



PT MULTITEK MITRA SEJATI

INDUSTRIAL SUPPLY COMPANY



INSTRUMENT

VALVE

MECHANICAL

Introduction

PT. Multitek Mitra Sejati is an industrial supply company incorporated on November 18, 2011 in Jakarta. We are authorized Agent / Distributors of several reputable product brands, serving Oil & Gas processing, Refineries, Petrochemical, Chemical, Power Plant, Pulp & Paper, Food & Beverages, Water & Waste Water, Pharmaceuticals, Marine, and General Industries.

We have well trained sales engineer that can help our customer to select the suitable product for their application, provide commissioning and installation assistant, Calibration and troubleshooting the products.

Our business philosophy is supply quality product at competitive price and provides service & support beyond to customer expectations.

We are committed to achieve the best possible experience for our customers.

Products

With Support from our principals, we can supply complete range products for:

1. Level Instrument:

- Magnetrol : Level Switch (Electric & Pneumatic), Level Transmitter / Controller. Using a range of technologies – Float, Displacer, Ultrasonic, Guided Wave Radar, Radar, Thermal Dispersion, Multiphase Level Detector
- Orion : Magnetic Level Indicator and Transmitter (Magnetostrictive, Reed Chain, Guided Wave Radar).
- Drexelbrook : RF Capacitance Switch & Transmitter, Water Cut Monitor. Ultrasonic Level Transmitter,
- Quest -Tec : Level Gage Glass for process and steam boiler.
- L&J : Tank Gauging, Servo Gauge.

2. Flow Instrument:

- Magnetrol : Flow switch, Mass Flow Transmitter for Gas.
- Kurz : Mass Gas Flow Meters.
- Erdco : Rotameter, Flow Indicating Meter w/ Switch or Transmitter.
- Max Muller : Sight Glass Flow Indicator.
- Flow Master : Orifice Plate and Flanged, Senior Orifice (Dual Chamber), Single Chamber Orifice, Venturi Tube, Wedge Meters, Flow-Cone, Pitot Tube, Seal Pot / Condensate Pot
- Lauris : Flare Gas Ultrasonic Flow Meter.
- Petrol : Positive Displacement Flow Meter.
- Hoffer : Liquid & Gas Turbine Flow Meters, Electromagnetic Flow Meter,
- Foxboro : Vortex Flow Meter
- Air Monitor : Air Flow Measurement System (CAMS, CEMS)

3. Pressure Instrument:

- Autrol : Pressure Transmitter, D/P Transmitter.
- UE : Pressure Switch Electric
- Schuh : Pressure Gauge and Accessories.
- Ruelco : Pressure Switch Pneumatic & Electric.
- Foxboro : Pressure Transmitter, D/P Transmitter

4. Temperature Instrument:

- Autrol : Temperature Transmitter.
- UE : Temperature Switch.
- Schuh : Temperature Gauge and Accessories.
- Foxboro : Temperature Transmitter

5. Safety Product & Pressure Relief:

- Pratt : Safety Showers & Eye Washes.
- BS&B : Rupture Disc ,Explosion Vent .
- Sand & Jurs : Pressure and Vacuum Relief Valve, Emergency Vent.

6. Digital Display & Controller:

- Precision Digital : Digital Panel Meters, Annunciators & Scanners, Field Mount Indicators, Temperature Controller, Multi Channel Controller.
- Foxboro : Pneumatic / Electric Controller. Recorder

7. Tristar Technologies:

- High Efficiency Gas-Liquid Vane Separator
- Three Phase Separator
- High Efficiency Multi Cyclone Gas/Liquid/Solid Separator
- High Efficiency Filter Separator

8. Valves:

A full range of valves – Globe, Butterfly, Gate, Ball Check, Needle Valve and Solenoid Valves.

9. Control Valve:

A full range of Control Valve – Globe, Rotary Disc, Butterfly, Gate and Ball.

10. Strainers:

General Y – Type and Basket strainers.

11. Engineering Package:

- Air Compressors and Dryers Systems,
- Nitrogen Generator System,
- Chemical Injection and Injection Rate Control Systems.
- Fuel Gas Conditioning Systems.
- Portable / Emergency Diesel Generators.
- CO2 Removal Systems.

TDR



Genesis™

Model ED1 & ED2 Multiphase Detector

Description: 24 VDC multiphase detector with up to four (4) 4–20mA outputs for convenient control of top level, top of emulsion, water level, and sediment.

Measurement Principle:
Time Domain Reflectometry (TDR)

Applications:

All interface measurement and control applications, including separators and desalters, containing emulsion layers.

Features:

- Explosion Proof and Non-Incendive approvals
- Concurrent top-down and bottom-up signal generation
- Level measurement not affected by changing media characteristics.
- 4-button keypad and graphic LCD display allow for convenient viewing of configuration parameters and echo curves
- Proactive diagnostics
- Probe designs up to +200 °C/70 bar (+400 °F/1000 psi)
- No moving parts

Options:

Main electronics can be remote-mounted up to 100 feet (30 meters) away from the probe, enlarged coaxial or Pentarod probe designs, HART® digital communications

GUIDED WAVE RADAR



Eclipse®

Model 706 GWR Transmitter

Description: An advanced 24 VDC loop powered transmitter with proactive diagnostics and superior signal strength. Not affected by foam, turbulence, and varying media conditions.

Measurement Principle:
Guided Wave Radar Time Domain Reflectometry (TDR)

Applications:

Ideal for difficult, low dielectric, high temperature process applications, high pressure steam, or simple storage applications.

Features:

- No calibration necessary
- General Purpose, Intrinsically Safe, Explosion Proof and Non-Incendive approvals
- Increased signal strength
- Superior Signal-to-Noise Ratio
- Proactive Diagnostics
- Broad offering of Overfill-capable probes
- Full vacuum to 6250 psi (430 bar); -320 to +850 °F (-196 to +450 °C)
- SIL 2/3 Certified with SFF = 93% (FMEDA available upon request)

Options:

Graphic LCD allows the viewing of waveforms; HART®, FOUNDATION fieldbus™, Profibus PA and Modbus digital communications; broad probe offering with numerous process connections



Eclipse®

Model 700 GWR Transmitter

Description: 24 VDC loop powered transmitter with proactive diagnostics and superior signal strength. Not affected by foam, turbulence, and varying media conditions.

Measurement Principle:
Guided Wave Radar Time Domain Reflectometry (TDR)

Applications:

Liquids and slurries, hydrocarbon to water-based media. Process and storage vessels to +400 °F (+200 °C).

Features:

- No calibration necessary
- General Purpose, Intrinsically Safe and Non-Incendive approvals
- Increased signal strength
- Superior Signal-to-Noise Ratio
- Proactive Diagnostics
- Full vacuum to 6250 psi (430 bar); -320 to +400 °F (-196 to +200 °C)
- SIL 2/3 Certified with SFF = 93% (FMEDA available upon request)

Options:

Graphic LCD allows the viewing of waveforms; HART® digital communications



Pulsar®

Model R80 Radar Transmitter

Description: An advanced loop-powered 4–20 mA level transmitter with proactive diagnostics provides accurate measurement even in shifting dielectric and varying media.

Measurement Principle:
Frequency Modulated Continuous Wave (FMCW)

Applications:

Liquids and slurries, hydrocarbons to water-based media, high temperature/high pressure process or storage vessels

Features:

- 80 GHz frequency offers smaller beam angle and improved resolution
- Up to 1000 psi (70 bar); up to 400 °F (200 °C)
- Quick connect/disconnect antenna coupling allows vessel to remain sealed
- Coated Isolation antennas for corrosive applications
- Intuitive false target setup
- Unique Commissioning and Optimization Wizards
- Proactive Diagnostics

Options:

Graphic LCD; HART®, digital communications; Wide variety of horn antenna configurations



Pulsar®

Model R86 Radar Transmitter

Description: An advanced loop-powered 4–20 mA level transmitter with proactive diagnostics provides accurate measurement even in shifting dielectric and varying media.

Measurement Principle:
Pulse Burst Radar

Applications:

Liquids and slurries, hydrocarbons to water-based media, high temperature/high pressure process or storage vessels

Features:

- 26 GHz frequency offers smaller beam angle and improved resolution
- Full vacuum to 2320 psi (160 bar); -100 to +750 °F (-70 to +400 °C)
- Quick connect/disconnect antenna coupling allows vessel to remain sealed
- Wide range of HTHP antennas, with extensions
- Coated Isolation antennas for corrosive applications
- Intuitive false target setup
- Unique Commissioning and Optimization Wizards
- Proactive Diagnostics

Options:

Graphic LCD; HART®, FOUNDATION fieldbus™ and Profibus PA digital communications; Wide variety of horn antenna configurations, all-plastic antenna, antenna extensions

THERMAL DISPERSION

ULTRASONIC



Thermatel® Models TD1/TD2 Flow/Level Switch

Description: Reliable flow/level/interface switch detects changes in heat transfer due to changes in media or flow rate.

Measurement Principle:
Thermal dispersion

Applications:

Flow switch for liquids and gases. Popular for pump protection to detect low flow rates. Also used for level/interface detection

Features:

- Continuous diagnostics with fault detection
- Temperature compensation
- mA output signal on TD2 permits flow monitoring and diagnostics
- Temperatures to +850 °F (+450 °C), pressure to 6000 psi (410 bar)
- Adjustable set point and time delay

Options:

Relay type, input voltage, integral or remote mounting, window to view LEDs, probe types and probe process connections



Thermatel® Model TA2 Mass Flow Transmitter

Description: An easy-to-use, economical, continuous gas flow meter to manage energy costs or meet environmental regulations.

Measurement Principle:
Thermal mass/dispersion

Applications:

Combustion air, compressed air, natural gas, flare gas, aeration lines, digester/biogas/LFG, low flow/low pressure

Features:

- Direct mass flow measurement
- Calibration verification in the field prevents sending unit back to the factory
- Strong signal at low flows and low pressures
- High turndown ratio
- Rotatable head and display for ease of viewing and proper installation

Options:

2-line × 16-character display, HART® and FOUNDATION fieldbus™ digital communications, probe length, process connection, Hot Tap, temperature output and pulse output, remote electronics



Echotel® Model 910 Level Switch

Description: Integral mount, low cost ultrasonic level switch with worldwide safety approvals.

Measurement Principle:
Ultrasonic

Applications:

Clean liquids, wastewater, hydrocarbons, foods and pharmaceuticals, solvents, seal pot level

Features:

- Tip sensitive gap style
- Integral mount unit with dual conduit hubs
- Field selectable high or low level fail-safe
- 8-amp DPDT gold flash or 5-amp DPDT hermetically sealed relay
- Vertical or horizontal mount
- No calibration required
- Two-year warranty

Options:

Housings, process connections, input power, relay type, and actuation length



Echotel® Models 961/962 Level Switches

Description: Universally applied liquid level switch with advanced self-test capabilities, time delay and pulsed signal technology for superior performance in difficult applications.

Measurement Principle:
Ultrasonic

Applications:

Water-based liquids, hydrocarbons, chemicals, low/high level detection, overflow protection, seal pot level

Features:

- Suitable for use in Safety Integrity Level (SIL) 2 loops
- Adjustable time delay for turbulent aerated liquids
- Tip-sensitive transducer
- Advanced self-test technology with malfunction alarm output
- Integral or remote mount electronics
- Pulsed signal technology
- Available for single (961) or dual point (962) liquid level detection.
- Plastic probes available

Options:

Housing materials, input power, output signal, integral or remote mounting and actuation length



Echotel® Model 355 Transmitter

Description: Loop-powered, integral mount, ultrasonic transmitter for level, volume, or open channel flow.

Measurement Principle:
Non-Contact 60 kHz ultrasonic

Applications:

Open channel flow, simpler level measurement with less vapors, foam and agitation

Features:

- Two-wire, loop-powered
- 4–20 mA with HART®
- PACTware PC program
- 20' (6 m) measurement range
- Temperature compensated echo rejection profile
- Dynamic baseline noise compensation
- Open channel flow equations
- Resettable and non-resettable flow totalizers

Options:

Cast aluminum or Lexan enclosure, polypropylene or Kynar® Flex transducer

BUOYANCY



Float Type

Top Mount Level Switch

Description: A simple and reliable float switch designed for top mounting on virtually any process or storage vessel.

Measurement Principle:
Buoyancy

Applications:

Virtually any tank or vessel; condensate receivers, cooling towers, interface detection

Features:

- Single or tandem float configurations
- Rugged reliability
- Wide selection of switches
- Actuating depths of up to 48" (1219 mm)
- Simple operation
- Maintenance-free
- Variety of process connections

Options:

Single or tandem units, tank connection type and float size, NACE construction, electric or pneumatic switch mechanisms, guide cages



External Cage Tuffy®

Float Type Level Switch

Description: A highly reliable level switch in an external cage and designed to be mounted outside the process vessel.

Measurement Principle:
Buoyancy

Applications:

Clean liquids or interface in scrubbers, feedwater heater, flair pots, day tanks, accumulators, knockout drums, etc.

Features:

- Sealed or flanged float cages
- Pressures to 3700 psi (255 bar) and temperatures over +1000 °F (+540 °C)
- Single or multiple actuation levels
- Carbon steel or stainless steel cage materials
- Floats for SGs as low as 0.32

Options:

Electric or pneumatic switches, ASME B31.1, B31.3 or NACE construction, exotic materials of construction, wide variety of process connections



Float Type Level Switch

Description: A compact, highly reliable level switch designed for horizontal mounting into a process vessel or an external cage.

Measurement Principle:
Buoyancy

Applications:

Clean liquids or interface in virtually any tank or vessel, including storage tanks and process vessels

Features:

- Available in narrow and wide adjustable differential models
- Float and trim parts in 316 SS or Hastelloy C
- Pressures to 2630 psi (181 bar) and temperatures to +900 °F (+482 °C)
- Explosion proof enclosure with variety of agency approvals
- Ease of wiring in enlarged switch housing

Options:

Pneumatic switch model, ASME B31.3 or NACE construction, wide variety of process connections, cast iron and aluminum switch housings



Modulevel®

Model E4 Displacer Level Transmitter

Description: Loop powered, two-wire, displacer transmitter utilizing a range spring and LVDT combination to measure total level or interface level.

Measurement Principle:
Buoyancy

Applications:

Feedwater heaters, scrubbers, receivers, separators, boilers, condensate drip pots, interface measurement

Features:

- No calibration required
- Range spring suppresses effects of turbulence
- Pressures up to 348 bar (5050 psig); Temperatures up to +445 °C (+835 °F)
- HART® communication with DD and DTM for use with PACTware™
- Retrofit transmitters without breaking the process seal
- SIL 2 Suitable
- Variety of chambers (cages) available
- Full range of hazardous approvals

Options:

External chambers; integral or remote mount electronics; displacer hanger cable; SG ranges 0.23–2.20; ASME or NACE constructions; selectable displacer lengths



Top Mount

Displacer Type Level Switch

Description: Highly reliable one-, two- or three-stage level switches offering wide and narrow level differentials.

Measurement Principle:
Buoyancy

Applications:

Foaming, surging or agitated liquids, dirty or clean liquids, heavy oils or slurries in sumps, storage tanks or process vessels, overfill prevention

Features:

- Field-adjustable levels and differential
- Variety of displacer, cable and wetted parts materials
- Ease of installation
- Variety of narrow and wide level differential combinations
- Suitable for use in liquids with SG from 0.40 to 2.40

Options:

Proof-er® ground-checker, floating rooftop/liquid dual detection, extended displacer cable, customer specific levels and differential arrangements, pneumatic or electric switches

VISUAL INDICATION



Atlas™

Magnetic Level Indicator

Description: The standard, high-performance magnetic level indicator suitable for a wide range of process conditions.

Measurement Principle:
Buoyancy, magnetic coupling

Applications:

Feedwater heaters, boilers, oil-water separators, flash drums, surge tanks, gas chillers

Features:

- Broad range of chamber configurations
- Fabricated non-magnetic chambers
- ASME and EN flanges
- Precision manufactured float
- Flag or shuttle type indicator
- Reveal™ wide view indicator

Options:

Custom span, process connections, scale units of measure, high temperature and cryogenic insulation, clamp-on reed, micro and pneumatic switches



Aurora®

Magnetic Level Indicator

Description: Unique combination of magnetic level indication with guided wave radar results in a truly redundant level control instrument.

Measurement Principle:
Buoyancy, magnetic coupling and micropower impulse radar

Applications:

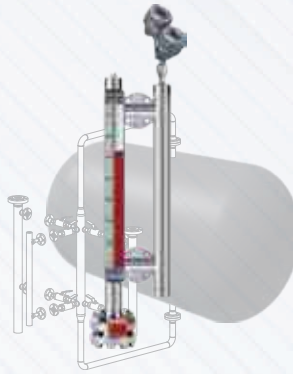
Feedwater heaters, vacuum tower bottoms, alkylation units, oil-water separators, deaerators, boiler drums

Features:

- True redundancy through use of two independent technologies
- Reveal™ wide view indicator
- Built to ASME B31.1, B31.3, PED, ASME U, UM, S Stamp, NACE construction available
- All metallic pressure boundary materials
- Pressures to 4500 psi (310 bar)
- SGs as low as 0.25
- Temperatures to +800 °F (+425 °C)

Options:

Remote mounted electronics, custom span, process connections, scale units of measure, high temperature and cryogenic insulation, clamp-on reed, micro and pneumatic switches



Gemini™

MLI with Modular Instrumentation Bridle

Description: Unique, fully customized design of Modular Instrumentation Bridle (MIB) designed to best incorporate different instrumentation packages and maximize performance to reduce total cost of ownership (TOC).

Applications:

Feedwater heaters, boilers, oil-water separators, flash drums, surge tanks, gas chillers, etc.

Features:

- Refer to ORI-210 brochure for details.
- True redundancy through use of two independent technologies

Options:

Full customization

MAGNETOSTRICTIVE



Jupiter®

Model JM4 Magnetostrictive Transmitter

Description: Highly accurate level measurement device that can be directly inserted into a tank or externally mounted to any one of our MLIs.

Measurement Principle:
Time-of-flight measurement utilizing a magnetostrictive wire which interacts with a float

Applications:

Separators, surge tanks, gas chillers, bio-therapeutics, pharmaceuticals, process vessels and more

Features:

- Full graphic local user interface and local waveform capture
- 4-20 mA output
- Rotatable and Removable transmitter head
- Ergonomic dual compartment enclosure
- Simple set-up and configuration
- Smart Probe technology
- Easy attachment to an MLI or modular bridle instrumentation
- Direct insertion for a wide variety of vessels and applications

Options:

HART® or FOUNDATION™ communications; Hastelloy® or Monel® materials of construction; Threaded or flanged process connections; External Jupiter® models can be top- or bottom-mounted to an MLI

Z-tron™
IV



X2-Qcpgcq

USonic™ Series
Ultrasonic Level Transmitter



USonic-R™ Series
Ultrasonic Level Measurement System



BrightTEK™ ST9x Wireless
Tank Monitoring System



ELECTRONIC PRESSURE MEASUREMENT PRODUCTS
Model 575 Series
Submersible Level Transmitters

Model 575P
protected
flush
diaphragm

Model 575P
protected
flush
diaphragm
with optional
3/4" plate

Model 575S
standard 1/2 NPT
(with nose cone removed)



Universal V™ Series Pro
and Lite Models
RF Admittance/Capacitance
Continuous Level Measurement System

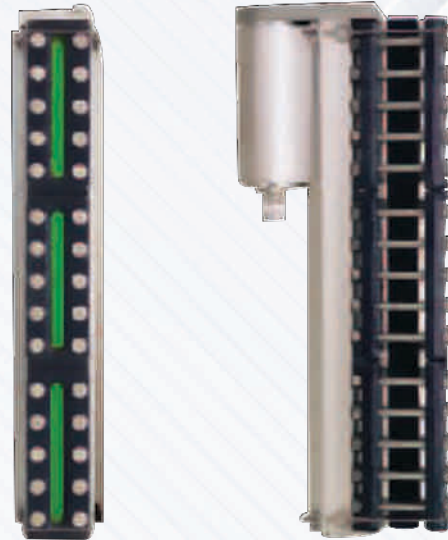


GLASS-TRAC Liquid LEVEL GAGES

See-Level Illuminator

See-Level Illuminator

- Explosion-proof rated
- Brilliant Green LED illumination for transparent level
- gages
- Easy mounting
- Conformal coated LED lighting
- NEMA 4X & 8 power supply enclosure
- Watertight, weatherproof, and corrosion resistant



*Armored Transparent
Liquid Level Gage*



*Armored Reflex
Liquid Level Gage*

Armored Reflex Gages

Glass-Trac Reflex Gages use prism glass to provide an excellent indication of the liquid level. All liquids appear black in high contrast to the mirror-like surface above. This clean line of separation can be sighted from many yards away. Reflex Gages are made in:

- Three pressures series (maximum 4000 psig @ 100 ° F)
- Tapped for 1/2" or 3/4" NPT connections
- Different materials are available to meet your specific process conditions

Armored Transparent Gages

Glass-Trac Transparent Gages use clear, see-through glass on both sides of the chamber so that both the color and the interface of liquids can be viewed. Electric lighted gage illuminators are available for use on transparent gages and provide easy viewing of liquid levels in dimly lit areas.

Transparent gages are made in:

- Three pressures series (maximum 3000 psig @ 100 ° F)
- Tapped for 1/2" or 3/4" NPT connections

Different materials are available to meet your specific process conditions

Tubular Gages & Valves

Glass-Trac Tubular Glass Gages are available in any length desired and can be fitted with tubular style gage valves. These gages provide 360 degrees of visibility of the liquid level through strong, clear glass. Guard rods and plastic tubes are available as an added measure of protection.



Armored Tubular

STEAM-TRAC DIRECT READING WATER GAGES

Standard features of Steam-Trac gages include cadmium plated bolting, high temperature paint, spring washers, high quality mica shields, and



ST-1000
with SLI-A Illuminator

ST-1000 to 1000 PSI

- Fully ASME compliant
- Multiple sections with minimum 1" overlap to ensure continuous visibility
- Spring washers for constant torque
- Recessed gasket face in chamber and cover
- Custom built per specification
- Nickel plated bolts, nuts and washers
- High temperature coating
- See-Level Illuminator with *amber lighting* available for easy viewing of levels in steam applications



ST-1600
with SLI-A Illuminator

ST-1600 to 1600 PSI

- Fully ASME compliant
- Multiple sections with minimum 1" overlap
- Spring washers for constant torque
- Nickel plated bolts, nuts and washers
- High temperature coating
- See-Level Illuminator with *amber lighting* available for easy viewing of levels in steam applications



STB-3000 STBI-3000

STB-3000 to 3000 PSI

- Fully ASME compliant
- Large, easy to read ports
- All lengths with continuous chamber
- Innovative illuminator design
- Nickel plated bolts, nuts and washers
- High temperature coating

LEVEL-TRAC REMOTE LEVEL INDICATOR SYSTEMS



LT-501 Column
with 801 Probe

For Service to 1000 PSI

- LT-500 Manifold/Type 800 Probe
- Extruded A-105 Body
- TFE Insulated Probe
- Robust Spiral Wound Gasket



For Service to 2000 PSI

- LT-501 Manifold/Type 810 Probe
- Extruded A-105 Body
- Zirconia Insulated, Brazed
- Probe



For Service to 3000 PSI

- LT-502 Manifold/Type 820 Probe
- Seamless A-106B Body
- Zirconia Insulated, Brazed
- Probe



Control / Display

Level-Trac Control Units are available utilizing three core technologies.

- LT-310 Model with two independent power supply units.
- LT-210 Model with 4-20mA output signal.
- LT-220 Model with 4-20mA output signal and two power supply.

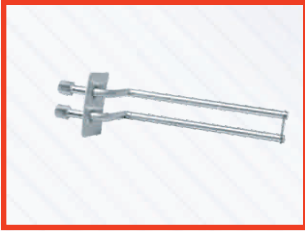
All remote display use bi-color LEDs for maximum life span and minimal power consumption. Most units ship out of stock and are pre-programmed per customer requirements.



Model LT - 100



Model LT - 210



IBAM™ – Individual Burner Airflow Measurement

The IBAM™ – Individual Burner Airflow Measurement probe is ideally suited for new or retrofit applications where a reduction in plant emissions and improvement in efficiency can be obtained through accurate measurement of burner secondary airflow. The IBAM™ probe has been designed to accurately measure in the particulate laden, high operating temperature conditions found in burner air passages.



VOLU-probe/SS™ Stainless Steel Airflow Traverse Probes.

Multi-point, self-averaging, Pitot-Fechheimer airflow traverse probes with integral airflow direction correcting design. Constructed of Type 316 stainless steel and available in externally and internally mounted versions for harsh, corrosive or high temperature applications such as fume hood, laboratory exhaust, pharmaceutical, and clean room production and dirty industrial process applications.



VELTRON DPT-plus – Microprocessor Based Transmitter

The The VELTRON DPT-plus transmitter is furnished with an automatic zeroing circuit capable of electronically adjusting the transmitter zero at predetermined time intervals while simultaneously holding the transmitter output signal. The automatic zeroing circuit eliminates all output signal drift due to thermal, electronic or mechanical effects, as well as the need for initial or periodic transmitter zeroing.



CA™ – Combustion Airflow Measuring Station & VOLU-probe/SS™ Traverse Probes.

Air Monitor Power's duct mounted airflow measurement devices have been designed to accurately and repeatedly measure air mass flow in power plants. The Combustion Air (CA) Station™ includes honeycomb air straightener to accurately measure in shorter straight duct runs than any other flow measurement device. The VOLU-probe/SS™ delivers accurate airflow measurement performance in the form of an insertion probe. Both devices feature Type 316 stainless steel flow sensing arrays.



CEMST™ – Continuous Emissions Monitoring System

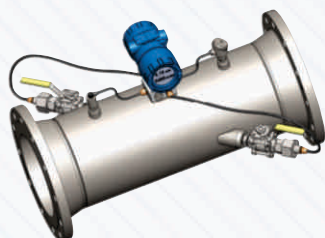
Air Monitor Power's CEMST™ – Continuous Emissions Monitoring Systems assist in complying with the Clean Air Act's stringent emission measurement standards and the requirements of 40 CFR 75. Air Monitor has assembled a cost effective integrated system consisting of in-stack flow measurement equipment and companion instrumentation to provide continuous, accurate, and reliable volumetric airflow monitoring of stacks and ducts of any size and configuration.



CAMST™ – Combustion Airflow Management Systems.

The CAMST™ – Combustion Airflow Management System has been designed to reliably and accurately measure airflow in combustion airflow applications. The CAMST™ contains the microprocessor based instrumentation to measure the airflow and manage the AUTO-purge. The AUTO-purge is a high pressure air blowback system that protects the duct mounted flow measurement device from any degradation in performance due to the presence of airborne particulate (flyash).

Ultrasonic Gas Flow Meter



- ▶ Operating Principle Transit-time measurement
- ▶ Transducer Material SS 316
- ▶ Cable Length 10m (30ft), maximum 30m (100ft)
- ▶ Velocity Range Regular from 0.02 to 85m/s (0.05 to 250ft/s),
extended 0.01 to 135m/s (0.03 to 400ft/s)
- ▶ Accuracy $\pm 1.5\%$ to $\pm 3\%$, up to $\pm 0.5\%$ in multipath version
- ▶ Repeatability Better than 1%
- ▶ Measurement Parameters Standard and actual volume flow, totalized volume
flow, molecular weight, mass flow, pressure,
temperature, gas velocity
- ▶ **Operating Conditions**
- ▶ Pipe Diameter 8 cm to 200 cm (3" to 80")
- ▶ Recommended Pipe Length 10D (upstream) & 5D (downstream)
- ▶ Process Temperature -40°C to $+135^{\circ}\text{C}$ (-40°F to 275°F)
- ▶ Process Pressure 0.5 barA to 20 barA (7 psiA to 300 psiA)
- ▶ Supply Voltage 24VDC (20-32 VDC)
- ▶ Inputs Two 4-20 mA for external pressure & temperature sensors
- ▶ Outputs Digital-ModBUS, analog 4-20mA, pulse-frequency,
HART (optional)
- ▶ Hazardous Area Approval CSA/UL Class 1, Div. 1, Goup ABCD T4



MASS GAS FLOW METERS

Constant Temperature

- ▶ Temperature upto 500°
- ▶ Turn down of over
- ▶ Direct Mass Flow (No Temperature & Pressure Correction)
- ▶ Accuracy $\pm 1\%$ of reading +20 SFPM; repeatability $\pm 0.25\%$ of
- ▶ Response time is less than 3
- ▶ NAMUR NE-43
- ▶ Communication protocol choices HART 7, Profibus, RS 232, RS 485
- ▶ Upto ANSI#300 Class or Higher (Special
- ▶ Field Repairable & Programma-
- ▶ Purging unit
- ▶ Low Velocity Measur-
- ▶ No moving parts hence no calibration over years of opera-
- ▶ Velocity Temperature Mapping for Accuracy & reliability over chang-
- ing
- ▶ ATEX, CSA, IECEx

INLINE METER

- ▶ $\frac{3}{8}$ " To 4"
- ▶ upto 11,000 NCMH
- ▶ 20 Bar
- ▶ Zone
- ▶ SS Enclosure

PORTABLE

- ▶ Rugged reliable portable
- ▶ Air
- ▶ Upto 500°
- ▶ Flow, Volume, Velocity & Tempera-
- ▶ Telescopic, Expandable, Fixed
Length Sensor probes

SINGLE POINT INSERTION METER

- ▶ 3" To
- ▶ Velocity Range 0 to 325
- ▶ Zone
- ▶ SS Enclosure

WET GAS METER

- ▶ Condensing Gas Environ-
- ▶ Built-in Dry Gas flow calculation for
digester, landfill applications
- ▶ -40°C to 120°
- ▶ 10 Bar

MULTIPOINT INSERTION METER

- ▶ 24" To
- ▶ Maximum 4 sensors on each
- ▶ Complies to EPA'S CE require-
- ▶ 0 to 56

ISO KINETIC SAMPLER

- ▶ Combines high accuracy
with
- ▶ Environmental, Process & Nuclear
applications.
- ▶ Wet Stack option

PETROL[®]

PETROL Instruments S.r.l

POSITIVE DISPLACEMENT FLOW METER



- ▶ Single Case, Double Case, Master meter, Basket Strainer & Tank Prover
- ▶ Excellent Accuracy & Repeatability : $\pm 0.1\%$ & $\pm 0.02\%$ respective-
- ▶ Meter Size from 1" to
- ▶ Floating type Rotor
- ▶ Maximum operating pressure 150 bar & maximum operating temperature
- ▶ Low Pressure
- ▶ Compact Design (No Upstream/ Downstream required)
- ▶ Wide range of construction (Cast Iron, Carbon Steel, Stainless Steel,
- ▶ Conformity with International standards PED, ATEX, OIML R117
- ▶ Mechanical, Digital Counters
- ▶ Flow Computer & Control

HOFFER FLOW CONTROLS, INC. The Turbine Flowmeter Company



LIQUID & GAS TURBINE FLOW METER

- ▶ Turbine flow meter, electronics & flow computer
- ▶ Liquids & Gases (HO, API, CT, Wingnut , Triflow, Teflon, MF mini Flow, HP
- ▶ ($\frac{1}{2}$ " to 24") Inline & Insertion (4" to 72") Types.
- ▶ Cryogenics, Custody Transfer, Subsea, Aerospace, Sanitary are some special metering applications
- ▶ Linearity of $\pm 0.15\%$ of reading with repeatability of $\pm 0.02\%$ of reading
- ▶ Std. Linearity is $\pm 0.5\%$ of reading with repeatability of $\pm 0.1\%$ of
- ▶ 5 Years warren-

ELECTROMAGNETIC FLOW METER



- ▶ Nor Mag Series AC/DC
- ▶ Flanges or Water (upto 600# Max pressure)
- ▶ Temperature upto 155°
- ▶ Accuracy : $\pm 0.2\%$ for 10% to 100%
 $\pm 0.5\%$ for 5% to
- ▶ Measuring Range : 0.1 to 10
- ▶ Minimum Conductivity : 0.2 ,
uS/cm
- ▶ Available in Stainless Steel, Hastel-
- ▶ Meter mounted or remote
- ▶ Protection Class IP67

ULTRASONIC FLOW METER

- ▶ Transit Time Inline Flowmeter
- ▶ Single Beam & Double
- ▶ Transi-Flo I (AC Powered with /
Without Rate Display)
- ▶ Transi-Flo II (Battery Powered with /
Without Rate Display)
- ▶ Accuracy : $\pm 1\%$ of measurement value
(Single beam)
 $\pm 0.5\%$ of measurement
value
- ▶ Line Size : $1\frac{1}{4}$ " to 12
- ▶ Bi-Directional measurement
- ▶ Ambient Temperature to 150°
- ▶ Internal & Remote version
- ▶ Drinking Water version(all
- ▶ Pressure 16 Bar
- ▶ RS 232 Communication /Data
Comm.via
- ▶ Measurement Range 200:1



General Purpose Flowmeter

Measure liquid, gas or steam flow rates in horizontal or vertical pipelines. Armor-Flo™ meters handle fluids that cannot be measured with the See-Flo® due to clarity, pressure or compatibility with wetted materials.

Applications

- Water
- Liquids with viscosity up to 300 cSt.
- Air and other gases

MAX MÜLLER

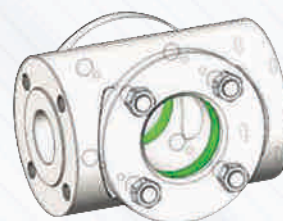
Sightglass light fittings for hazardous areas

- Hazardous area classification to ATEX Ex II 2 G and D (gas and dust)
- Temperature classes T3 up to T6, supply voltages from 12 up to 240 V
- Halogen or LED version



Sightflow indicators

- With ends for welding (series S-St and S-VA), PN 10/16
- With flanged ends (series F-St and F-VA), PN 6/10/16
- From grey, steel and stainless steel cast with flanged ends (series FDG, FDS, FDE) PN 16



	DUAL CHAMBER Materials: Carbon Steel, Stainless Steel, Duplex. Others on request.		SINGLE CHAMBER Materials: Carbon Steel, Stainless Steel, Duplex. Others on request.
	MEASUREMENT PROBE Materials: 316 Stainless Steel. Others on request.		FLOWCONE Materials: Carbon Steel, 304/316 Stainless Steel, Duplex, Super Duplex, Alloy Steel. Others on request.
	WEDGE Materials: Carbon Steel, 304/316 Stainless Steel, Duplex, Super Duplex, Alloy Steel. Others on request.		VENTURI TUBE Materials: Carbon Steel, 304/316 Stainless Steel, Duplex, Super Duplex, Alloy Steel. Others on request.
	ORIFICE PLATE Materials: 304/316 Stainless Steel, Duplex, Super Duplex, Hastelloy, Monel. Others on request.		ORIFICEFLOW Materials: 304/316 Stainless Steel, Duplex, Super Duplex, Hastelloy, Monel. Others on request.
	ORIFICEFLOW - CONDITIONER Materials: 304/316 Stainless Steel, Duplex, Super Duplex, Hastelloy, Monel. Others on request.		ORIFICE FLANGE ASSEMBLY Materials: Carbon Steel, 304/316 Stainless Steel, Duplex, Super Duplex. Others on request.



2-Way ESD Valve (Model 1102)



3-Way ESD Valve (Model 1103)



ESD Station



Electric ESD Station



Fuse Plug (Models 2101/2102)



High Pressure Fuse Plug (Model 2103)



Low Pressure Fuse Valve (Model 2300)



High Pressure Fuse Valve (Model 2302)



SS-1 Pressure Switch (Model 4102)



SS-2 Pressure Switch (Model 4202)



SS-2 High Flow Pressure Switch (Model 4222)



High/Low Assembly



SS-H Hydraulic Pressure Switch (Model 4HL2)



LPO Control System



SS Series Differential Pressure Switch



SS-E Electric Pressure Switch (Model 4E02)



SS-E Electric Differential Pressure Switch (Model 4E02)



SS-H Hydraulic Pressure Switch (Model 4HH2)

UE | Pressure & Temperature Switch

Remote bulb and armored capillary temperature model



Welded stainless steel diaphragm pressure model



Ultra-low "wc model with welded stainless steel diaphragm



Differential pressure model with Option M210, Indicating module



AUTROL®

Smart Transmitter for Differential / Gauge / Absolute / HighLine Pressure Measurement



APT3100

Function

- Flexible Sensor Input: DP,GP,AP,HP
- Various Output: 4~20mA ,Digital Signals
- Setting Various Parameters:Zero/Span, Trim, Unit, Fail-mode,etc.
- Self Diagnostic Function:Sensor, Memory A/D Converter, Power, etc.
- Digital Communication with HART protocol
- Explosion-proof Approval & Intrinsic Safety Approval: KOSHA, KTL, FM, ATEX, GOST

Features

- **Superior Performance**
 - High Reference Accuracy: $\pm 0.075\%$ of Calibrated Span (*Specially $\pm 0.04\%$)
- **Flexibility**
 - Data Configuration with HART Configurator
 - Zero Point Adjustment
- **Reliability**
 - Continuous Self-Diagnostic Function
 - Automatic Ambient Temperature Compensation
 - Fail-mode Process Function
 - EEPROM Write Protection
 - CE EMC Conformity Standards

Smart Pressure Transmitter with Diaphragm Seal

APT3100L

Function

- Flexible Sensor input: Measuring hydrostatic pressure head and transmitting liquid level
- Various output: 4~20mA(Analog),Digital Signals
- Automatic Compensation of Ambient Temperature
- Setting Various Parameters: Zero/Span, Fail-mode, Unit, Trim, etc.
- Self Diagnostic Function: Sensor, A/D Converter, Memory, Power, etc
- Digital Communication with HART protocol
- Explosion-proof Approval & Intrinsic Safety Approval: KOSHA, KTL, FM, ATEX, GOST
- 5 Digit LCD: Express all pressure unit and flow unit, Use 5 digit for measured value.

Features

- **Superior Performance**
 - High Accuracy
 - Long-Term Stability
- **Flexibility**
 - Data Configuration with HART configurator
- **Reliability**
 - Continuous Self-Diagnostic Function
 - Automatic Ambient Temperature Compensation
 - Fail-mode Process Function
 - EEPROM Write Protection
 - CE EMC Conformity Standards



Smart Transmitter for Gauge / Flush Mount Absolute Pressure Measurement

APT3200

Function

- Flexible Sensor Input: GP, AP, Vacuum, Flush Mount
- Various Output: 4 ~20mA , Digital Signals
- Setting Various Parameters: Zero/Span, Trim, Unit, Fail-mode,etc.
- Self Diagnostic Function : Sensor, Memory A/D Converter, Power, etc.
- Digital Communication with HART protocol
- Explosion-proof Approval & Intrinsic Safety Approval: KOSHA, KTL, FM, ATEX, GOST

Features

- **Superior Performance**
 - High Accuracy: $\pm 0.075\%$ of Calibrated Span (*Specially $\pm 0.04\%$)
 - Long-Term Stability
- **Flexibility**
 - Measuring GP,AP
 - Data Configuration with HART configurator
- **Reliability**
 - Continuous Self-Diagnostic Function
 - Automatic Ambient Temperature Compensation
 - Fail-mode Process Function
 - EEPROM Write Protection
 - CE EMC Conformity Standards

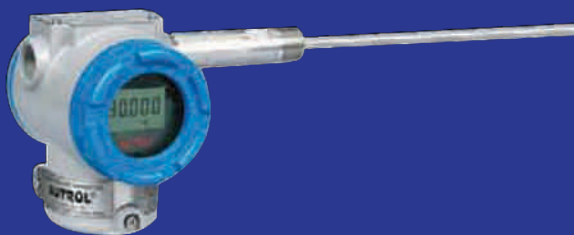


Smart Temperature Transmitter

ATT2100

Description of Product (ATT2100 / ATT2200)

The ATT2100,2200 Smart Temperature Transmitter is a microprocessor-based high performance transmitter, which has flexible sensor input and output, automatic compensation of ambient temperature and process parameters, configuration of various parameters, communication with HART protocol. All Data of Sensor (Tag No., type, range etc.) is to be input, modified and stored in EEPROM.



Function (ATT2100 /

- Flexible Sensor input: RTD, T/C, mV, Ohm
- Various output: 4 ~ 20mA (Analog), Digital Signals
- Automatic Compensation by Linearization table in which user can modify the various necessary values
- Automatic Compensation of Ambient Temperature
- Setting Various Parameters: Zero/Span, Unit, Fail-mode, Trim, etc.
- Self Diagnostic Function: Sensor, A/D Converter, Memory, Power, etc.
- Digital Communication with HART protocol
- Flameproof Approval and Intrinsic Safety Approval (ATT2100): KOSHA, KTL, ATEX

Features (ATT2100 /

- **Superior Performance**
 - Excellent Accuracy
 - Long-Term Stability
- **Flexibility**
 - Selection of various T/C, RTD, mV, Ohm
 - Data Configuration with HART configurator
- **Reliability**
 - Automatic Compensation: Linearization of sensor input, Ambient temperature compensation
 - Continuous Self Diagnostic
 - Fail-mode Process function
 - EEPROM Write Protection
 - I/O Isolation : Grounded Thermocouple
 - CE EMC Conformity Standards

ATT2200



DIN Rail

Sensor Inputs (ATT2100 /

- **Sensor Inputs**

The model ATT 2100, 2200 is compatible with a variety of temperature sensors, including 2W, 3W, 4Wire RTDs, thermocouples, and other resistance

< Input Sensor Types >

 - RTD: 2W, 3W, 4Wire
 - Thermocouple: B, E, J, K, N, R, S, T type
 - mV: -10 ~ 75mV
 - Ohm : 0 ~ 430 Ω

* Please contact us before order for detailed certificate

STAINLESS STEEL SPECIALTY VALVES

for over 40 years

- Hydraulic Interface Valves
- Hydraulic Quick Exhaust
- Hi-Lo Sensor Manifolds
- Pressure Sensors
- Solenoid Valves
- Fusible Devices
- ESD Stations
- Regulators
- Relief Valves
- Panel Accessories



24SRV12 & 24SRV32



11SLV60



20HM24



Hi-Lo Sensor



SCHUH TECHNOLOGY®
Accuracy, Warranty and Quality



PC45 Series



P45 Series



PX45 Series



PX Series



TG Series



TW Series

PD765 X2 Trident X2 Process & Temperature Meter

Quick Overview

Input: Process: 0-20 mA, 4-20 mA;
±10 VDC (0-5, 1-5, 0-10 V)
Temperature: Thermocouple J, K, T, E; RTD 100 Ω Pt
Display: 4-digit, 1.20" (30.5 mm)
Case: 1/8 DIN, NEMA 4X/IP65
Power: 85-265 VAC or 12-36VDC option
Operating Temperature: 0 to 65°C

Free Software Available

MeterView: Program, monitor, and datalog up to 100 meters from PC. *Requires serial communication adapter.*

Features

- 1° or 0.1° resolution with RTD
- Sunlight readable display
- Maximum/minimum display
- Linear or square root with low-flow cutoff
- Transmitter power option
- Modbus® RTU or proprietary ASCII protocol
- Shallow depth case 3.6" behind panel

Options

- 2 relays and 4-20 mA analog output options
- 24 VDC transmitter power supply
- Dual 24 VDC transmitter power supplies
- Serial communications

PROCESS &



TRIDENT



HowTo
Tutorial Videos

PD6210 PROVu® Analog Input Batch Controller

Quick Overview

Input: 0-20 mA, 4-20 mA; ±10 VDC (0-5, 1-5, 0-10 V);
Modbus PV (slave)
Display: Dual-line 6-digit, 0.60" (15 mm) & 0.46" (12 mm)
Case: 1/8 DIN, NEMA 4X/IP65
Power: 85-265 VAC or 12/24 VDC option
Operating Temperature: -40 to 65°C

Free Software Available

MeterView Pro : Configure, monitor, and datalog from a PC. *Requires serial communication adapter.*

Features

- Start, batch, pause, & stop with front panel buttons
- Display batch total + rate, grand total batch count or preset
- Single or multi-stage batching with up to 8 relays
- Automatic overflow correction
- Manual control or automatic batching
- Count up or down, total & grand total
- On-board digital input

Options

- 4-20 mA output with isolated 24 VDC @ 40 mA power supply
- 2 or 4 form C internal relays
- External 4-relay and digital I/O expansion modules
- USB, RS-232, & RS-485 serial communications

BATCH CON-



PROVu®
SERIES



PD6800 ProtEX-Pro Process Meter

Quick Overview

Input: 4-20 mA
Display: 5-digit upper display 0.7" (17.8 mm);
7 alphanumeric character lower display 0.4" (10.2 mm)
Case: Smooth die-cast aluminum explosion-proof
Power: Loop-powered
Operating Temperature: -40 to 75°C

Features

- Safe Touch® through-glass button programming
- Alphanumeric tag names
- 3.0 V drop (6.0 V drop with backlight)
- Flanges for wall or pipe mounting
- Backlight standard
- Loop-powered
- Password protection
- 32-point, square root, or exponential lineariza-

PRO-



ProtEX
Pro



Explosion-proof. Complete product approved.

PD8-158 ProtEX-MAX 8-Point Annunciator

Quick Overview

Input : Switch, transistor, logic level
Display : 4 or 8 red LED indicators
Case : Smooth die-cast aluminum explosion-proof
Power: 85-265 VAC or 12-36 VDC
Operating Temperature: -40 to 65°C

Features

- 8 field selectable sequences
- 8-point monitoring
- All common ISA sequences
- Multiple-unit first-out indication
- 2 SPDT relays for alarm activated devices
- Silence, acknowledge, and reset functions
- Safe Touch® through-glass button programming

ANNUNCIA-



ProtEX
Pro



Explosion-proof. Complete product approved.



Emergency Showers & Eyewashes

- Stainless steel construction for long service life in all environments
- Full compliance with A4775 and ANSI Z358. 1 for emergency eyewash and shower equipment
- Models available to suit any application

Combination Showe Units

- The most versatile decontamination system available - use shower, eyewash or both simultaneously
- Balanced water supply inlets ensures optimum eye/face wash pattern even with varying water pressure
- Self - closing dust cover on Aerostream eye/face wash keeps airborne contaminants off nozzles

SHOWER WITH AEROSTREAM®WASH UNITS

Model No	Description
SE607	Eye/face wash with bowl, hand and foot operated
SE603	Eye/face wash with bowl, hand operated
SE612	Eye wash with bowl, hand and foot operated
SE616	Eye wash with bowl, hand operated
SE675	Eye wash, no bowl, hand operated
SE679	Eye wash, no bowl, hand and foot operated
SE685	Eye/face wash, no bowl, hand operated



SE685

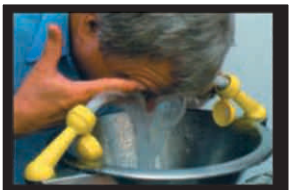
SE607

SHOWER WITH SOFTSTREAM®WASH UNITS

Model No	Description
PEM607	Eye/face wash with bowl, hand and foot operated
PEM603	Eye/face wash with bowl, hand operated
PEM675	Eye/face wash, no bowl, hand operated



PEM607



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Website : www.multitekms.com