Overview Catalogue

• Humidity – Temperature Series
• Air Velocity Series
• Temperature Series
• Differential Pressure series
• BTU Meter & Ultrasonic flow meter
• CO & CO2 series
• Moisture In Oil
• Thermal Imager (Portable & Online)
• Humidity Calibrator
• Dew-point Meter
• Pressure Transmitter
• Compressed air Counter
• Portable Instruments
• Indicators & controllers
• Infrared Moisture Meter
• RF Moisture Meter
We Listen. We Learn. We Deliver. That's "Photon Instruments"

Photon Instruments Established in 2012. We are involved in sales-service and support activity for portable and process instruments (online). We represent various Multinational Brands including some well known National Brand. Apart from Sales activity we are also engaged into arranging B2B meetings – Conferences- Trade Shows – Seminars etc. Our Associate Partner Bright International Conferences & Events is a well know name in market. To know more about coming events pls refer this website http://www.brightice.org/

Long Term Vision
To become the most Respected instruments & Service provider for Customer.
To use Knowledge & Commitment as the only differentiator with competitor.
To be a part of knowledge sharing resource partner.
Brands We Represent

**Rotronic, Switzerland**: Specialised product on Rh-Temp (transducer, Datalogger, Transmitters, handheld indicator, Portable Humidity Calibrator)

**E+E – Austria**: Thermo-Hygrometer, Air velocity TX, CO2 TX, Dewpoint Tx, Moisture in Oil Tx and handheld, Wireless monitoring (RH-Temp)

**Sensocom, USA**: Differential Pressure switches, Gauges & Transmitters, Air Capture hood, Air flow Station,

**Kimo, France**: Air Velocity TX, Diff Pressure TX, Noise and Sound Level meters, Solarimeters, Anemometers, Handheld Manometers, Tacho meters, IR Guns,

**Process Sensors, USA**: Non contact Moisture Sensors for Tobacco/Food/Cement industry etc and IR Temp Sensors for general industries. Online thermal imaging Camera,

**Sense Air, Sweden**: CO2 & CO transmitters and hand held devices

**Senix, UK**: Ultrasonic Level Transmitters.

**Measurement Specialities, USA**: Pressure Transmitters

**American Sensor Technologies – USA**: Pressure Transmitters, Digital Pressure Gauges & Differential Transmitters

**Fourier Systems, Israel**: Datalogger (humidity-temperature, temperature), Wireless datalogger, 8 channel Handheld logger (universal input)

**Shenitech USA**: Portable ultrasonic Flow-meter, BTU meter, Clamp on & insertion type flow meter

**ULIR Vision, China**: Thermal Imager Series

**ASHE Controls, India**: indicator, Scanner, Data logger, Transmitter, Totalizer, Controller, Isolator etc...
Humidity – Temperature series

We have product like sensor, data-logger, Transmitter, Ex-proof Transmitter hand held thermo-hygrometer and table-top thermo-hygrometer also. To give a spicy test – wireless monitoring and humidity-temperature – Differential (3-in-1) transmitter adds its own definition.

Online Wireless Monitoring – Model DATANET

- ZigBee wireless, 2.4 GHz system with E-mail/sms/hooter alarm facility
- Standard and 21 CFR software for Critical application & pharma requirement
- 4 external input (4 to 20 mA, 0 to 1 V, Pulse counter, PT100 2-wires, NTC, Thermocouple J, K and T, Dry Contact)
- 65000 units can be connected in the network
- LCD display in the units for local indication

Analysis Features
Dew point analysis, FO Pasteurization, histogram, MKT, statistics with export to Excel and CSV formats

Sensor View
Real-time sensor-specific data view with alarm status,
Real-time data in multiple displays (Graph, Table, Statistics)

% RH-Temp-DP (3 in one)
Very high accurate reading measurement.
Option of RS485 communication to reduce the cost of cabling
Set point and alarm on display possible.
Bright LED/LCD display available with different Differential Pressure range.
**4 Ch data logger with 4 audio alarms with email/SMS notification to any location - Model – DAQLINK**

- 16-bit data logging resolution
- Rechargeable battery lasting up to 6 months
- Intuitive keypad with Run/Pause logging option
- Immediate response alarm alerts, including audible alarm buzzer
- Internal sensors & 4 External Inputs: 4 to 20 mA, 0 to 50 mV, 0 to 1 V, Temperature PT-100 2-wire, Thermocouple J, K, T, Frequency, Pulse Counter, Contact
- Real-time data streaming to PC or large cyclic memory storage
- Onsite monitoring via two row LCD and periodic USB data download
- External output s - 12VDC for tx and alarm device.

**USB Logger – MODEL – MICROLITE**

- High resolution 16-bit (0.1 °C) and high accuracy of 0.3 °C
- High functionality, multi-trip plug-in logging
- Large sample memory: Optional 8,000 or 16,000 samples
- P68 Standards: Dustproof and waterproof tested
- Fast sampling rate of once per second
- LCD numeric decimal point display - showing min/max and current values
- Range -40 to 80 °C
- Start sampling options: Magnet key, automatic and timer
- Real-time, accurate historical data indicator
- Fast automatic data download to graph, table, export to Excel
- Long battery life and easily replaceable industry standard
- Built-in real-time clock and calendar
- Supports USB 2.0 interface enabling fast track communication

**RH-Temp Data logger - Model -HL 20 D , Accuracy ± 0.8 %rh / 0.2 Deg C**

- 20000 data point memory with date & time stamps
- Programmable alarm limits / recording intervals
- Psychrometric calculations of dew and frost point values available
- FDA 21 CFR Part 11 / GAMP 4 compliant
- USB interface
- Long battery life
- With /without display option

**1-2 channel indicator, for RH-Temp Rh-temp Controller 8 ch or 16 channel scanner and data logger series.**

- Direct print out option
- Various software options
- Logging interval 1 to 9999 sec & Printing Interval 5 to 9999 sec
**Humidity-Temperature Data Logger**

- Memory for 32700 readings (16350 temperature and 16350 humidity readings)
- Dew point indication via Windows Software
- Selectable measuring cycle: 2s, 5s, 10s, 30s, 1m, 5m, 10m, 30m, 1hr, 2hr, 3hr, 6hr, 12hr, 24hr
- Status Indication via Red/Yellow LED and Green LED
- USB Interface for Set-up and Data Download
- User-Programmable Alarm Thresholds for Relative Humidity and Temperature
- Analysis software used to view graph for logging data
- Multi mode to start logging
- Long battery life

**8 Ch portable data logger**

- Large data storage 512 KB RAM
- High-end data acquisition hand-held
- Fast communication channels: USB mobile solution
- Multiple logging storage of up to 100 sampling sessions
- 8 channels each capable of measuring seven popular parameters
- Scales readings into meaningful engineering units e.g. bar, ppm
- Setup on every port makes it viable for all industries
- Built-in clock and calendar keeps track of time and date for each data recording
- Stand-alone operation: Display and keyboard for field programming and analysis (graph/table)
- On screen text editing to annotate collected data
- Rechargeable 7.2V battery with over 500 charging cycles
- Value for money – less than $130 per channel
- High sampling rate – up to 4,000 samples/second

8 year legacy of customer satisfaction, reliability and application experience

Up to 3 parameters: Temp, RH and external sensors

Accurate, portable 8-bit (MicroLog) and 10-bit (MicroLogPRO) data loggers

All data viewing, export, and printing is done via two function keys

View up to 30 days min/max history on LCD screen

Water and dust proof (IP65/NEMA 4)

Infrared communication to portable thermal printer

Records months of data - up to 16,000 or 54,000 samples

External sensors include: Temperature, pH, 4-20 mA, 0-10 V and more

4-20 mA and 0-10 V inputs allow for connection with any industry standard sensors

Sensor values are displayed in their own units on the LCD

MicroLab analysis software enabling powerful monitoring and data analysis capability
**IHVAC TX – available in wall/space/duct version**

Measures relative humidity, temperature and
dew/frost point

- Range of application -40…60°C; -10…60°C with
  LCD 0…100%rh
- Automatic sensor test & drift compensation
- Saves up to 2,000 measurement pairs
- Use as simulator for system validation
- UART service interface
- Accuracy: ±2%rh / ±0.3k

**OEM High Temperature TX**

- Accuracy - ±1 %rh, & ±0.2 °
- Temp range – -100…200°C

- Available as 2-wire (XB20) or 3/4-wire
  (XB3x)
- Two freely scalable analog outputs
- Calculates dew-point/frost point
- Configurable via HW4 software.
- Pt100 RTD direct 4-wire connection
- Sensor auto-diagnostics and automatic correction

**Industrial TX – available in wall/duct version**

- Accuracy – ±0.8 %rh / 0.1 Deg C
- Available with MODBUS solution
- Other than %RH-TEMP solution Optional output –
  1. enthalpy (H) in kJ/kg
  2. dew point
  3. wet bulb temperature (Tw) in °C
  4. specific humidity (Q) in g/kg
  5. absolute humidity (Dv) in g/m³
  6. mixing ratio (R) in g/kg

**Online Dew-point TX**

- Measuring range -80...60°C Td
- With or without display option
- Remote Transmitter option
- Pressure range - 0...20bar
- Accuracy ≤ ±2°C Td (≤ ± 3.6°F)
- Output as dew-point or ppm
- Serial interface for configuration
  RS232C
- Working temperature range- -40...70°C
- Response time t90 - 80 Sec
- special auto calibration procedure
- ensures high accuracy always

**Hazardous areas (%RH-Temp TX).**

- Complete supply of Transmitter + Zenor barrier +
  inter connecting cable and sensor.
- Intrinsically safe probe ATEX 100
- Power supply via HygroFlex transmitter (15VDC),
  or from 2 wire 4…20mA loop (RH or °C only)
- Electronics operating range -40...40°C.
- Temperature measurement range -50...200°C (at
  probe)
- Accuracy : ±1 %rh / +0.3k
**Hand Held Thermo-Hygrometer - HP 21**
- Fixed probe
- Application range: 0…100 %rh / -10…60 °C
- Measures humidity, temperature and calculates dew/frost point
- Accuracy: ±1 %rh / ±0.2 K
- Very fast response time
- Save – upto 2000 memory (software required)

**Hand Held Thermo-Hygrometer - HP 22**
- Interchangeable probe for multi purpose
- Accuracy: ± 0.8 %RH, 0.1 K (standard)
  ± 0.5 %RH, 0.1 K (optional)
- Measure %rH – temp & all psychometric calculations
- Having option of connecting master PT 100 probe
- Save – upto 2000 memory (software required)

**Hand Held Thermo-Hygrometer - HP 23**
- Data recording function up to 16000 data records (with date, time, batch no.)
- Accuracy: ± 0.8 %RH, 0.1 K (standard)
  ± 0.5 %RH, 0.1 K (optional)
- Two probe connections for all ROTRONIC HC2 probes or analog third-party probes
- Adjustment of transmitters HF3, HF4, HF5, HF7, HF8, via service cable
- 2 Analogue Inputs for 0…1 VDC or 0(4)...20 mA
- 9 V Battery (Rechargeable Option)

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**Model HP 22/23 with special Probe HC2-IE102 becomes portable dew-point meter**
Upto 100 bar pressure
Accuracy - ±0.8 %RH, ±0.1 K,

**Model HP 22/23 with special Probe HC2-IC102 is suitable for very high temperature - up to 200 Deg C**
Accuracy - ±0.8 %RH, ±0.1 K,

**Model HP 22/23 with Probe HC2-P05 is useful for bulk material (dust free - bricks, concrete etc)**

**Model HP 22/23 with Probe HC2-HP28 becomes portable bulk material moisture meter like flour, sand, sugar etc**
we have product like – Velocity Transmitter, portable thermo anemometer, Manometer with pitot-tube, Vane type anemometer, Velocity Hood etc.

**Air velocity TX**
- Range – 0 – 1 m/s to 0-40m/s
- Temperature upto 120 Deg C
- Rugged design.
- Available with various length
- Different models for various harsh application
- with display and without display option
- Remote TX option available
- available with current or voltage output

**Portable Vane Anemometer**
- Vane size - 14 mm / 70mm / 100 mm
- Display - 2 lines, LCD with backlit
- Power supply -1 alcaline battery 9V 6LR61
- Air velocity and ambient temperature
  - Range - 0.25 to 35 m/s / -20 to +80°C
  - Velocity Accuracy - ±3% of reading ±0.05m/s
- Temperature
  - ±0.4% of reading ±0.3°C

**Air velocity & DP TX**
- Simultaneous Display and Output of Air Velocity, Temperature and Pressure
- 316 SS Armored Sensing Element and Probe
- Adjustable Range from 0-200 fpm to 0-4000 fpm
- Displays Flow in CFM or M3/h and Totalizes Media: Air and compatible, non combustible gases
- Velocity: (0-1 m/s) to (0-20 m/s)
- Pressure: (0-25 Pa) to (0-3 kPa)
- Temp: (-10 to 50° C) or (-20 to 125° C)
- Accuracy: 3% F.S. (opt- 1% F.S.)
- Pressure: 1% F.S.
- Output: Independent 4-20 mA output for air velocity, temperature, and optional pressure

**Air Capture hood**
- Light Weight with 100 Reading Memory
- Large LCD Display / • Accuracy +/- 3%
- Including Cable & Software for Data Download
- Measures Flow, Velocity and Temperature
- Supply or Exhaust Measurement

**Thermal (HOT WIRE) Anemometer**
- Hotwire probe Ø 8mm, length 300 mm
- Display - 2 lines, LCD with backlit
- Power supply -1 alcaline battery 9V 6LR61
- Air velocity and ambient temperature
  - Range - 0.15 to 30 m/s / -20 to +80°C
  - Velocity Accuracy - ±1% of RD ±0.3m/s
- Temperature - ±0.4% of reading ±0.3°C
- Selection of units - m/s, fpm, Km/h
- HOLD / Minimum and maximum values
- Automatic average / Airflow calculation - m3/h, cfm, l/s, m3/h
we have products like – Basic sensor, Temperature Indicator Data-logger, Transmitter, Ex-proof Transmitter, Handheld thermometer meter, IR Gun,

**Battery Operated DIGITAL TEMPERATURE INDICATOR**
- For: Refrigerator, Freezer, Cold Room, Super Market, Show Case, Food Industry.
- Range: -40°C to +70°C
- Size: 48mm(W) x 28mm(H) x 15mm(D)

**Handheld temperature thermometer**
- Selection of units / Adjustable alarms HOLD / Minimum and maximum value
- Display: 2 lines, LCD with Backlit
- Probe: PT 100 / NTC/ TC (K/J/T/S)
- Range: -200 Deg C to 1760 Deg C
- Accuracy – very high probe specific
- Available with food-grade probe & IP67
- Power supply: 1 alkaline battery 9V 6LR61

**Temp. Indicator**
- Single channel / multi channel
- Resolution 0.1 DegC
- Option - loop powered / battery powered
- Option for relay output
- Ex-proof model available

**USB Datalogger – Temperature**
- Direct USB connection
- Basic software is available in net
- Provides market value and F0 value
- Memory up to 32,000
- Very high accuracy
- Model available with external temp sensor

**Non Contact IR Gun**
- Ranges up to 2200 Deg
- High Distance to spot ratio
- Accuracy – +/-1.5 Deg C
- Various unit for different temperature range

**Temperature Scanner – 4/8/16 Channel & Data-logger**
- Direct Print-out option
- 2+4 digit seven-segment, 0.5” LED display
- 4 Relay Output
- Panel Mount
**Differential Pressure Series**

**Analogue Differential Pressure Gauge**
Mounts in Industry Standard Holes
- Accuracy 2%
- Die Cast Aluminum Housing (S2000)
- Different pressure range to suit most of the application

**Digital Differential Pressure Gauge**
Mounts in Industry Standard Holes
- Universal Power 16 – 265 VAC / VDC
- Accuracy 1% (better available)
- Large 0.5" LED Display
- Weatherproof Face
- 5 selectable engineering units
- Optional 4-20 mA output

**Digital Differential Pressure Control**
Mounts in Industry Standard Holes
- 1.6" Panel Depth
- Universal Power 16 – 265 VAC / VDC
- (2) 8 Amp SPDT Relays
- Accuracy 1% (better available)
- LCD Program Display
- Large 0.5" LED Display
- Weatherproof Face
- Measures Flow & Velocity
- 15 selectable Units
- Optional Link™
- Optional 4-20 mA output

**Differential Pressure Transmitter**
Compact Design
- 0.25% Accuracy
- Compact Design
- LED Power Indication
- 2-Wire Design
- 4-20 mA output

**Differential Pressure Transmitter**
- Measuring ranges from 0/+100 Pa to -1000/+2000 mbar
- Configurable intermediary and central zero ranges
- 0-10 V or 4-20 mA output, active sensor, power supply 24 Vac/Vdc (3-4 wires) or 4-20 mA output, passive loop, power supply 18 to 30 Vdc (2 wires)
- With display option

**Portable Manometer**
- Range - from 0 to ±1000 Pa & upto 0 to ±2000 mbar
- Selection of units
- Manual automatic calibration
- HOLD function
- Minimum and maximum values
Portable Ultrasonic Flow meter
- High accuracy, ±1% of velocity.
- Clamp-on installation, easy and fast.
- Bi-directional, wide range, [-52ft/s ~ 52ft/s (-16m/s ~ 16m/s)]
- Wide pipe size range, DN25 ~ DN6,000 mm
- Suitable for all commonly used pipe materials and liquids.
- Rechargeable battery for 10 hours of operation.
- Built-in data logger.
- Totalizer for net, positive and negative flow.
- Optional StufManager TM PC software for data download and real-time data display.
- Signal quality tracking and self-adjusting capabilities

BTU Meter
clamp on sizes – 0.5” to 240 “
- Built-in totalizer, batch controllers and etc.
- Isolated RS-485 interface.
- Supports the MODBUS
- Abundant input/output, such as 4-20mA output,
- relay output, pulse output, alarm output, etc.

Online Ultrasonic Flow meter
- High accuracy, better than ±1%
- Bi-directional
- Wide measurement range, ±16m/s
- Built-in flow totalizes
- Suitable for most pure liquids and liquids with minor particles
- Compatible with clamp-on, insert ion and flow-cell transducers
- Pipe size selectable from DN10 to DN5000mm

Energy rate and total consumption measurement
Battery supply for 6 or more years
- Nominal pressure up to 1.6MPa
- Pulse / M-Bus / RS485 for remote readout
- Optional BACnet or M-Bus concentrator
- Optional AMR system solution, including meter reading software and utility billing software
We have product like CO, CO2 Transmitter and Portable instruments

**CO TX**
- Electrochemical sensor element
- 4-20 mA or 2-10 Vdc output
- Wide supply voltage range (18-28 Vdc)
- Overload and short circuit protected
- Reverse polarity protected
- Continuous monitoring
- Low zero point drift
- Positioning stable
- Long life sensor
- Modular plug-in technology

**CO2 – Temp – Instrument (NDIR) technology**
- Data output RS232
- Displays the CO2, Temp with Min, Max and average values
- Internal automatic self-diagnostic function
- Audible alarm
- Range - 0-2000 ppm
- Extended 2001-9999 ppm

**CO2 –% RH-Temp – Instrument (NDIR) technology**
- Data output RS232
- Displays the CO2, Temp, %RH with Min, Max and average values
- Internal automatic self-diagnostic function
- Audible alarm
- CO2 - Range - 0-3000 ppm
- Extended 3001-9999 ppm
Other than the mentioned one we do have products like Lux meter, Sound level Meter, Digital Pressure Gauges, Portable Dew-point meter, Online Dew Point Meter.

**Lux meter**

Range: from 0,1 to 150,000 Lux
from 0.01 to 13940 fc
High Accurate model

**Digital Pressure gauges**

Pressure Range: -14.7 to 10000 psi
Measurement Units: PSI, BAR, kg/cm2
Accuracy: ±0.5% BFSL (Includes Non-linearity, Hysteresis and Non-repeatability)
Power 9 Volt Alkaline Battery
Automatic Power Off 5 minutes
Battery Life: about 3.5 years
Resolution: 0.007 bar (or 0.1 PSI)

**Sound level meter**

Measuring range: 30-130 dB
Time weighting: Slow, fast
Standards: IEC 61672-1 Class 2 & IEC 61651 Class 2 / IEC 60804 Class 2
Backlighted Display: graphic 128x64 pixels

**Compress Air Counter**

15mm to 65mm
High accuracy ± 2.5% of reading
Exceptional reproducibility
Quick sensor exchange at line pressure
Broad working range of 1:400
Very service friendly

**Compact Transmitter / Switch for Moisture Content in Oil**

Measuring range: 0...1 aw
Measurement of water content in ppm
Medium temperature: -40...80°C
Two relay outputs for aw/ppm/T

**Multifunctional Hand-Held**

Relative humidity RH
Temperature T
Dew point temperature Td
Absolute humidity dv
Mixing ratio r
Air velocity v
Water activity aw
Water content in oil x
**THERMAL IMAGER**

- Temperature range upto 1200 Deg C
- Detector 160X120 or 384 X 284
- Thermal sensitivity (NETD) - <65mk at 30°C
- Electronic zoom – 2X
- Measurement spot - Up to 4 moveable spots
- Measurement area - Up to 3 moveable boxes, automatically capture maximum minimum, average temperature
- High temperature alarm - Voice, color
- Voice annotation - 40s voice record, stored with the image via built-in microphone.
- Laser Pointer - Class 2, 1mW/635nm Red

**PAPER INDUSTRY – PORTABLE METER**

Sword probe for equilibrium relative humidity & temperature
Adjustable Probe position
Large, clear display parameters
Easy operation
Adjustment by potentiometer
Application range 0…100 %rh / -10…60°C
Battery charge monitor (low battery indicator)
Hold function
Auto power off
Integrated, hinged aluminum sword probe 9 V battery
Adjusted at 23 C and 35.80%rh
Accuracy :±1.5 %rh/±0.3k

**Humidity-Temperature sensor for Handheld Instruments, Data Loggers, Transmitters and OEM Systems**

- Saves up to 2000 Measurement Pairs
- Measures Humidity, Temperature and Calculates Dew / Frost Point
- Range of Application: 0…100%rh / -50…100°C
- UART Interface and freely scalable analog signals 0…1 V
- Standard Scaling: 0…1 V = 0…100%rh / -40…60°C
- Probe with Adjustment Profile “Standard” Factory Adjustment Certificate

**Range**

- 0 to 1000 bar
- Heavy Industrial CE Approval
- 100 V/m EMI Protection
- Reverse Polarity Protection
- Extended Temperature Range
- 1% Total Error Band
- Compact Outline
- -40°C to +125°C Operating Temperature Range
- Advanced HVAC Systems
- Refrigeration Systems
- Industrial Process Control
- Automotive Test Stands
- Pumps and Compressors
- Hydraulic/Pneumatic Systems

**Range**

- 0 to 700 bar
- Gauge /Absolute and sealed option
- Heavy Industrial CE Approval
- 100 V/m EMI Protection
- 0.75% Total Error Band
- -40°C to +125°C Operating Temperature Range
**Diff. Pressure transducer – upto 2000psi**
- Unit in PSI / BAR & KG/Cm²
- Power supply 10-28 VDC or 5VDC
- Output option - 1-5V, 0-5V 1-6V, 1-10V, 0-10V 0.5-4.5V Ratiometric 4-20mA (three wire)
- Heavy Industrial CE Approval
- 100 V/m EMI Protection
- 0.75% Total Error Band
- Temp Range - -40°C to +125°C

**Submersible level sensors**
- High Strength Stainless Steel Construction
- No Internal O-rings
- Wide Operating Temperature Range
- Ranges up to 100 PSI
- Low Static and Thermal Errors

**Pressure Transmitter – Flush type**
- All Stainless Steel Construction
- Wide Operating Temperature Range
- Ranges from 0-1BARA to 0-10 BARG
- Low Static and Thermal Errors
- Rugged Design Survives Harsh Environments
- Compatible with Wide Range of Liquids
- EMI/RFI Protection

**IR Sensor range: -40°C to 1030°C**
- Response time: 25 ms
- Optical Resolution 15:1
- Green LED alarm indication, aiming support, self-diagnostic
- Ambient temperature rating up to 80°C without cooling
- Scalable analog output: 0-10 V or 0-5 V + alarm output or digital output
- USB programming interface, direct serial 9.6 kBaud interface
- Wide power range 5-7, 12-28 V DC

**Process Sensors** offers a comprehensive range of imaging and line camera systems to continuously monitor and control industrial processes. These unique products are also applied to laboratory and R&D applications covering an overall temperature span from -20°C to 2500°C

**Thermal Imager with USB 2.0 interface for online applications**
Digital Indicators & Controllers
Digital Indication – LCD and LED in various dimensions & executions
Numeric and Alphanumeric Indicators - Loop Powered Indicators - Bar-Graph Indicators - Battery powered Indicators
Multiple Relay control outputs - Various Control actions – like On-Off, PID, Time delay, etc.

Signal Isolators, Transducers & Transmitters
The TX series of Signal Isolators and Transducers comprise a wide range of DC and AC Analog signal converters to optically isolated signals with excellent linearity and load driving capability.

The Transducers accept all standard DC or AC signals like Voltage, Current, Resistance, Frequency, Active Power, etc. besides standard temperature sensors like RTD Pt-100, various Thermocouples, etc. Output signals include 4 to 20 mA DC, DC Voltage or Frequency outputs.

The instruments provide Optical and Galvanic Isolation and operate on AC or DC Power Supply, as required. The Transducers are available in standard DIN-Rail mount execution. Options include Digital Indication, Control Relay outputs, higher load driving capability, Multiple analog outputs, weather-proof/flame-proof/panel mount options, etc.

Other products -
Temperature Scanner
Power Supply Units
Signal Isolators,
Blind Controllers
Temperature & Viscosity Controllers
Power Switching Units
Temperature Sensors
Explosion-proof instruments
Mobile Storage System Controller
Stream Selector

Flow Totalizers :
Humidity & Temperature Controllers
Transducers
Earthing Relays
Digital Indicators & Controllers
Fuse Failure Relay
Rack Mounting equipments
Membrane Keyboards
Signal Simulators
GPS based Timer
The MCT 360 NIR Transmitter is a multiple constituent sensor. It can measure three components simultaneously. For example, it can monitor moisture, coat weight, thickness, etc. from the same transmitter, continuously.

**Typical constituents includes:**

**Wood Products:**  
- Particle board  
- Fiberboard  
- Hardboard  
- Hog Fuel  
- Medium Density Fiberboard  
- Oriented Strand  

**Food Products:**  
- Snack Foods  
- Pet Foods  
- Coffee  
- Starches  
- Cereal  
- Soy Bean & Corn Meals  
- Milk powders  
- Cookies & Crackers  
- Chemicals & Minerals:  
  - Crumb Rubber  
  - PVC Powders  
  - Ceramics  
  - Fertilizers  
  - PVB Films  
  - Plastic Chips  
  - Detergents  
  - Soaps  
  - Ores  

**Tobacco Products:**  
- Whole Leaf  
- Lamina Strips  
- Stems  
- Cut  
- Reconstituted  
- Expanded  
- Chewing Tobacco  
- Paper Converting:  
  - Moisture & Coat weights  
  - Re-moisturizing  
  - Hot Melts  
  - Extruded Plastics  
  - Pressure Sensitive Adhesives  
  - Carbonless Coatings

The MCT 360-WP uses a well proven algorithm which works on a wide range of wood varieties and forms. You choose the mode of operation, stand-alone or networked, but you’re never locked in because the network interface module can be fitted retrospectively.

**Typical applications include:**  
- Oriented Strand Board  
- Particle Board Fiberboard  
- Wood-Based Panelboard  
- Sawdust  
- Wood Pellets  
- Hog Fuels

The MCT 360-T Tobacco Moisture Transmitter is an on-line sensor ‘dedicated’ to measuring moisture in all forms of tobacco. It measures moisture… the most critical variable in tobacco processing … providing the world’s most accurate, reliable and stable moisture measurement for the tobacco industry.

It can also be configured to measure product temperature. Delivered pre-calibrated and with a comprehensive 2-year warranty, the MCT360-T is simple to install and may be used at any stage of tobacco processing, with all types of tobacco applications, including:

- Whole Leaf  
- Whole Stems  
- Cut Stems  
- Lamina Strips  
- Lamina  
- Reconstituted  
- CRS  
- Expanded  
- Cigar Filler  
- Chewing  
- Pipe Tobacco  
- Cased Burley  
- DIET  
- Snuff
MCT 330HD – Heavy Duty Multiple Constituent Gauge

Built for difficult processing environments the MCT 330HD NIR Gauge is comprised of a sensor and operator interface combination. Its fundamental function is to provide a reliable and robust measurement in challenging environments. The MCT 330HD is designed for durability: enclosed in stainless steel it is ideal to meet the demands of a difficult processing environment.

Features
- Resistant to High Temperatures
- Heavy Duty Stainless Steel Enclosure
- Sealed for Wash Down Environments
- Reliable, Continuous Moisture Measurement

MCT 330-SF – Stainless Steel Food Moisture Gauge

Designed specifically for the Food Industry the MCT 330SF NIR Gauge is comprised of a sensor and food grade operator interface. Its fundamental function is to provide a reliable and robust measurement in food processing environments.

Application - measures three constituents: moisture, oil and product temperatures.

MCT 660 Bench Top Infrared Tester

The MCT 660 NIR Bench Top Tester is used for a wide range of measurements in manufacturing environments. It provides precise measurements of moisture, oils, resins and other constituents, in virtually all types of powders, flakes and leaves.

Application - Wood Products
- Food Products
- Tobacco Products
- Chemicals and Minerals

GUARDIAN Web Profile Scanning Frame System

The Guardian Scanning Frame System is comprised of three components.
- MCT-360 NIR Transmitter
- Automated Scanning Frame
- PC with Automated Guardian Profile Software

The MCT 360 NIR sensor is mounted on the scanner and is programmed to move continuously across the web. Both the scanner and the MCT 360 communicate directly with the Guardian Profile Software.

Application : Moisture • Coat Weight • Thickness
RFM 100BT Radio Frequency Moisture Tester

The RFM - 1000BT is a simple and reliable Radio Frequency Bench Top Moisture Tester. The tester generates a radio frequency fringe field at less then 10MHz. This field penetrates a sample chamber that holds the product being measured for moisture content. RFM - 1000BT conducts non destructive testing and is unaffected by sample color.

**Application**
- **Food**: Peanuts, Pecans, Cranberries, Whole Coffee Beans, Powders
- **Agriculture**: Whole Corn, Seeds, Wheat, Rice, Grains
- **Minerals**: Sand, Recycled Sand

HHRF  Handheld Radio Frequency Moisture Gauge

The HHRF is a portable RF Moisture Guage. It is light-weight and easy to manuever and operate. Percentage moisture appears on a bright, easily visible display.

**Features**:
- Auto Power Down
- Light-weight, Ergonomic Design
- Convenient Standardization
- 10 User Programmable Product Codes

RFM  Radio Frequency Moisture Sensor

The RFM - 1000 is an RF Moisture Sensor made up of an electrode, an oscillator and digital circuitry. The electrode can be of different lengths up to 48”. The RF - 1000 is not affected by product color changes.

**Typical applications include**:
- **Board Manufacture**: Gypsum Board, Veneer, Plywood, Particle Board, Oriented Strand Board
- **Food Products**: Human Cereals, Coffee Beans, Animal Feeds, Grains, Nuts, Caramel
- **Textiles**: Rugs, Felts, Wovens
- **Papers**: Cardboard, Laminates, Corrugated Boxes
**Photon Instruments** in association with Bright International Conferences & Events Organization committee.

We invite all the Academicians, Industrialists across the world to attend "BIOFEST" (International Conference and Exhibition on Life sciences) which will be held during **12-13, December, 2012** at Asia's best Convention center Awardee-Leonia International Centre for Exhibitions & Conventions, Hyderabad, India. For more detail pls [http://www.brightice.org](http://www.brightice.org)

**Bright International Conferences & Events** successfully organizes World Congress on Biotechnology-2012 at Hyderabad with its International advisory board and renowned speakers across the world reputed Universities and Industries. Now it is officially welcomes all the participants across the world for upcoming BIOFEST-2012.

**Event highlighting the following Topics:**

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**Biofest2012**

[12-13 December 2012, Leonia International Convention Centre, Hyderabad, India]
Andhra Pradesh

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Contact us for further details.

Soon we are coming with calibration facility at Hyderabad