensor Range: VOCs (0-20,000 ppb) (0-20 ppm) or VOCs (0-200 ppm) Sensor. Add UP TO 2 More Gas Sensors Including Formaldehyde (CH2O)

### **Features**

- Measure 4 Parameters Volatile Organic Compounds (VOC) Sensor,
   Relative Humidity, Ambient Temperature and Barometric Pressure
- ▶ 2000 Points Internal Memory for REAL-TIME Continuous Data Logging for Graphs, Data Review, IAQ reports
- **▶** Wireless Communications with Bluetooth
- ▶ Active Internal Sampling Pump
- ▶ PC Software & USB Included
- ▶ Light Weight, Durable, and Easy-to-Transport Design
- ▶ Li-Ion Rechargeable Battery

For more information visit our web site at:

https://www.tnp-instruments.com/aq-pro-v-indoor-air-quality-meter.html





AQ COMFORT-1 Portable Indoor Air Quality Monitoring Kit with Carbon Dioxide (CO2) Range 0 to 5000 ppm

#### **Features**

- ▶ Active Internal Sampling Pump
- ▶ Measurement Parameter Carbon Dioxide (CO2)
- ▶ Active Internal Sampling Pump
- ▶ Light Weight, Durable, and Easy-to-Transport Design
- ▶ Easy to Use Menu System with Easy Built-in, Menu-driven Calibration Procedure

For more information visit our web site at:

https://www.tnp-instruments.com/AQ\_comfort\_indoor\_air\_quality\_meter.html

### AQ COMFORT-2 HVAC Indoor Air Quality Kit Measure Carbon Dioxide (CO2) and Ambient Temperature

### **Features**

- ▶ Measurement Parameter Carbon Dioxide (CO2) and Ambient Temperature
- ▶ Active Internal Sampling Pump
- ▶ Light Weight, Durable, and Easy-to-Transport Design
- ▶ Easy to Use Menu System with Easy Built-in, Menu-driven Calibration Procedure

For more information visit our web site at:

https://www.tnp-instruments.com/AQ-comfort-2-indoor-air-quality-meter.html

### AQ COMFORT-3 Indoor Air Quality Meter Measure Carbon Dioxide (CO2), Relative Humidity, Temperature and Pressure

#### **Features**

- ▶ Measurement Parameter Carbon Dioxide (CO2), % Relative Humidity, Ambient Temperature, Wet Bulb & Dew Point and Differential Pressure
- Large Internal Memory (2000 points) for REAL-TIME Continuous Data Logging for Graphs, Data Review, IAQ reports
- ▶ Active Internal Sampling Pump
- ▶ Wireless Communications with Bluetooth
- Easy to Use Menu System with Easy Built-in, Menu-driven Calibration Procedure

For more information visit our web site at:

https://www.tnp-instruments.com/aq-comfort-3-indoor-air-quality-meter.html

### AQ COMFORT-4 Indoor Air Quality Meter with Carbon Dioxide (CO2) 0 to 5000 ppm and CO 0 to 200 ppm Ranges

#### **Features**

- ▶ Measurement Parameter Carbon Dioxide (CO2), Carbon Monoxide (CO), % Relative Humidity, Temperature, Differential Pressure
- ▶ Large Internal Memory (2000 points) for REAL-TIME Continuous Data Logging for Graphs, Data Review, IAQ reports
- ▶ Active Internal Sampling Pump
- ▶ Wireless Communications with Bluetooth
- Easy to Use Menu System with Easy Built-in, Menu-driven Calibration Procedure

For more information visit our web site at:

https://www.tnp-instruments.com/aq-comfort-co-indoor-air-quality-meter.html







### TPI 1008A Indoor Air Quality (IAQ) Meter Measure Carbon Dioxide and Ambient Temperature

### **Features**

- ▶ Carbon Dioxide (CO2) Measurement 0 to 5000 ppm
- ▶ Measure Ambient Temperature -5°F to 140°F (-20°C to 60°C)
- ▶ CO2 Alarm Audible and Visual, selectable level
- ▶ Data Logging Up to 50 samples
- ▶ Record and display min, max & average values
- ▶ New! Print to optional printer Model A740 Infrared Printer
- ▶ Designed to meet the needs of testing professionals in ANY Air Quality applications

For more information visit our web site at:

https://www.tnp-instruments.com/tpi-1008a-indoor-air-quality-meter.html



### TPI 1010A Multifunction Indoor Air Quality Measure CO2, CO, RH and % Outside Air

### **Features**

- ▶ Calculate percent outside air to maintain acceptable CO2 levels in buildings and work spaces
- ▶ Measure and display Carbon Dioxide (CO2) and Carbon Monoxide
- ▶ Measure ambient air temperature
- Measure relative humidity, dew point and wet bulb
- ▶ Log up to 4,000 readings in 1 second to 1 hour intervals
- ▶ Download to a computer using the A368 USB cable
- New! Print via to optional Infrared printer (Model A740)

### For more information visit our web site at:

https://www.tnp-instruments.com/aq\_pro\_indoor\_air\_quality\_meter.html



### CO-50 Measure Carbon Dioxide and Ambient Temperature Meter with Intergral Probe

### **Features**

- ▶ Carbon Monoxide (CO) Measurement 0 to 500 ppm
- ▶ Measure Ambient Temperature -4 to 176°F (-20 to 80°C)
- ▶ 4.5" (110mm) Long, 1" (26mm) Diameter Integral Sensor
- **▶** HOLD function
- ▶ Automatic shut-off
- ▶ IP54 Housing

### For more information visit our web site at:

https://www.tnp-instruments.com/co-50-carbon-monoxide-meter.html





NEW - AMI 310 - Complete Multifunctional Instrument for Indoor Air Quality BUILD YOUR OWN TOOL:

Start with the Base AMI-310 Meter and then add the Optional Probes and Modules you need.

The NEW AMI 310 can measures up to 6 simultaneous parameters including pressure, temperature (Pt100 and thermocouple J, K, T, N and S), humidity, air quality (CO/CO2), air velocity, airflow (vane probes and hotwire), and tachometry when used with the Optional Interchangeable Add On Sensors and Probes Modules

### **Features**

- ▶ Interchangeable modules 1 device = several possible ranges & parameters
- ▶ Optional Interchangeable Add On Sensors and Probes Modules Sold Seperately
- ▶ AMI 310 measures parameters including pressure, temperature (Pt100 and thermocouple), humidity, air quality (CO/CO2), air velocity, climate airflow (vane probes and hotwire), and tachometry



https://www.tnp-instruments.com/aim300 multifunction indoor air quality meter.html

### **CO-110S Carbon Monoxide Meter with 12" Probe**

### **Features**

- ▶ Carbon Monoxide (CO) Measurement 0 to 500 ppm
- ▶ Measure Ambient Temperature -4 to 176°F (-20 to 80°C)
- ▶ 12" Integral Sensor with Retractable, length 18" (0.45 m), up to 8' (2.4 m) when released
- Minimum and Maximum Valuesf
- ▶ 2 Configurable Alarms

### For more information visit our web site at:

https://www.tnp-instruments.com/co-110s-carbon-monoxide-meter.html

### AQ 110S Indoor Air Quality (IAQ) Meter Measure Carbon Dioxide and Ambient Temperature

New advanced AQ-110S carbon dioxide and ambient temperature meter is a portable, highly accurate, durable, compact and user-friendly hand held instruments designed to meet the needs of testing professionals in ANY Air Quality applications. Ideal for Inspectors, Laboratories, HVAC, IAQ, Greenhouse, Office Spaces, Commercial, Residential, where carbon dioxide build up can cause environmental hazardous and safety concerns.

### **Features**

- ▶ Carbon Dioxide (CO2) Measurement 0 to 5000 ppm
- ▶ Measure Ambient Temperature 0 to 176°F (-18 to 80°C)
- ▶ Minimum and Maximum Values
- **▶** HOLD function
- ▶ Adjustable automatic shut-off
- ▶ IP54 Housing

### For more information visit our web site at:

https://www.tnp-instruments.com/aq110s-indoor-air-quality-co2-meter.html





Temperature & Process Instruments Inc.

Visit us on the web at www.tnp-instruments.com
1767 Central Avenue \* Suite 112 \* Yonkers \* NY \* USA \* 10710 \* Phone: (914)673-0333 Fax: (866) 292-1456



### Thermo-Anemometers Air Flow and Digital Hygrometer/Psychrometer Instruments

### TPI 556C1 Digital Air Velocity / Air Flow Meter

#### **Features**

- ▶ Measure air velocity, air flow and temperature
- ▶ Five units of measure for air velocity m/s, km/hr, mile/hr, knots and ft/min
- ▶ Two units of measure for air flow cfm and cmm
- ▶ Four digit dual line display simultaneously shows air flow and temperature
- ▶ Data record displays minimum, maximum and average readings
- ▶ Data log up to 1000 readings in 1 second to 999 second intervals

### For more information visit our web site at:

https://www.tnp-instruments.com/556c1-air-velocity-air-flow-meter.html



### TPI 575C1 Combination Vane and Hot Wire Anemometer

#### **Features**

- ▶ Increased versatility, uses both hot wire and vane type probes
- ▶ Measure air velocity and temperature simultaneously
- ▶ Record, minimum, maximum and average
- Data hold
- ▶ Auto power off (10 min.)
- ▶ Low battery display
- ▶ Multiple units of measure: (m/s, k/h, mile/h, knots, ft./min)

### For more information visit our web site at:

https://www.tnp-instruments.com/575C1-combination-vane-hot-wire-anemometer.html



### LV-130S 4" (100mm) Diameter Fixed Vane Thermo-Anemometer Displays Velocity and Temperature

#### **Features**

- ▶ Measure Air Velocity and Ambient Temperature
- ▶ 4" (100mm) Diameter Integral Vane Probe
- ▶ Mearsure Air Velocity 59 to 6890 fpm (0.3 to 35 m/s)
- ▶ Reliable and Accurate and Easy to Use
- ▶ Hold, Min and Max Function
- ▶ Display of 2 Measurements Simultaneously
- ▶ IP54 Housing
- ▶ Hold Function. Minimum and Maximum Values

### For more information visit our web site at:

https://www.tnp-instruments.com/lv130s-fixed-vane-thermo-anemometer.html





### Vame Probe Thermo-Anemometers Air Flow Instruments

### LV-111S 0.55" (14mm) Diameter Vane Probe Thermo-Anemometer Displays Velocity and Temperature

#### **Features**

- ▶ Mearsure Air Velocity 157 to 4920 fpm (0.8 to 25 m/s)
- ▶ Mearsure Temperature 0 to 176°F (-18 to 80°C)
- ▶ 0.55" (14 mm) Diameter Vane Probe, 12" Long Probe with Retractable 18" cable expands to 8
- ▶ Reliable and Accurate and Easy to Use
- ▶ Hold, Min and Max Function
- ▶ Display of 2 Measurements Simultaneously
- ▶ IP54 Housing
- ▶ Hold Function, Minimum and Maximum Values

For more information visit our web site at:

https://www.tnp-instruments.com/lv111S-vane-thermo-anemometer.html



### LV-117S Portable Thermo-Anemometer with 2.75" Diameter Vane Probe

### **Features**

- ▶ Mearsure Air Velocity 78 to 6890 fpm (0.4 to 35m/s)
- ▶ Mearsure Temperature 0 to 176°F (-18 to 80°C)
- ▶ 2.75" (70 mm) Vane Probe, 12" Long Probe with Retractable 18" expands to 8'
- ▶ Reliable and Accurate and Easy to Use
- ▶ Hold, Min and Max Function
- ▶ Display of 2 Measurements Simultaneously
- ▶ IP54 Housing
- ▶ Hold Function, Minimum and Maximum Values

For more information visit our web site at:

https://www.tnp-instruments.com/lv107s vane thermo anemomet.html



### LV-110S Portable Thermo-Anemometer with 4" (100mm) Diameter Vane Probe

### **Features**

- ▶ Mearsure Air Velocity 59 to 6890 fpm (0.3 to 35m/s)
- ▶ Mearsure Temperature 0 to 176°F (-18 to 80°C)
- ▶ 4" (100mm) Vane Probe, 12" Long Probe with Retractable 18" cable expands to 8"
- ▶ Reliable and Accurate and Easy to Use
- ▶ Hold, Min and Max Function
- ▶ Display of 2 Measurements Simultaneously
- ▶ IP54 Housing
- ▶ Hold Function, Minimum and Maximum Values

For more information visit our web site at:

https://www.tnp-instruments.com/lv107s\_vane\_thermo\_anemomet.html





### Hot WireProbe Thermo-Anemometers Air Flow Instruments

### VT-110S Portable Hot Wire Thermo-Anemometer Measuring Airflow, Air Velocity and Temperature

### **Features**

- ▶ Measure Air Velocity and Temperature
- ▶ Measure Air Velocity 30 to 5900 fpm
- ▶ Mearsure Temperature -4 to 176°F (-20 to 80°C)
- ▶ Measure Air Flow Rate 0 to 58,857 cfm with optional cone
- ▶ 0.3" (8mm) Diameter, 12" (300mm) Long Probe with Intergral 78" Cable
- ▶ NTC Temperature Sensor
- ▶ Large graphic LCD Display
- ▶ Display of 2 Measurements Simultaneously
- ▶ IP54 Housing
- ▶ Hold Function, Minimum and Maximum Values

For more information visit our web site at:

https://www.tnp-instruments.com/vt110s-hot-wire-thermo-anemometer.html



### VT-115S Portable Hot-Wire Thermo-Anemometer with Telescopic Probe Measuring Airflow, Air Velocity and Temperature

### **Features**

- ▶ Measure Air Velocity and Temperature
- ▶ Measure Air Velocity 30 to 5900 fpm
- ▶ Mearsure Temperature -4 to 176°F (-20 to 80°C)
- ▶ Measure Air Flow Rate 0 to 58,857 cfm with optional cone
- ▶ 0.3" (8mm) Diameter, 12" (300mm) Long Probe with Intergral 78" Cable
- **▶ NTC Temperature Sensor**
- ▶ Large graphic LCD Display
- ▶ Display of 2 Measurements Simultaneously
- ▶ IP54 Housing
- ▶ Hold Function, Minimum and Maximum Values

For more information visit our web site at:

https://www.tnp-instruments.com/vt110s-hot-wire-thermo-anemometer.html





### Portable Relative Humidity, Temperature, and Dew Point Meters

### HD 50 Hygrometer Easily Measures Relative Humidity and Ambient

**Temperature** 

### **Features**

- ▶ Measure Humidity, Dew Point and Temperature
- ▶ Measuring range: humidity: 5 to 95% RH
- ▶ Measure Temperature -4 to +158°F (-20 to +70°C)
- ▶ Integral 1.9" long Sensor Probe
- **▶** Hold Function
- ▶ Automatic Shut-off 20 Minutes
- ▶ 2 lines, LCD Technology Display
- ▶ IP54 Housing



https://www.tnp-instruments.com/hd110S-humidity-dew-point-temperature-hygrometer.html

### **HD-110 Relative Humidity, Dew Point and Ambient Temperature Thermo-Hygrometer**

#### **Features**

- ▶ Measure Humidity, Dew Point and Temperature
- ▶ Selection of units (Temperature and Dew Point)
- ▶ Relative Humidity Range 5 to 95%
- ▶ Dew Point Range -40 to +158°F
- ▶ Measure Temperature -40 to +158°F (-40 to +70°C)
- ▶ Integral 12" long, Retractable cable length 18" (450 mm), up to 8' (2.4m) when released
- ▶ Minimum and Maximum values
- ▶ Adjustable Automatic Shut-off
- ► Large Backlight Display
- ▶ IP54 Housing

#### For more information visit our web site at:

https://www.tnp-instruments.com/hd110S-humidity-dew-point-temperature-hygrometer.html



### **Features**

- ▶ Measure Relative Humidity (RH) 0% to 100% and Temperature 40°F to 122°F (-40°C to 50°C)
- Increased versatility, uses both hot wire and vane type probes
- ▶ Small diameter (0.45") probe for measuring inside air ducts
- ▶ Relative humidity (RH) accuracy of ±2% provides reliable readings
- ▶ Measure dew point and wet bulb temperature
- ▶ Data record function stores minimum and maximum humidity and temperature measurements

### For more information visit our web site at:

https://www.tnp-instruments.com/597C1-digital-hygrometer-psychrometer.html







### Humidity, Dew Point, Temperature, Transmitters

### RHT-Climate-WM Wall Mounted Humidity and Temperature 2-wire 4 to 20mA or 0 to 10Vdc Transmitter

#### **Features**

- ▶ High accuracy readings
- ▶ Humidity Programmable from 0 to 100% (non-condensing)
- ▶ Humidity Accuracy ±1.8% RH at 25°C (0% to 90% RH)
- ▶ Temperature Accuracy ±0.2°C (0°C to +60°C)
- ▶ ∘Electronic circuit case IP65; Sensors capsule IP30

For more information visit our web site at:

https://www.tnp-instruments.com/rht-climate-wm-temperature-humidity-transmitter.html



### RHT-Climate-DM Duct Mounted Humidity and Temperature 2-wire 4 to 20mA or 0 to 10Vdc Transmitter

#### **Features**

- ▶ Stainless Steel Probe Available in 150, 250 and 400mm Lenghts
- ▶ Humidity Programmable from 0 to 100% (non-condensing)
- ▶ Humidity Accuracy ±1.8% RH at 25°C (0% to 90% RH)
- ▶ Temperature Accuracy ±0.2°C (0°C to +60°C)

For more information visit our web site at:

https://www.tnp-instruments.com/rht-climate-dm-temperature-humidity-transmitter.html



### RHT-WM Wall Mounted Humidity and Temperature 2-wire 4 to 20mA or 0 to 10Vdc Transmitter

### **Features**

- ▶ Microprocessor Based Temperature and Humidity Transmitter
- ► Field Configurable with Optional TxConfig PC Interface and the Windows® Based Software
- Two-wire loop powered 4 to 20mA, 20 to 4mA or Voltage output 0 to 10Vdc
- ▶ Isolated 4 to 20mA outputs, Non-isolated 0 to 10Vdc outputs
- ▶ Programmable from 0 to 100%RH or from 100 and 103°C for dew point



### For more information visit our web site at:

https://www.tnp-instruments.com/rht-wm-temperature-humidity-transmitter.html

### RHT-DM Duct Mounted Humidity and Temperature 2-wire 4 to 20mA or 0 to 10Vdc Transmitter

### **Features**

- ▶ Microprocessor Based Temperature and Humidity Transmitter
- ▶ Field Configurable with Optional TxConfig PC interface and the Windows® based software
- ▶ Three Probe Lenghts Available 150mm, 250mm or 400mm Long (400mm with 4 to 20ma Output Only)

### For more information visit our web site at:

https://www.tnp-instruments.com/rht-dm-duct-mounted-humidity-temp-transmitter.html





### Temperature and Process Controllers

### Series 16C 1/16 DIN Autotune with 8 Level Ramp and Soak Temperature/Process Controller

### **Features**

- ▶ Field-Configurable Universal Inputs
- ▶ User-Selectable Ramp to Setpoint
- ▶ 8 Level Ramp/Soak Control
- **▶** Bumpless Auto/Manual Transfer
- ▶ NEMA 4X (IP65) Dust and Splash-Proof Front Panel
- ▶ Decimal Display in 0.1° for Measured Temperatures Under 1000° F or C
- ▶ On/Off through Full PID Operation (P,PI,PD,PID)

For more information visit our web site at:

https://www.tnp-instruments.com/16C\_Temperature\_Process\_Controller.html



### Legacy Series 16 1/16 DIN Universal Autotune Temperature/Process Controller

### **Features**

- ▶ Accepts Thermocouple, RTD or Process Signal Inputs
- ▶ Bumpless Auto/Manual Transfer
- ▶ NEMA 4X (IP65) Dust and Splash-Proof Front Panel
- ▶ On/Off through Full PID Operation (P,PI,PD,PID)
- ▶ Auto-Tuning, Heat or Cool
- ▶ Adjustable Hysteresis and Heat/Cool Spread
- **▶** cUL and CE Approvals

For more information visit our web site at:

https://www.tnp-instruments.com/16\_Series\_Temperature\_Process\_Controller.html



### Legacy Series 25 1/4 DIN Universal Autotune Temperature/Process Controller

### **Features**

- Accepts Thermocouple, RTD or Process Signal Inputs
- ▶ User-Selectable Ramp to Setpoint
- ▶ Bumpless Auto/Manual Transfer
- ▶ NEMA 4X (IP65) Dust and Splash-Proof Front Panel

• On/Off through Full PID Operation (P,PI,PD,PID)

• Auto-Tuning, Heat or Cool

• Adjustable Hysteresis and Heat/Cool Spread

For more information visit our web site at:

https://www.tnp-instruments.com/25\_Series\_Temperature\_Process\_Controller.html



### **ZC and PC Series Solid State SSR Contactors Power Controller**

### **Features**

- ▶ All Solid-State Design
- ▶ No Maintenance Required
- ▶ Choose from Zero Crossing or Phase Angle Models
- ▶ Supplied with 3.6" or 5.5" Heat Sink
- ▶ Soft-Start Optional on PC Phased Angle Series

For more information visit our web site at:

https://www.tnp-instruments.com/PC-ZC-solid-state-relays.html





### Temperature and Process Controllers and Panel Meters

### N1030 1/16 DIN Shallow Depth Auto Tune Programmable Temperature Controller

### **Features**

- ▶ Only 1.38 inches (35mm) deep
- ▶ Single Loop Auto Tune PID and ON/OFF controller
- Accepts thermocouples type J, K, and T, and 3-wire Pt100 RTD's
- ▶ Dual 4-digit red and green four-digit display
- ▶ Dual output 1 pulse and 1 relay

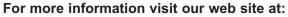
For more information visit our web site at:

https://www.tnp-instruments.com/N1030-temperature-controller.html

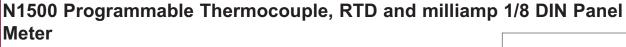


#### **Features**

- ▶ ∘Accepts thermocouples type J, K, T, E, N, R, S and B; 3-wire Pt100 RTD's, and 0 to 50mV
- ▶ ∘Auto-tuning PID Parameters r
- ▶ ∘Dual output 1 pulse and 1 relay
- ▶ Dual 4-digit red and green four-digit display



https://www.tnp-instruments.com/N1030-temperature-controller.html



#### **Features**

- ▶ Accepts thermocouples type J, K, T, E, N, R, S and B; 3-wire Pt100 RTD, 4 to 20mA, 0 to 50mV and 0 to 10Vdc
- ▶ Six digit 13mm ultra bright LED display
- ▶ Accepts and linearizes non-linear 4 to 20mA signals from thermocouple transmitters
- ▶ Standard 24Vdc output for field transmitters
- ▶ Programmable scaling from -1999 to +9999 and adjustable digital filter

For more information visit our web site at:

http://www.tnp-instruments.com/n1500-18DIN-panel-meter.html

### N1540 1/8 DIN Programmable Temperature Process Panel Meter with USB Communication Port

### **Features**

- ▶ Accepts thermocouples J, K, T, E, N, R, S, B, RTD Pt100, 0 to 50mV, 0 to 5Vdc, 0 to 10Vdc, 0 to 20mA and 4 to 20mA
- ▶ Bright 14mm display
- ▶ Two relay alarms SPST 1.5A/240 Vac Standard
- ▶ USB Interface for configuration and monitoring
- ▶ Programmable indicating range from -1999 to 9999
- ▶ Auxiliary 24 Vdc voltage source

For more information visit our web site at:

http://www.tnp-instruments.com/n1540-18DIN-temperature-process-meter.html









## Head Mounted 2-wire 4 to 20mA Programmable Temperature Transmitters

### Mp82710H HART® Protocol Head Mounted Programmable 2-Wire 4 to 20mA Temperature Transmitter

#### **Features**

- ▶ Microprocessor-Based, HART® Protocol
- ▶ Universal Input Thermocouples, RTD's, millivolts and Ohm
- ▶ Field Programmable with optional Programming Kit and PC Software
- ▶ Fully-Isolated and Linearized
- ▶ RFI/EMI-Immune
- ▶ High Accuracy 0.1%
- ▶ Small Size (1.7" dia. x 1.1"H)



#### For more information visit our web site at:

https://www.tnp-instruments.com/mp82700h\_hart\_protocol\_programable\_transmitter.html

### Mp82710 Head Mounted Programmable 2-Wire 4 to 20mA Temperature Transmitter

### **Features**

- ▶ Universal Input Thermocouples, RTD's, millivolts and Ohm
- ▶ Field Programmable with optional Programming Kit and PC Software
- ▶ Fully-Isolated and Linearized
- ▶ RFI/EMI-Immune
- ▶ High Accuracy 0.1%
- ▶ Small Size (1.7" dia. x 1.1"H)

# THE PARTY OF THE P

#### For more information visit our web site at:

https://ww.tnp-instruments.com/mp82700\_programmable\_temperature\_transmitter.html

### MP82810 Thermocouple and RTD Linearized 2-wire 4 to 20mA Temperature Transmitter

### **Features**

- ▶ Universal Input Thermocouples, RTD's, millivolts and Ohm
- ▶ Field Programmable with optional Programming Kit and PC Software
- ▶ Fully-Isolated and Linearized
- ▶ RFI/EMI-Immune
- ▶ High Accuracy 0.1%
- ▶ Small Size (1.7" dia. x 1.1"H)

#### For more information visit our web site at:

https://www.tnp-instruments.com/mp82810-linearized-thermocouple-rtd-transmitter.html





## Head Mounted 2-wire 4 to 20mA Programmable Temperature Transmitters

### Mp82830-T Series Programmable Head Mounted Thermocouple Linearized Temperature Transmitter 2-Wire 4 to 20mA Output

#### **Features**

- ▶ Programmable for 5 Thermocouple Types Input
- Field Programmable with optional Programming Kit and PC Software
- ▶ Fully-Isolated and Linearized
- ▶ RFI/EMI-Immune
- ▶ High Accuracy 0.1%
- New Small Size 43mm Dia. x 27mm H. (1.69" x 0.75")

For more information visit our web site at:

https://www.tnp-instruments.com/mp82800\_programable\_transmitter.html



### Mp82830-R Programmable Head Mounted 2-Wire 4 to 20mA Temperature Transmitter Pt100 RTD Input

#### **Features**

- ▶ Pt100, Pt250, Pt500, Pt1000, Ni100, Ni500 and Ni1000 RTD Input
- ▶ Field Programmable with optional Programming Kit and PC Software
- **▶** Fully Linearized
- ▶ RFI/EMI-Immune
- ▶ New Small Size 43mm Dia. x 27mm H. (1.69" x 0.75")



#### For more information visit our web site at:

https://www.tnp-instruments.com/mp82800r\_rtd\_programmable\_head\_mounted\_transmitter.html

### TxIsoPack-USB Isolated and Linearized Programmable Thermocouple and RTD Temperature Transmitter

#### **Features**

- ▶ Programmable Thermocouples J, K, T, E, N, R, S, B and 2,3 or 4 wire Pt100 RTD's
- Isolated 1000 Vac for 1 minute between input and output
- Linearized 2-Wire Loop powered 4 to 20 mA or 20 to 4 mA output
- ▶ USB micro-B port allows direct PC connection for configuration
- ▶ Optional USB Cable and Windows configuration software

#### For more information visit our web site at:

https://www.tnp-instruments.com/txisopack-usb-temperature-transmitter.html

### TxBlock-USB Linearized Programmable Thermocouple and RTD 2-wire 4 to 20mA Temperature Transmitter

### **Features**

- Programmable Thermocouples J, K, T, E, N, R, S, B and 2,3 or 4 wire Pt100 RTD's
- Linearized 2-Wire Loop powered 4 to 20 mA or 20 to 4 mA output
- ▶ USB micro-B port allows direct PC connection for configuration
- ▶ Optional USB Cable and Windows configuration software

### For more information visit our web site at:

https://www.tnp-instruments.com/txblock-usb-temperature-transmitter.html





## MP88000 Series Din Rail Mounted 2-wire 4 to 20mA Programmable Temperature Transmitters

### Mp88710H HART® Protocol Din Rail Mounted Programmable 2-Wire 4 to 20mA Temperature Transmitter

#### **Features**

- ▶ Microprocessor-Based, HART® Protocol
- ▶ Universal Input Thermocouples, RTD's, millivolts and Ohm
- ▶ Field Programmable with optional Programming Kit and PC Software
- ▶ Fully-Isolated and Linearized
- ▶ RFI/EMI-Immune
- ▶ High Accuracy 0.1%
- ▶ Small Size (1.7" dia. x 1.1"H)

For more information visit our web site at:

https://www.tnp-instruments.com/mp88700h\_din\_rail\_hart\_transmitter.html



### Mp88710 Din Rail Mounted Programmable 2-Wire 4 to 20mA Temperature Transmitter

#### **Features**

- ▶ Universal Input Thermocouples, RTD's, millivolts and Ohm
- ▶ Field Programmable with optional Programming Kit and PC Software
- ▶ Fully-Isolated and Linearized
- ▶ RFI/EMI-Immune
- ▶ High Accuracy 0.1%
- ▶ Small Size (1.7" dia. x 1.1"H)

For more information visit our web site at:

https://www.tnp-instruments.com/mmp88700\_din\_rail\_transmitter.html



### Mp88810 Series Programmable Din Rail Mounted Thermocouple and RTD Linearized Temperature Transmitter 2-Wire 4 to 20mA Output

### **Features**

- ▶ Universal Input Thermocouples, RTD's, millivolts and Ohm
- ▶ Field Programmable with optional Programming Kit and PC Software
- ▶ Fully-Isolated and Linearized
- ▶ RFI/EMI-Immune
- ▶ High Accuracy 0.1%
- ▶ Small Size (1.7" dia. x 1.1"H)

For more information visit our web site at:

https://www.tnp-instruments.com/mp88800\_din\_rail\_transmitter.html



### Mp88810R Programmable Din Rail Mounted 2-Wire 4 to 20mA Temperature Transmitter Pt100 RTD Input

### **Features**

- ▶ Pt100 RTD Input
- ▶ Field Programmable with optional Programming Kit and PC Software
- ▶ Fully-Isolated and Linearized
- ▶ RFI/EMI-Immune
- ▶ High Accuracy 0.1%

For more information visit our web site at:

https://www.tnp-instruments.com/mp88800r\_din\_rail\_transmitter.html





Т

## Compact Industrial Fixed Mounted Non-Contact Infrared Thermometers

### Optris OPTCS-TCLT15 Compact Industrial Fixed Mounted Infrared Thermometer with 0 to 5V or 0 to 10V Output

### **Features**

- ▶ New wider Temperature Range -40°F to 1886°F (-40°C to 1030°C)
- ▶ Spectral response 8 to 14µm
- ▶ Field of View 15:1 standard, Optional CF-len 2:1 FOV
- ▶ Optional USB Programming Adapter and Optris® Compact \ Connect
- ▶ Emissivity 0.100 to 1.000 (adjustable via 0 to 5 V DC input or software)
- ▶ Compact Size M12x1, 87 mm long, stainless steel housing
- ▶ Usable up to 75°C ambient temperature without cooling



https://www.tnp-instruments.com/OPTCS-TCLT15-compact-infrared-thermometer.html

Optris OPTCSMV LT/LTH Series Micro Sensor Fixed Mounted Infrared Thermometer with V/mV Output

### **Features**

- ▶ Temperature Range -58 to 1886°F (-50 to 1030°C)
- ▶ Spectral response 8 to 14µm
- ▶ Choice of Four Field of View
- ▶ Emissivity 0.100 to 1.000 (adjustable via 0 to 5 V DC input or software)
- ▶ Optional USB Programming Adapter and Optris® Compact Connect
- ▶ Compact Size M12x1, 28 mm long, stainless steel housing

For more information visit our web site at:

https://www.tnp-instruments.com/OPTCSMV-lt-lth-industrial-infrared-thermometer.html

### Optris OPTCSMA-LT, Micro Sensor Fixed Mounted Non-Contact Infrared Thermometer with Analog 4 to 20mA Output

### **Features**

- ▶ Temperature Range -58 to 1886°F (-50 to 1030°C) programmable with the optional optris CSmicro kit
- ▶ Spectral response 8 to 14µm
- ▶ Choice of 3 fields of views
- ▶ Emissivity 0.100 to 1.000 (adjustable via 0 to 5 V DC input or software)
- ▶ Optional USB Programming Adapter and optris® Compact Connect
- ▶ Compact Size M12x1, 28 mm long, stainless steel housing
- ▶ Ambient temperature sensor head -4 to 248°F (-20 to 120°C)

For more information visit our web site at:

https://www.tnp-instruments.com/optcsma-lt-lth-series-infrared-thermometer.html



122012 € 0



T

## Compact Industrial Fixed Mounted Non-Contact Infrared Thermometers

Optris OPTCTLT15F CTfast LT15F Fast Response Non-Contact Infrared

### **Temperature Measurement Thermometer**

### **Features**

- ▶ Temperature Range -58 °F to 1787°F (-50°C to 975°C) scalable via programming keys or optional USB, RS232, interface and software
- ▶ Separate electronics housing with easy accessible programming keys and LCD backlit display
- ▶ High Optic Resolution of Field Of View 15:1
- ▶ Spectral Response 8 to 14µm
- ▶ Emissivity 0.100 to 1.000 adjustable via programming keys and LCD backlit display
- ▶ Signal processing: Peak Hold, Valley Hold, Average;
- Scalable analog output: 0/4 to 20mA, 0 to 5V, 0 to 10 V, or Thermocouple Type K or J

#### For more information visit our web site at:

https://www.tnp-instruments.com/OPTCTLT15F-CTfast-%20LT15F-Infrared-Thermometer.html

### **Optris OPTCTLT25F CTfast LT25F Fast Response Infrared Temperature Measurement Thermometer**

### **Features**

- ▶ Temperature Range -58 °F to 1787°F (-50°C to 975°C) scalable via programming keys or optional USB, RS232, interface and software
- ▶ Separate electronics housing with easy accessible programming keys and LCD backlit display
- ▶ High Optic Resolution of Field Of View 25:1
- ▶ Spectral Response 8 to 14µm
- ▶ Emissivity 0.100 to 1.000 adjustable via programming keys and LCD backlit display
- ▶ Signal processing: Peak Hold, Valley Hold, Average;
- ▶ Extended hold function with Threshold and Hysteresis
- ▶ Scalable analog output: 0/4 to 20mA, 0 to 5V, 0 to 10 V, or Thermocouple Type K or J

### For more information visit our web site at:

https://www.tnp-instruments.com/OPTCTLT25F-CTfast-%20LT25F-Infrared-Thermometer.html





## Compact Industrial Fixed Mounted Non-Contact Infrared Thermometers

### Optris CT LT02 Compact Infrared Thermometer Sensor with LCD Display

### **Features**

- ▶ Temperature Range -58°F to 1112°F (-50°C to 600°C) scalable via programming keys or optional USB, RS232, interface and software
- ▶ Optic Resolution of 2:1 (with flat front window)
- ▶ Separate electronics housing with easy accessible programming keys and LCD backlit display
- ▶ Scalable analog output: 0/4 to 20mA, 0 to 5V, 0 to 10 V, or Thermocouple Type K or J
- ▶ Spectral response 8 to 14µm
- ▶ Compact Size M12x1, 1.1 in. (28mm) long, SS sensor housing
- ▶ Ambient temperature sensor head rugged and usable up to 266°F (130°C) ambient temperature without cooling



#### For more information visit our web site at:

https://www.tnp-instruments.com/OPTCSMV-lt-lth-industrial-infrared-thermometer.html

### Optris CT LT15 Compact Infrared Thermometer Sensor with LCD Display

#### **Features**

- ▶ Temperature Range -58°F to 1112°F (-50°C to 600°C) scalable via programming keys or optional USB, RS232, interface and software
- ▶ Optic Resolution of 15:1 (precision glass optics)
- ▶ Spectral response 8 to 14µm
- ▶ Separate electronics housing with easy accessible programming keys and LCD backlit display
- ▶ Compact Size M12x1, 1.1 in. (28mm) long, SS sensor housing
- ▶ Scalable analog output: 0/4 to 20mA, 0 to 5V, 0 to 10 V, or Thermocouple Type K or J
- ▶ Ambient temperature sensor head rugged and usable up to 266°F (130°C) ambient temperature without cooling

### For more information visit our web site at:

https://www.tnp-instruments.com/optctlt15-ct-lt15-infrared-thermometer.html

### Optris CT LT22 Compact Infrared Thermometer Sensor with LCD Display

#### **Features**

- ▶ Temperature Range -58°F to 1787°F (-50°C to 975°C) scalable via programming keys or optional USB, RS232, interface and software
- ▶ Optic Resolution of 22:1 (precision glass optics)
- ▶ Separate electronics housing with easy accessible programming keys and LCD backlit display
- ▶ Scalable analog output: 0/4 to 20mA, 0 to 5V, 0 to 10 V, or Thermocouple Type K or J
- ▶ Spectral response 8 to 14µm
- ▶ Compact Size M12x1, 1.1 in. (28mm) long, SS sensor housing
- ▶ Ambient temperature sensor head rugged and usable up to 266°F (130°C) ambient temperature without cooling

### For more information visit our web site at:

https://www.tnp-instruments.com/optctlt20-ct-lt22-infrared-thermometer.html







## Compact Industrial Fixed Mounted Non-Contact Infrared Thermometers

### **OPTCTLT02H CTHot Industrial Infrared Thermometer with High Ambient Temperature Sensor**

#### **Features**

- ▶ Temperature Range -40°F to 1787°F (-40°C to 975°C) scalable via programming keys or optional USB, RS232, interface and software
- ▶ Sensor head rugged and usable up to 482°F (250°C) ambient temperature without cooling
- ▶ Optic Resolution of 2:1
- ▶ IP 65 (NEMA-4) Sensing Head and Electronic Housing
- ▶ Separate electronics housing with easy accessible programming keys and LCD backlit display
- ▶ Scalable analog output: 0/4 to 20mA, 0 to 5V, 0 to 10 V, or Thermocouple Type K or J
- ▶ Spectral response 8 to 14µm
- ▶ Sensor Head Size M12x1, 2.16 in. (55mm) long x 1.16 in (29.5mm) dia. Stainless Steel housing
- ▶ Signal processing: Peak Hold, Valley Hold, Average; Extended hold function with Threshold and Hysteresis



https://www.tnp-instruments.com/OPTCTLT02H-CThot-industrial-infrared-thermometer.html



### **Features**

- ▶ Temperature Range --40°F to 1787°F (-40°C to 975°C) scalable via programming keys or optional USB, RS232, interface and software
- ▶ Sensor head rugged and usable up to 482°F (250°C) ambient temperature without cooling
- ▶ Optic Resolution of 10:1
- ▶ Spectral response 8 to 14µm
- ▶ Separate electronics housing with easy accessible programming keys and LCD backlit display
- ▶ Spectral response 8 to 14µm
- Sensor Head Size M12x1, 2.16 in. (55mm) long x 1.16 in (29.5mm) dia. Stainless Steel housing
- ▶ Signal processing: Peak Hold, Valley Hold, Average; Extended hold function with Threshold and Hysteresis



https://www.tnp-instruments.com/OPTCTLT10H-industrial-infrared-thermometer.html





T

### Handheld and Portable Non-Contact Infrared **Thermometers**

### P20-1M/2M Portable Documenting Infrared Thermometer **Designed For Demanding High Temperature Industrial Applications**

### Features

- ▶ Three Models to Choose From
- ▶ Low Temperature range from 32 to 2352°F(0 to 1300°C)
- ▶ High Temperature ranges from 725 to 3252°F (385 to 1800°C)
- ▶ High optical resolution 300:1
- Precise aiming with dual laser and scope sighting
- Adjustable emissivity from 0.100 to 1.000
- MAX/MIN function and audible alarm
- USB interface, PSC Connect RSoftware Included
- ▶ Data logger for 2000 measured values

For more information visit our web site at:

https://www.tnp-instruments.com/PSC PTLST 20 Series documenting infrared thermometer.html



- ▶ Wide Temperature Range -20 to 1400°F (-32 to 760°C)
- Maximum, Minimum, Differential and Offset Reading
- ▶ Alarm Functions Visual and audible High/Low
- ▶ USB Communication Interface and Type K Thermocouple Connector
- ▶ Laser Sighting Standard
- ▶ Adjustable Emissivity

For more information visit our web site at:

https://www.tnp-instruments.com/psc\_plms\_pro\_infrared\_thermometer.html



### MS-PLUS Handheld Portable Non-Contact Infrared Thermometer with Laser Sighting and Adjustable Emissivity

#### **Features**

**Features** 

- ▶ Wide Temperature Range -20 to 980°F (-32 to 530°C)
- ▶ Adjustable Emissivity
- Maximum, Minimum, Differential and Offset Reading
- ▶ Alarm Functions Visual and audible High/Low
- ▶ Comfortable Ergonomic Design
- ▶ Easy to Use Just a "Click" to Measure
- Quick Immediate Response
- Laser Sighting Standard

For more information visit our web site at:

https://www.tnp-instruments.com/psc\_plms\_Plus\_infrared\_thermometer.html



### MS Handheld Portable Infrared Thermometer with Laser Sighting and **Fixed Emissivity**

### **Features**

- ▶ Wide Temperature Range -20 to 768°F (-32 to 420°C)
- ▶ Fixed Emissivity (Preset at 0.95)
- **▶** Comfortable Ergonomic Design
- ▶ Easy to Use Just a "Click" to Measure
- ▶ Quick Immediate Response
- **▶** Laser Sighting Standard
- ▶ Large Backlight LCD Display

For more information visit our web site at:

https://www.tnp-instruments.com/psc\_plms\_infrared\_thermometer.html





## Industrial Portable Refrigerant and Combustible Gas Leak Detectors

### Industrial TPI 750A Portable Refrigerant Leak Detector With 0.02 Oz/yr. Sensitivity

#### **Features**

- ► Capable of detecting all existing refrigerants and blends including 404A, PURON® and R-507 (AZ50®)
- ▶ Fully adjustable tic rate to eliminate background concentration and pinpoint leaks
- ▶ One hand operation
- ▶ Field replaceable sensor tips for easy maintenance

For more information visit our web site at:

https://www.tnp-instruments.com/750\_753\_refrigerant\_leak\_detectors.html



### Industrial TPI 753A Portable Refrigerant Leak Detector with 0.1 Oz/yr. Sensitivity

#### **Features**

- ► Capable of detecting all existing refrigerants and blends including 404A, PURON® and R-507 (AZ50®)
- ▶ Fully adjustable tic rate to eliminate background concentration and pinpoint leaks
- ▶ One hand operation
- ▶ Field replaceable sensor tips for easy maintenance

For more information visit our web site at:

https://www.tnp-instruments.com/753a\_refrigerant\_leak\_detectors.html



### Industrial 7899 Hand Held Combustible Gas Leak Detector with Easy To Read Large LCD Display

### **Features**

- ▶ Detect combustible gasses including Methane, Propane, Natural Gas, LPG, Hydrocarbons, etc.
- ▶ Visual LED screen & Audible Alarms
- ▶ Rugged, accurate, and highly sensitive
- ▶ Auto Zero Drift Adjustment
- Quick Response Time
- ▶ 11" Flexible probe to reach inaccessible places

For more information visit our web site at:

https://www.tnp-instruments.com/7899\_combustible\_Gas\_leak\_detector.html



#### **Warning and Precaution**

The Combustible GAS detector is a leak locating tool and is not intended for use as a confined-space, personal safety tool. It will not specifically identify a gas or a CFC, and it does not tell you the precise level of a combustible gas or CFC that may be present.

High concentrations of combustible gas/CFC can cause explosions, fires, asphyxia, and other hazards that could cause serious personal injury or death. Be informed on the characteristics and hazards of the gas/CFC you are working with, and use proper precautions to avoid hazardous atmospheres.



### Industrial Portable Combustible Gas Leak Detectors

### Industrial TPI 720B Economical Portable Combustible Gas Leak Detector

#### **Features**

- ▶ Gases Detected (partial listing): Acetone, Acetylene, Alcohol, Ammonia, Benzene, Butane, Ethanol, Ethylene Oxide, Gasoline, Hexane, Hydrogen, Methane, Naphtha, Natural Gas, Paint Thinners, Propane and Solvents
- Instant response
- ▶ 10ppm (methane) Sensitivity
- ▶ Adjustable tic rate
- Audio and Visual alarm indication with user adjustable alarm point For more information visit our web site at:

https://www.tnp-instruments.com/720B combustible Gas leak detector.html

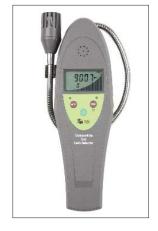


### Industrial TPI 721 Portable Combustible Gas Leak Detector with **Bargraph LCD Display**

### **Features**

- ▶ Combustible Gas Leak Detector capable of displaying real ppm, stepped ppm, and %LEL (Lower Explosive Limit)
- ▶ Gases Detected (partial listing): Acetone, Acetylene, Alcohol, Ammonia. Benzene, Butane, Ethanol, Ethylene Oxide, Gasoline, Hexane, Hydrogen, Methane, Naphtha, Natural Gas, Paint Thinners, Propane and Solvents
- ▶ Instant response
- ▶ 10ppm (methane) Sensitivity
- ▶ Adjustable tic rate
- ▶ Audio and Visual alarm indication with user adjustable alarm point For more information visit our web site at:

https://www.tnp-instruments.com/721\_combustible\_Gas\_leak\_detector.html



### Industrial TPI 775 Multifunction Hand Held Combustible Gas Detector and Ambient Carbon Monoxide

#### **Features**

- ▶ Combination Ambient Carbon Monoxide and Combustible Gas Leak **Detector**
- ▶ Gases Detected (partial listing): Acetone, Acetylene, Alcohol, Ammonia, Benzene, Butane, Ethanol, Ethylene Oxide, Gasoline, Hexane, Hydrogen, Methane, Naphtha, Natural Gas, Paint Thinners, Propane and Solvents
- ▶ 2 Line LCD Display
- ▶ Auto and Manual Zero
- ▶ Visible and Audible High and Low Alarm Included
- ▶ Flexible 16" gooseneck

For more information visit our web site at:

https://www.tnp-instruments.com/775\_carbon\_monoxide\_combustible\_Gas\_leak\_detector.html



#### **Warning and Precaution**

The Combustible GAS detector is a leak locating tool and is not intended for use as a confined-space, personal safety tool. It will not specifically identify a gas or a CFC, and it does not tell you the precise level of a combustible gas or CFC that may be present.

High concentrations of combustible gas/CFC can cause explosions, fires, asphyxia, and other hazards that could cause serious personal injury or death. Be informed on the characteristics and hazards of the gas/CFC you are working with, and use proper precautions to avoid hazardous atmospheres.

Temperature & Process Instruments Inc. Visit us on the web at www.tnp-instruments.com 1767 Central Avenue \* Suite 112 \* Yonkers \* NY \* USA \* 10710 \* Phone: (914)673-0333 Fax: (866) 292-1456



### Industrial Solar Radiation Meters are Ideal for Testing, Monitoring and Optimizing Solar Panels

### TPI 510 Hand Held Solar Irradiance Meter

### **Features**

- **▶** Measure solar radiation (irradiance)
- ▶ Use to find the optimal angle of inclination for installing solar panels
- ▶ Measure light intensity through windows
- ▶ Determine the effectiveness of solar film/window tint
- ▶ Displays results in W/m2 or BTU/(ft2\*h)
- ▶ 0 to 1999 W/m2 (0 to 634 BTU) range
- ▶ Measurable light sources, including all visible light

For more information visit our web site at:

http://www.tnp-instruments.com/tpi510-solar-irradiance-meter.html



### SL-200 Solarimeter Solar Radiation Meter with 30 Days Datalogging

#### **Features**

- ▶ Measure and Spot Check of Solar Power in W/m2
- ▶ Storage capacity 31 days, 44640 saved recording points
- ▶ Instantaneous, Average, Min/Max Values, Hold
- ▶ Calculation of Energetic Exposure in Wh/m2
- ▶ Evaluation of Generated Electric power
- ▶ Optimum Orientation of Solar Panels
- ▶ Solar Irrigation Range: 1W/m2 to 1300 W/m2
- ▶ Energetic Exposure Measuring Range: 1W/m2 to 500 W/m2
- Solar Cell Included
- Solar Cell Spectral Response: from 400 to 1100 nm

For more information visit our web site at:

https://www.tnp-instruments.com/sl200\_solarimeter\_solar\_radiation\_meter.html



### SL-100 Solarimeter Solar Radiation Meter with 3 Days Datalogging

### **Features**

- ▶ Measure and Spot Check of Solar Power in W/m2
- ▶ Instantaneous, Average, Min/Max Values, Hold
- ▶ Calculation of Energetic Exposure in Wh/m2
- ▶ Evaluation of Generated Electric power
- ▶ Optimum Orientation of Solar Panels
- ▶ Solar Irrigation Range: 1W/m2 to 1300 W/m2
- ▶ Energetic Exposure Measuring Range: 1W/m2 to 500 W/m2
- ▶ Solar Cell Included
- ▶ Solar Cell Spectral Response: from 400 to 1100 nm

For more information visit our web site at:

https://www.tnp-instruments.com/sl100\_solarimeter\_solar\_radiation\_meter.html





## Industrial LUX Meters are Ideal for Testing, Monitoring and Optimizing Solar Panels

LX-200 Hand Held Lux Meter Measure Illuminance in Foot Candles or LUX with Datalogging

### **Features**

- ▶ Measuring range: from 0.1 to 200,000lux (from 0,01 to 18,585 fc)
- ▶ Sensing element in silicon photodiode (spectral responsivity in accordance with photonic curve CIE)
- Displaying of instantaneous, maximum and minimum values
- ▶ Evolution of illuminance according to weather conditions
- ▶ Relative measurement to a reference point
- ▶ Includes LLX200 software Operating software for data processing and printing of reports

For more information visit our web site at:

https://www.tnp-instruments.com/lx-200-lux-meter.html



### LX-100 Hand Held Lux Meter Measure Illuminance in Foot Candles or LUX

### **Features**

- ▶ Measuring range: from 0.1 to 150,000 lux (from 0.01 to 13940 fc)
- ▶ Sensing element in silicon photodiode (spectral responsivity in accordance with photonic curve CIE)
- ▶ Pause function to eliminate any unrepresentative illuminance
- ▶ Timed measurement: min., max. and average values
- ▶ Relative measurement to a reference point

For more information visit our web site at:

https://www.tnp-instruments.com/lx-100-lux-meter.html





## Pressure Manometers Calibration Instrumentation

### **TPI 621 Dual Input Differential Manometer**

#### **Features**

- ▶ Dual input with ±120" H2O range
- ▶ 0.001" H2O maximum resolution
- ▶ Seven units of measure (mbar, kPa, PSI, mmHg, inHg, mmH2O, inH2O)
- ▶ Display 5 digit with backlight
- ▶ Smooth Stabilizes display when measuring fluctuating pressures
- ▶ Auto Off: Conserve battery power

### For more information visit our web site at:

https://www.tnp-instruments.com/tpi621-dual-input-differential-manometer.html



### **TPI 623 Dual Input High Resolution Digital Manometer**

#### **Features**

- ▶ 0.001 inH2O/kPa resolution to ±9.999 inH20/kPa input
- ▶ High accuracy ±0.02 inH2O less than 2 inH20; 1% above 2 inH20
- **▶** Temperature compensated
- ▶ Overpressure protection to +/- 50 inH20
- ▶ Trim mode to stabilize fluctuating pulse readings
- ▶ Seven units of measure

### For more information visit our web site at:

https://www.tnp-instruments.com/tpi-623-high-resolution-digital-manometer.html



### **TPI 665 Differential Pressure Manometer**

### **Features**

- ▶ Differential input with ±100 PSI range
- ▶ Differential input with 29 PSI range
- ▶ Seven units of measure (mbar, kPa, PSI, mmHg, inHg, mH2O, inH2O)
- ▶ 4 digit dual line display with backlight

#### For more information visit our web site at:

https://www.tnp-instruments.com/tpi-665-differential-manometer.html



### TPI 665L Differential Pressure Manometer Can Be Used In Non-Corrosive Liquid Applications

### **Features**

- ▶ Can be used in non-corrosive liquid applications
- ▶ Differential input with ±100psi range
- ▶ Differential input with 29 PSI range
- ▶ Seven units of measure (mbar, kPa, PSI, mmHg, inHg, mH2O, inH2O)

### For more information visit our web site at:

https://www.tnp-instruments.com/tpi-665l-differential-manometer.html





## Industrial Test Tools Tachometers, Clamp-On and DMM

TPI 505 Combination Contact/Non-Contact Portable Compact Digital Tachometer

#### **Features**

- Non-contact (photo/optical) and contact RPM and surface speed
- ▶ Wide Measuring Range 0.5 to 30,000 RPM
- ▶ Last measurement, maximum measurement and minimum measurement automatically saved and recalled

For more information visit our web site at:

https://www.tnp-instruments.com/tpi505-photo-contact-tachometer.html



### TPI 505L Combination Contact/Non-Contact Portable Compact Digital Tachometer

### **Features**

- ▶ Non-contact Laser and contact RPM and surface speed
- ▶ Wide Measuring Range 0.5 to 30,000 RPM
- ▶ Mutifunctions : Photo Tach & Contact Tach & Surface Speed
- ▶ Last measurement, maximum measurement and minimum measurement automatically saved and recalled

For more information visit our web site at:

https://www.tnp-instruments.com/tpi505l-photo-contact-tachometer.html



### TPI 183A True RMS Digital Multimeter Industrial 4000 Count True RMS Multimeter

### **Features**

- Large 4000 count Backlit Display with Analog Bargraph
- ▶ True RMS for more accurate measurements
- Auto/manual ranging
- ▶ Duty cycle to measure the amount of time the motor is on
- Low pass filter for noisy environments

For more information visit our web site at:

https://www.tnp-instruments.com/183A\_digital\_multimeter.htmltml



### TPI 296 AC/DC True RMS Digital Clamp Meter Industrial True RMS 700 Amp Clamp-On Meter and DMM

#### **Features**

- ▶ True RMS Provides accurate and dependable readings of non-linear loads.
- ▶ HDR Mode Determines if a signal is clean or distorted.
- ▶ Bar Graph When measuring frequency, bar graph indicates current level.
- ▶ TRIM Mode Smooth out unstable readings.
- ▶ Peak Mode For start-up and inrush currents.
- ▶ Sleep Mode Preserves battery life.

For more information visit our web site at:

https://www.tnp-instruments.com/183A\_digital\_multimeter.htmltml





### General Terms and Conditions

WE GLADLY ACCEPT YOUR OFFER, BUT THIS ACCEPTANCE IS EXPRESSLY MADE CONDITIONAL ON ASSENT TO OUR ADDITIONAL AND DIFFERENT TERMS AND CONDITIONS.

The following are the terms and conditions ("Terms and Conditions") for the sale of products ("Products") by Temperature & Process Instruments, Inc. to Temperature & Process Instruments, Inc.'s customers ("Customers").

- 1. ORDERS. Orders will be initiated by Customer issuing a purchase order to Temperature & Process Instruments, Inc.. Orders must identify the Products, unit quantities, part numbers, descriptions, applicable prices. Orders are subject to Temperature & Process Instruments, Inc.'s acceptance. Temperature & Process Instruments, Inc. reserves the right to limit quantities and to refuse to deal with any person.
- 2. PRICES. Orders are quoted and billed at the prices (in US dollars) in effect at the time of shipment. The web site reflects the latest pricing information available at the time they were posted, all prices are subject to change without notice. Nonstandard Products will be sold at the prices set out in the relevant quotation supplied by Temperature & Process Instruments, Inc.

Prices do not include federal, state and local sale, use, excise and similar taxes that apply to Products, which Customer will also pay at the applicable rate unless an original signed tax exemption certificate is received by Temperature & Process Instruments, Inc.

- 3. TERMS OF PAYMENT. Temperature & Process Instruments, Inc. accepts major credit cards. Credit cards accepted are MasterCard, Visa, American Express and Discover.
- 4. DELIVERY AND TITLE. All shipments by Temperature & Process Instruments, Inc. are FOB point of shipment from Temperature & Process Instruments, Inc.'s facility and the amount of all shipment charges shall be paid to Temperature & Process Instruments, Inc. by Customer in addition to the purchase price of the Products. Selection of the carrier and delivery route will be made by Temperature & Process Instruments, Inc. unless specifically designated by Customer. Temperature & Process Instruments, Inc. will aim to initiate shipment and deliver the Products as close as possible to Customer's requested delivery date(s). Customer acknowledges that shipment and delivery dates provided by Temperature & Process Instruments, Inc. are estimates only and that Temperature & Process Instruments, Inc. will not be liable for failure to achieve such dates. Delivery to a carrier will constitute delivery to Customer, and risk of loss of or damage to the Products will pass to Customer at this point. Title to the Products shall remain with Temperature & Process Instruments, Inc. until payment in full for the Products by Customer
- 5. CANCELLATIONS, RETURNS. Customer may, without charge, cancel an order for standard Products provided the order is scheduled for shipment by Temperature & Process Instruments, Inc. more than 45 days after Temperature & Process Instruments, Inc. receives written notice of cancellation from Customer. Customer may only cancel an order for standard Products scheduled for shipment by Temperature & Process Instruments, Inc. within 45 days after Temperature & Process Instruments, Inc. receives written notice of cancellation if accepted by Temperature & Process Instruments, Inc. in its sole discretion, which acceptance may be subject to Customer accepting a cancellation fee determined by Temperature & Process Instruments, Inc.. Customer may only reschedule an order if accepted by Temperature & Process Instruments, Inc. in its sole discretion. Orders may not be cancelled or rescheduled after delivery by Temperature & Process Instruments, Inc. to the carrier. Customer may not cancel orders for nonstandard Products. Non-standard Products include, without limitation, Products which are special orders, products which do not appear on the web site, products not customarily in stock, value-added products, products to be assembled from kit form, opened software, and products identified as otherwise non-cancelable and non-returnable ("NCNR"). Customer is deemed to have accepted the Products unless written notice of rejection is received by Temperature & Process Instruments, Inc. at time of delivery. Authorization to return Products must be obtained from Temperature & Process Instruments, Inc., which authorization may be granted by Temperature & Process Instruments, Inc. in its sole discretion. If granted, Temperature & Process Instruments, Inc. will issue Customer a return material authorization ("RMA") number. No return of Products will be accepted without an RMA number. Returned Products must be in original shipping cartons and must be complete with all packing materials and in re-sellable condition. Return freight charges must be prepaid by Customer. Temperature & Process Instruments, Inc. will not be responsible for returned Products lost in transit. Product returned due to Customer error may be subject to a restocking fee. All items not eligible for return will be returned to Customer, transportation collect. Non-standard Products may not be returned.
- 6. LIMITED WARRANTY. Temperature & Process Instruments, Inc. warrants to Customer that Products purchased hereunder will conform to the applicable manufacturer's specifications for such Products. If Temperature & Process Instruments, Inc. breaches this warranty, Customer's remedy is limited to (at Temperature & Process Instruments, Inc.'s election) (1) refund of Customer's purchase price for such Products (without interest), (2) repair of such Products, or (3) replacement of such Products; provided that such Products must be returned to Temperature & Process Instruments, Inc., along with acceptable evidence of purchase, within 10 days from date of delivery, transportation charges prepaid. No warranty will apply if the Product has been subject to misuse, static discharge, neglect, accident or modification. Temperature & Process Instruments, Inc. will transfer to Customer all transferable warranties which Temperature & Process Instruments, Inc. receives from the manufacturer of the Products. Details of these warranties can be made available to Customer on request. SAVE AS EXPRESSLY PROVIDED IN THESE TERMS AND CONDITIONS, ALL IMPLIED WARRANTIES, TERMS AND CONDITIONS (WHETHER STATUTORY OR OTHERWISE) ARE EXCLUDED TO THE FULLEST EXTENT PERMITTED BY LAW. IN PARTICULAR, TEMPERATURE & PROCESS INSTRUMENTS, INC. MAKES NO WARRANTY RESPECTING THE MERCHANTABILITY OF THE PRODUCTS OR THEIR SUITABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR USE OR RESPECTING INFRINGEMENT.
- 7. LIMITATION OF LIABILITIES. CUSTOMER SHALL NOT BE ENTITLED TO, AND TEMPERATURE & PROCESS INSTRUMENTS, INC. SHALL NOT BE LIABLE FOR, LOSS OF PROFIT, PROMOTIONAL OR MANUFACTURING EXPENSES, OVERHEADS, BUSINESS INTERRUPTION COSTS, LOSS OF DATA, REMOVAL OR REINSTALLATION COSTS, INJURY TO REPUTATION OR LOSS OF CUSTOMERS, PUNITIVE DAMAGES, IPR INFRINGEMENT, LOSS OF CONTRACTS OR ORDERS OR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE. CUSTOMER'S RECOVERY FROM TEMPERATURE & PROCESS INSTRUMENTS, INC. FOR ANY CLAIM SHALL NOT EXCEED THE PURCHASE PRICE PAID FOR THE AFFECTED PRODUCTS IRRESPECTIVE OF THE NATURE OF THE NATURE OF THE CLAIM WHETHER IN CONTRACT, TORT, WARRANTY, OR OTHERWISE.
- 8. PUBLISHED INFORMATION. Temperature & Process Instruments, Inc. makes every effort to ensure the accuracy of the information published on its web site. However, Temperature & Process Instruments, Inc. makes no representations about the information presented, which is provided "as-is" without warranty of any kind. Product specifications and availability are subject to change without prior notice.
- 9. LIMITATIONS OF USE. PRODUCTS SOLD BY TEMPERATURE & PROCESS INSTRUMENTS, INC. ARE NOT RECOMMENDED OR AUTHORIZED FOR USE IN LIFE SUPPORT, SURGICAL IMPLANTATION, NUCLEAR OR AIRCRAFT APPLICATIONS OR FOR ANY USE OR APPLICATION IN WHICH THE FAILURE OF A SINGLE COMPONENT COULD CAUSE SUBSTANTIAL HARM TO PERSONS OR PROPERTY. Customer agrees that using or selling Products for use in such applications is done at its own risk, and agrees that Temperature & Process Instruments, Inc. and the manufacturer of the Products are not liable for any claim or damage arising from such use. Customer agrees to fully indemnify, defend and hold harmless Temperature & Process Instruments, Inc. and the manufacturer of the Products from and against any and all claims, damages, loss, cost, expense or liability arising out of or in connection with the use or performance of Products in such applications. Use of software will be subject to the terms of any accompanying end user license.

  10. STATEMENTS AND ADVICE. If statements or advice (technical or otherwise, and whether or not provided by Temperature & Process Instruments, Inc.'s technical support) are offered or given to Customer, such statements or advice will be deemed to be given as an accommodation to Customer and without charge and Temperature & Process Instruments, Inc. will have no responsibilities or liabilities whatsoever for the content or use of such statements or advice.

  11. FORCE MAJEURE. Temperature & Process Instruments, Inc. will not be liable for delays in delivery or for failure to perform its obligations due to causes beyond its reasonable control, including, but not limited to, product allocations, material shortages, labor disputes, transportation delays, unforeseen circumstances, acts of God, acts or omissions of other parties, acts or omissions of civil or military authorities, Government priorities, fire, strikes, floods, severe weather conditions, computer interruptions, terrorism, epidemics, quarantine restrictions, riots, or war. Temperature & Process Instrum
- 12. EXPORT CONTROLS. Products purchased are subject to export control laws, restrictions, regulations and orders of the United States. Customer agrees to comply with all applicable export laws, restrictions and regulations of the United States or foreign agencies or authorities, and shall not export, or transfer for the purpose of re-export, any product to any prohibited or embargoed country or to any denied, blocked, or designated person or entity as mentioned in any such United States or foreign law or regulation. Customer represents and warrants that it is not on the Denied Persons, Specially Designated Nationals or Debarred Persons List and is not otherwise prohibited by law from purchasing the products or services hereunder. Customer shall be responsible for obtaining any required license to export, re-export or import.

remaining part thereof without liability by giving notice to Customer.

13. GENERAL. The Terms and Conditions may not be modified or cancelled without Temperature & Process Instruments, Inc.'s written agreement. Any provision hereof which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof in that jurisdiction or affecting the validity or enforceability of such provision in any other jurisdiction. The provisions set out in these Terms and Conditions are for the sole benefit of the parties hereto, and confer no rights, benefits or claims upon any person or entity not a party hereto.