TEKTROL

Technology Solutions

GLOBAL LEADER

In Manufacturing & Innovative Solutions

CORPORATE BROCHURE

WHO WE ARE

Tek-Trol Technology Solutions is a global leader in manufacturing and suppling innovative solutions in advanced measurement, automation, and control solutions. We hold our company to the highest of standards and strive to be the preferred partner for industries around the world. No matter the need, Tek-Trol is with you at every stage of your project.

We have carved out a niche for being a reliable and trust-worthy manufacturer of flow, level, temperature and pressure measurement solutions. This has developed overtime by staying true to our core values:

- Ownership and Accountability
- Integrity
- Maximize Value
- Relationship Development
- Reliable and Trustworthy Business

This dedication allows us to assist in optimizing your company's processes, thereby increasing efficiency, as well as safety and ultimately minimizing costs.

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TEKTROL Technology Solutions

FLOW MEASUREMENT

Tek-Trol's range of Flow Meter monitors mass and volumetric flow of liquids, gases and steam with premium accuracy, high stability and robust operation.

TEK-COR 1100A

Coriolis Mass Flow Meter

Service	Liquid and Gas
Wetted Material	304 SS, 316 SS, or Hastelloy C
Accuracy	±0.05%, ±0.1%, ±0.2% or ±0.5%
Line Size	3/8" to 24" (10 to 600mm)
Repeatability	± 0.05% (for 0.1% accuracy), ± 0.1% (for 0.2% accuracy), ±0.25% (for 0.5% accuracy) or ± 0.05% (for 0.05% accuracy)
Output Signal	4-20mA and Pulse, Optional: HART, Modbus RS485 or Ethernet
Power Supply	18-28VDC, 85-220VAC
Temperature Limits	Direct Mount: -60°F to 260°F (-50°C to 125°C) Remote Mount: -300°F to 400°F (-180°C to 200°C)
Maximum Pressure	580 to 3600psi (4 to 25MPa)
Process Connection	DIN, ANSI Flanges, NPT, Flare, Tri-Clamp
Display	OLED
Approvals	UL Class I Div I

TEK-CLAMP 1200A

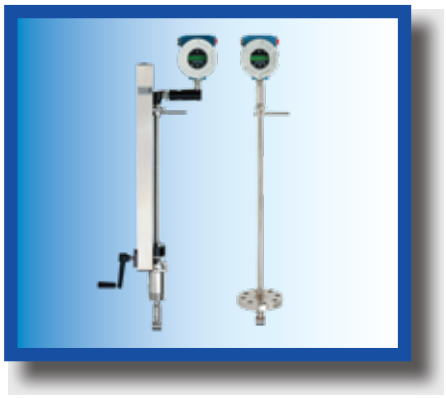
Ultrasonic Clamp-On Flow Meter

Service	Liquids
Accuracy	Better than 1% accuracy
Line Size	½" to 200" (15 to 5000mm)
Repeatability	0.2%
Output Signal	Modbus RS485, 4-20mA, Pulse
Power Supply	85 to 264VAC or 8 to 36VDC; Rechargeable nickel metal hydride battery
Temperature Limits	-40 °F to 320 °F (-40 °C to 160 °C)
Measurement Period	0.5 Seconds
Protection Class	Sensor: IP68, Wall Mount: IP65, DIN Mount: IP50
Display	LCD with backlight 2 x 20 letters
Approvals	Class I Div II approved (1200A-100EXP)

TEK-VOR 1300C

Vortex Mass Flow Meter

Service	Liquid, Gas, and Steam
Wetted Material	304 SS, 316 SS
Accuracy	±1% of Reading; For Multivariable Version: Temperature ±1 °F; Pressure: 0.75% F.S.
Line Size	1/2" to 12" (15 to 300mm)
Repeatability	0.3% of F.S.
Output Signal	4 to 20mA and Pulse; 4 to 20mA, Pulse and HART; 4 to 20mA, Pulse and RS485 Modbus
Power Supply	18-28VDC, 85-220VAC
Temperature Limits	-40 °F to 302 °F (-40 °C to 150 °C) or -40 °F to 482 °F (-40 °C to 250 °C) or -40 °F to 662 °F (-40 °C to 350 °C)
Maximum Pressure	Limited to Flange Rating
Process Connection	Wafer, CL150 ANSI Flange, CL300 ANSI Flange
Electrial Connection	½" NPT
Diagnostics	Bluetooth
Approvals	CE



TEK-VOR 1300I

Insertion Vortex Flow Meter

Services	2" to 36" (DN100 to DN900); larger sizes available upon request		
Accuracy	Process Variables	Liquids	Gas & Steam
	Volumetric Flow Rate	± 1.2% of Rate	± 1.5% of Rate
	Mass Flow Rate	± 1.5% of Rate	± 2.0% of Rate
	Temperature	± 2°F (± 1°C)	± 2°F (± 1°C)
	Pressure	± .3% of Full Scale	± .3% of Full Scale
	Density	± .3% of Reading	± .5% of Reading
Rangeability	100:1		
Temperature Range	Process Standard Temperature: -330 to 500°F (-200 to 260°C) Ambient Operating Temperature: -40 to 140°F (-40 to 60°C) Ambient Storage Temperature: -40 to 140°F (-40 to 60°C		
Pressure Range	Up to 1500 psia		
Wetted Materials	316L, Stainless Steel, PTFE		
Power Supply	DCL option: 12-36 VDC, 25mA, 1W max, loop powered (single output) DCH option: 12-36 VDC, 300mA, 9W max, (multiple outputs) DCHPOE option: 12-28 VDC, or Power over Ethernet, 5W max (multiple outputs) AC option: 100-240 VAC, 50/60Hz line power, 5W (multiple outputs)		
Output Signal	4-20 mA, HART protocol communications – Standard, Modbus, BACnet communications available		
Response Time	Adjustable from 1 to 100 seconds		
Approvals	FM, FMC, ATEX, IECEx		

TEK-VOR 1300XP

Explosion Proof Inline Vortex Flow Meter

Accuracy	Volumetric Flow Rate: ±0.7% of rate (for Liquids), ±1% of rate (for Gas or Steam) Mass Flow Rate: ±1% of rate (for Liquids), ±1.5% of rate (for Gas or Steam) Temperature: ±2°F (± 1°C) Pressure: ±0.3% of Full Scale Density: ± 0.3% of Reading (for Liquids), ± 0.5% of Reading (for Gas or Steam)
Repeatability	Mass Flow Rate: ± 0.2 % of rate Volumetric Flow Rate: ± 0.1 % of rate Temperature: ± .2° F (± .1° C) Pressure: ± .05% of full scale Density: ± 0.1% of readings
Stability	Mass Flow Rate: ± 0.2 % of rate Volumetric Flow Rate: ± 0.1 % of rate Temperature: ± .2° F (± .1° C) Pressure: ± .05% of full scale Density: ± 0.1% of readings
Response Time	Adjustable from 1 to 100 seconds
Operating Temperature	-40°F to 140°F (-40°C to 60°C)
Process Temperature	-330°F to 500°F (-200°C to 260°C)
Pressure Rating	Full Scale Operating Pressure: 30 to 1500psi (2 to 100bar) Maximum Over Range Pressure: 60 to 2750psi (4 to 175bar)
Storage Temperature	-40°F to 185°F (-40°C to 85°C)
Output Signal	Analog: 4-20mA Alarm: Solid state relay, 40VDC Totalizer Pulse: 50-millisecond pulse, 40VDC Volumetric or Loop Powered Mass: One Analog, One Totalizer Pulse, HART Multivariable option: Up to Three Analog Signals, Three Alarms, One Totalizer Pulse, HART Multivariable option: Modbus, Ethernet, or BACnet process monitoring
Wetted Materials	Standard 316L Stainless Steel, Plus Optional Carbon Steel or Hastelloy C. DuPont Teflon® based thread sealant on models with pressure transducer.
Approvals	FM, FMC, ATEX, IECEx
Display	Alphanumeric 2-line x 16-character LCD digital display Six push buttons for full-field configuration Pushbuttons can be operated with a magnetic wand without the removal of enclosure covers. The display can be mounted in 90° intervals for better viewing.
Power Supply	DCL option: 12-36VDC, 25mA, 1W max, loop powered (single output) DCH option: 12-36VDC, 300mA, 9W max, (multiple outputs) AC option: 100-240VAC, 50/60Hz line power, 5W (multiple outputs)

FLOW MEASUREMENT

TEK-FLUX 1400A

Electromagnetic Flow Meter

Service	All Conductive Liquids
Wetted Material	Electrode Material: 316 SS or Hastelloy C; Liner Materials: PTFE or Hard Rubber Special liners
Accuracy	±0.5%, ±0.3% Optional
Line Size	½" to 28" (15 to 700mm)
Repeatability	0.15%
Output Signal	4-20mA, Pulse; Modbus, RS485; HART
Power Supply	18-36VDC, 85 to 220VAC
Temperature Limits	Sensor: -4 °F to 158 °F (-20 °C to +70 °C) Converter: -4 °F to 158 °F (-20 °C to +70 °C) Integral Type: 14 °F to 122 °F (-10 °C to +50 °C)
Maximum Pressure	Limited to Flange Rating
Process Connection	150# to 600# ANSI Flange and AWWA Flange
Protection Class	IP68, IP65

TEK-FLUX 1400B

Insertion Electromagnetic Flow Meter

Service	All Conductive Liquids
Wetted Material	316 SS, Hastelloy C, PTFE
Accuracy	±1% of span
Line Size	4" to 80" (100 to 2000mm)
Repeatability	±0.2% of Span
Output Signal	4 to 20mA and Pulse
Power Supply	18 to 60VDC or 80 to 300VAC
Temperature Limits	-20ºF to 250ºF (-28ºC to 120ºC)
Maximum Pressure	250psi
Process Connection	1.5" MNPT or 2" Weldolet
Display	16 characters x 2 row LCD, 5 Digit Flow rate and 8 Digit Totalizer
Protection Class	IP66 or IP68

TEK-FLUX 1400C

Utility Electromagnetic Flow Meter

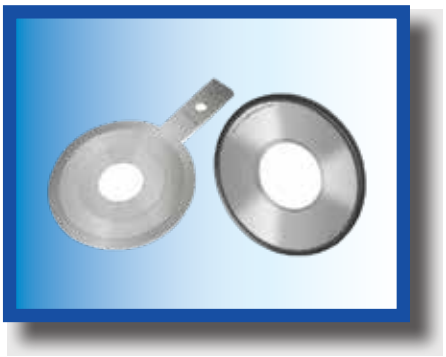
Accuracy	±0.5% (Standard)
Repeatability	±0.2% of Span
Nominal Diameter	2" to 12" (50 to 300mm)
Nominal Pressure	150# ANSI or 300# ANSI Flange
Working Temperature	Direct: -40 to 250ºF (-40 to 120ºC) Remote: -40º to 350ºF (-40 to 180ºC)
Wetted Material	Electrode Material: 316 SS Sensor Lining: Polypropylene Display Version: Integral (Optional: Remote)
Measuring Tube Material	SS 304 Carbon Stee
Transmitter Material	Die Cast Aluminium
End Connection	ANSI Flange
Measuring Range	0.7 to 39ft/s (0.2 to 12 m/s) Bidirectional
Output	Pulse and RS485 Modbus
Power Supply	Battery Powered 5 years' Battery Life
Protection Class	Sensor: IP65, Transmitter: IP67

FLOW MEASUREMENT

TEK-DP 1610D

Integral Orifice Assemblies

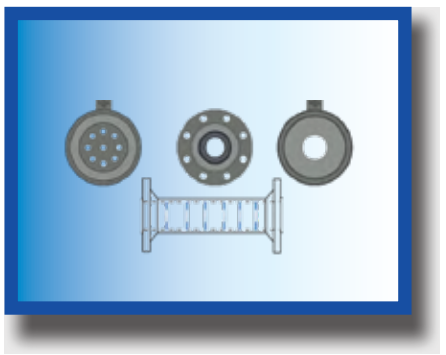
Service	Liquid, Gas, and Steam
Material	316 SS or Hastelloy C
Accuracy	Up to ±0.75%
Line Size	½" to 1 ½"(15mm to 40mm)
Beta Ratio	0.1 to 0.8
Process Connection	Flanged, Weld Neck, Beveled End, Socket, NPTF
Pressure Rating	150# to 900#
Mounting	Direct, Remote
Converter	DP and MVT transmitter available
Approvals	AGA, ISO, ASME



TEK-DP 1610E

Orifice Plate and Seal

Size	1" to 48"
Material	SS304L, SS316L, Duplex, Super Duplex, Monel, Inconel, and Hastelloy (Other material available depending on requirements)
Bore	Concentric, Eccentric, and Quadrant
Surface Finish	Better than 25 micro inches as per AGA3

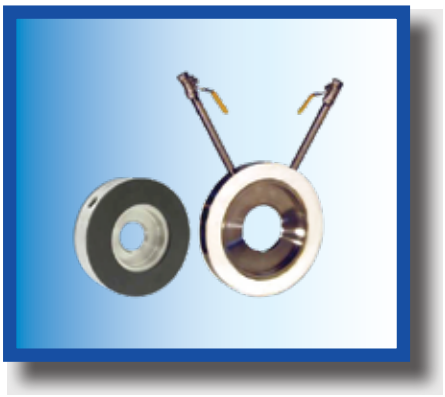


TEK-DP 1610F

Restriction Orifice

R.O. Plate Types	Square Edge Concentric- Single or multi element units Eccentric , Segmental – Single or Multi-Element DP1610 – Multi-Element Device, Flanged & Pressure Tested Single -Element Plate Only (Client Installation)
Plate Material	304SS, 304L SS, 316SS, 316L SS Ni,Cr,Mo,Alloy Steel (A182 F11 to 91) Monel, Hastelloy, Inconel (on request)
Pressure Rating	Available in accordance with National and International standards
Plate Thickness	1 Calculated taking into consideration the required process pressure reductions, flow, and the pipe size and liquid or gas process details according to clients' piping requirements and standards
Mounting	Flanged or clients piping requirements
Normal Pipe Diameters	1 inch to 24 inches(25-600mm) (Note: Other diameters on request)
Support Pipe	Full NDT with Dye Penetrant, Radiography & Hydrotest (Flanged or butt weld)
Flange Rating	ANSI 150, 300, 600, 900, 1500, 2500RF/RTJ as required

FLOW MEASUREMENT

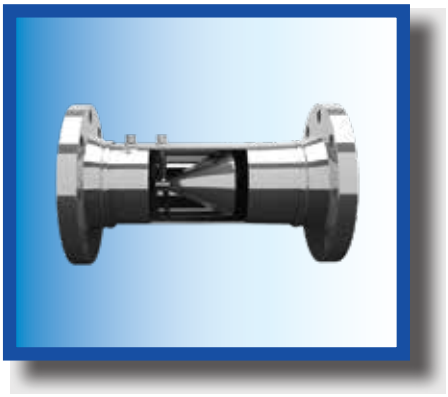


TEK-DP 1610H
Wafer Style Orifice Plate

Accuracy	±0.6% of full-scale Flow
Wetted Material	304SS, Buna-N gaskets
Temperature	-600°F to 2000°F (Dependent on Material and Gasketing)
Pressure	Limited only by pipe and flange rating restrictions (ISO: 300, 600, 900; ANSI: 1500, 2500#)
Line Sizes	¼" to 24" (6.35mm to 610mm)
Head Loss	Similar to Standard Orifice Plates
Fluids	Liquids, Gases, and Steam High Pressure and Temperature, Corrosive Fluids
Process Connection	¼" Female NPT
Pipe Requirements	General Requirements 10D up and 5D down
Bore	Concentric Standard, Eccentric, Quadrant Edge, Segmental, Multi Bore Available
Installation	Standard ANSI Flange, 150# STD (Orifice Flanges Not Required)
Weight	Varies with Line Size and Model

TEK-DP 1611I
Compact Orifice Plate

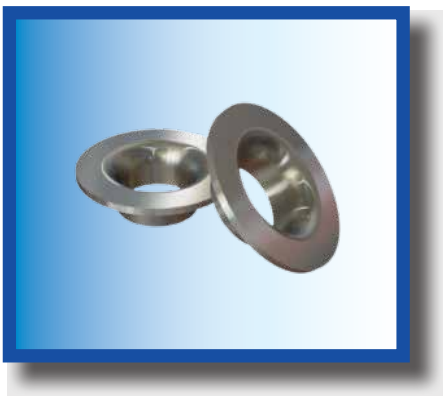
Line Sizes	Standard 0.40 or 0.65
Line Sizes	¼" to 24" (12.7 mm to 406.4mm)
Accuracy	0.5% to 1.50%
Pipe Size	2 ... 16" per ANSI/ASME, DN 50 ... 400 per EN Other sizes on request
# Pressure Ratings	# 150, 300, 600 raised face (RF) per ANSI/ASME B16.5 Class 150 ... 2500 with raised face (RF) and ring-type joint (RTJ) per ANSI/ASME B16.5
Pressure Limit	Maximum Pressure retention per ANSI B16.5 600# or DIN PN100
Design	Square Edged Concentric
Material	AISI 316/SST , Special alloys on request (Orifice plate body Welded or turned from one piece Main body thickness: 25 ... 65 mm)
Pressure Taps	NPT thread • Weld stub • Nipple same shape and dimensions for all sizes and connection options
Service	Liquid/Gas/Vapour (Vapor)



TEK-DP 1620A
Cone Flow Meter

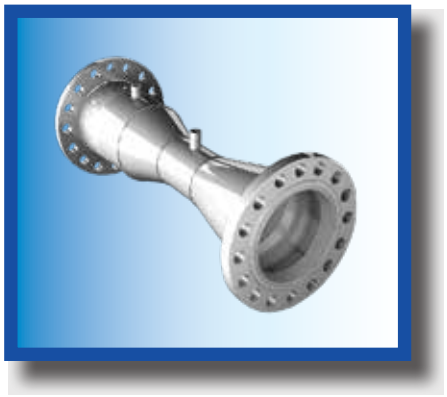
Accuracy	±0.5% with Calibration
Repeatability	±0.1% or better
Flow Ranges	10:1 and greater
Standard Beta Ratios	0.45 through 0.85 Special betas available
Instillation Piping Requirements	as per ISO 5167-5
Material	Inconel, Duplex, 304 or 316 Stainless Steel, Hastelloy C-276, Carbon Steels, Other materials available on request
Line Sizes	2" to 48" (50.8 mm to 1219.2mm)
End Connections	Flanged, Threaded, Hub or weld-end standard, Others on request
Performance Verification Testing	ISO 5167-5

FLOW MEASUREMENT



TEK-DP 1630A
Flow Nozzle

Service	Liquids and Gas
Mounting Types	Weld in type, holding ring type, flange type
Material	Carbon steel for weld in type, 304SS, 304L SS, 316SS, 316L SS for holding ring type and Ni, Cr, Mo Alloy Steel for flanged type
Pressure Taps	1D-½D taps



TEK-DP 1640A
Venturi Tube Meter

Material	All standard materials available
Tap Connections	Two 1/2" NPT per side standard, Flanged, Socket Welded, Butt Welded, Valves
Venturi Tube Sizes	1" to 48", Custom size available on order, Flanged, Socket Welded, Butt Welded Valves
Turn Down Ratio	10:1 Standard
Beta Ratio	Typically, β 0.3 to 0.75
End Connection	#150 – #2500 RF/RTJ, SO/WN Flanges or Beveled ends
Operating Temperature	Standard at -20° to 100° F, optional -40° to 1200° F
Operating Position	Vertical, Horizontal (any orientations for liquids only)
Process Products	Liquids, Liquid Hydrocarbons, Cryogenics, Natural Gas, Steam
Assembly Type	Flange, Weld in, Insertion type

TEK-DP 1650A
DProbar MultiPort Self-Averaging Flow Meter

Accuracy	±1% at 95% confidence level
Process Media	Liquid, Gas, and Steam
Line Sizes	2" to 72" Diameter (50.8 mm to 1828.8 mm)
Operating Temperature	Standard at -20°F to 100°F, optional -40°F to 1200°F
Body Material	316L SS
Isolating Valve Materials	316 SS or Carbon Steel
DProbar Material	All standard materials available including : Stainless Steels, Hastelloy and other Exotics
Process Connections	Flanged, Weld prepared ends, Threaded NPT, Others on request
Transmitter Mounting	Direct or Remote

FLOW MEASUREMENT

TEK-DP 1690B

Flow Conditioners

Size	2" to 36" (DN100 to DN900); larger sizes available upon request
Class	150# through 1500#
Standard Bores	Schedule 40, Schedule 80, Others on request
Materials	316 / 316L Stainless Steel – Standard Supply Other: Carbon Steel, Alloy 20, Hastelloy, Monel and Duplex
Type	Straightening Vane Design, Zanker Design, Nova Design
Mounting Flange	150#, 300#, 600#, 900#, 1500#, 2500#
Performance	In accordance with AGA 3/API 14.3
Fluid Types	Natural gas, methane, air, light hydrocarbons, crude oil, water
Maximum Pressure Rating	ANSI 2500

TEK-THERMAL 1700B

Thermal Mass Flow Meter

Service	Air and Nitrogen
Flow Velocity Range	0.98 to 98 ft/sec or 1.9 to 190 ft/sec or 2.9 to 295 ft/sec or
Probe Material	316 SS
Accuracy	±0.5% of Reading
Measured Variables	Mass Flow, Volume Flow, Total Flow, Temperature, Velocity
Response Time	1 second
Temperature Limits	-40 °F to 302 °F (-40 °C to 150 °C)
Max. Pressure Limit	232 PSI
Mounting Orientation	Horizontal or vertical
Process Connection	Insertion NPT
Output	4 to 20mA and Pulse standard; Modbus RS485 or HART optional
Power Requirements	13.5 VDC to 42 VDC or 85 VAC to 265 VAC
Enclosure Rating	IP65

LEVEL MEASUREMENT

Tek-Trol's level measurement devices offer the right solution for your level measuring requirements.

TEK-FLEX 4100A

Explosion-Proof Guided Wave Radar Level Transmitter

Services	Liquids, Slurries, & Solid Level	
Accuracy	Standard:	±0.08" (±2mm) (distance ≤ 10m / 33ft) ±0.02% of measured distance (distance > 10m / 33ft)
	Interface:	±0.2"(±5 mm) (distance ≤ 10m / 33ft) ±0.05% of measured distance (distance > 10m/ 33ft)
Measuring Range	Single-Piece or Single-piece fully PTFE coated: 3.28 to 13.12ft (0.6 to 4m); Segmented: 3.28 to 19.69ft (0.6 to 6m); Single Cable: 3.28 to 196.85ft (1 to 60m)	
Resolution	0.004" (0.1 mm)	
Repeatability	±0.04" (±1 mm)	
Temperature Limits	+59 to + 77°F (+15 to +25°C)	
Operating Temperture	-58 to + 482°F (-50 to +250°C); -58 to +302°F (-50 to 150°C)	
Pressure Limits	Single fully PTFE-coated: -14.5 to 580psig (-1 to 40barg); Single ceramic process seal system: -14.5 to 1450psig (-1 to 100 barg)	
Material	316L SS; Hastelloy C; PTFE	
Process Connection	Thread, Flange	
Output Signal	4 to 20mA or HART output	
Power Supply	11.5 to 30VDC; 13.5 to 34VDC	
Protection Class	IP68; IP66	
Enclosure	NEMA 4x	
Approvals	CE, Class I Div 1	

TEK-FLEX 4100B

Two-Wire Loop-Powered OEM TDR Level Transmitter

Services	Level and Volument measurement of liquids, Pastes, Powders, Granulates		
Construction	Measuring probe attached directly to a signal converter		
Temperature	-60 to +185°F / (-50 to +85°C)		
Protection Category	IP66		
Housing	Polyester-coated aluminum		
Power Supply (Terminals)	14 to 30 VDC		
Output Signal	4 mA to 20.5 mA		
User Interface Options	LCD Display		
Process Connection	Stainless steel (1.4404/316 SS)		
Measuring Range	0.73 to 4.067 m/ 2.4 to 13.3ft (1)	1 to 20 m/ 3.3 to 65.6ft	1 to 10 m/ 3.3 to 32.8ft

TEK-SOUND 4200A

Ultrasonic Level Transmitter

Services	Beverages, Pharamaceutical, Water & Wastewater, Chemical
Wetted Materials	PVC
Ranges	9", 16", 20", 30", 50", 60"
Accuracy	±0.25% of max range
Temperature Limits	Electronic Enclosure: -40 °F to 140 °F (-40 °C to 60 °C) Temperature Compensation: -40 °F to 140 °F (-40 °C to 60 °C)
Pressure Limits	Up to 72 PSI (5 bar)
Power Requirement	4 Wire: 115 VAC at 60 Hz or 230 VAC at 50Hz 3 Wire: 12 VDC to 30 VDC
Output Signal	4 mA to 20 mA as Standard or Optional RS232 or RS485 or 750 Ω on 4 Wire
Process Connection	1" NPT or 3" NPT
Enclosure Rating	NEMA 6 (IP68)
Mounting Orientation	Vertical
Agency Approvals	CE

TEK-WAVE 4300A

Explosion-Proof Radar Level Transmitter

Services	Liquids, Bulk Solids
Range	17 ft. to 100 ft. (20L" to 1200")
Temperature	-40 °F to 140 °F (-40 °C to 60 °C)
Accuracy	±0.1% of Max. Range in Lab Using 4-20 mA Current Output
Frequency	6.3 GHz
Material	PTFE
Power Input	20-35 VDC
Output	4 to 20 mA with HART
Agency Approvals	FM for Can. & US Explosion Proof Class I, Div.1, Groups B, C, D: Dust-Ignition Proof Enclosure for Class II/III Div. 1, Groups E, F, G.

TEK-SOUND 4300B

Bluetooth Radar Level Transmitter

Accuracy	±2mm
Measuring Range	45ft
Repeatability	±1mm
Temperature	-40°F to 176°F (-40°C to 80°C)
Process Pressure	-14.5 to 40psi (-1 to 3bar)
Beam Angle	8°
Process Connection	1-1/2" Male NPT
Electrical Connection	1" Male NPT with 15" lead wire
Material	PVDF
Power	<0.5W (Power supply required 24VDc with minimum 25mA)
Output	Analog: 4-20mA (2- wire) Digital: Bluetooth, HART, Modbus RS-485
Enclosure & Ratings	IP68
Approvals	CE

LEVEL MEASUREMENT

TEK-WAVE 4300C

Free Space Radar Level Transmitter

Services	Solids, Dew, Dust, Corosive Liquids
Accuracy	±3mm
Measuring Range	90ft (30m)
Process Pressure	-14.50 to 580psi (0.1 to 4Mpa)
Operating Temperature	-40 to 212°F (-40 to 100°C)
Process Connection	NPT or Flange
Electrical Connection	½" NPT (Two)
Protection Class	IP67
Output Signal	4 to 20mA with HART®, Optional Modbus RS485
Power Supply	16 to 26VDC
Blind Area	Antenna end
Response Time	About 1 second (depending on parameter setting)
Approval	CE

TEK-HYDRO 4500A-D

Differential Pressure Level Transmitter

Services	Liquid Level, Density
Accuracy	± 0.75% of span
Measuring Range	1.5 in H_2O to 1000PSID
Output	4 to 20 mA with HART
Temperature Limit	Process temperature: -40 °F to 248 °F Operating temperature: -40 °F to 185 °F
Thermal Effect	±[0.025%URL+0.125% Span]/28 °C
Power Supply	12 to 45 VDC
Process Wetted Material	316 SST
Process Connection	1/4" – 18" NPTF ½"-14"FNPT Connection Adapter (316 SST) for Tek-Hydro 4500A-D series w/ Single Diaphragm Seal
Electrical Connection/Housing	½" – 14" NPTF Conduit/Epoxy Coated-Aluminum G1/2 Conduit/Epoxy Coated-Aluminum
Agency Approval	KOSHA Flameproof Approval: Ex d IIC T6 KTL Intrinsic Safety Approval: Ex ia IIC ATEX (KEMA) Flameproof: Ex d IIC T6 or T5 ATEX (DEKRA) Intrinsic Safety FM/FMC Explosion proof (for USA & Canada) Class I/II/III, Division 1/2, Group A-D/E-G
Enclosure Rating	IP66(NEMA 4X)

TEK-HYDRO 4500A-G

Gauge Pressure Level Transmitter

Services	Liquid Level and Density
Accuracy	± 0.75% of span
Measuring Range	0.217 PSI to 8700 PSI
Output	4 to 20 mA with HART
Temperature Limit	Process temperature: -40 °F to 248 °F Operating temperature: -40 °F to 185 °F
Power Supply	12 to 45 VDC
Process Wetted Material	316 SST
Electrical Connection/Housing	½" – 14" NPTF Conduit/Epoxy Coated-Aluminum G1/2 Conduit/Epoxy Coated-Aluminum
Agency Approval	KOSHA Flameproof Approval: Ex d IIC T6 KTL Intrinsic Safety Approval: Ex ia IIC ATEX (KEMA) Flameproof: Ex d IIC T6 or T5 ATEX (DEKRA) Intrinsic Safety FM/FMC Explosion proof (for USA & Canada) Class I/II/III, Division 1/2, Group A-D/E-G
Enclosure Rating	IP67(NEMA 4X)

TEK-SUB 4800A

PTFE Submersible Level Transmitter

Service	Aggressive Liquids
Pressure Range	2.8 psig to 15 psig (2 mH2O to 10.5 mH2O)
Pressure Type	Gauge
Accuracy	±0.5% FS (max.)
Long Term Stability	±0.2% FS/year (typ.), ±0.3% FS/year (max.)
Output Signal	4 to 20 mA, RS-485, 0.5 to 4.5 VDC
Power Supply (Vs)	12 to 36 VDC
Temperature Range	Compensated: PTFE: 32 °F to 140 °F (0 °C to 60 °C) Operating: PTFE: -20 °F to 160 °F (-29 °C to 71°C) Storage: -40 °F to 257 °F (-40 °C to 125 °C)
Material	Housing: PTFE Cable: PTFE or Polyurethane Diaphragm: Ceramic (Al2O3, 96%) O-ring: FKM (Flourine rubber) or FFMK
Net Weight	0.91lb (412 g)

TEK-SUB 4800B

SUBMERSIBLE LEVEL TRANSMITTER

Pressure Range	5 psig to 20 psig (3.5 mH2O to 14 mH2O), Optional ranges available
Over Pressure	150% of span
Accuracy	±0.5% FS
Long Term Stability	±0.2% FS/year (typ.), ±0.3% FS/year (max.)
Power Supply (Vs)	12 to 36 VDC
Temperature Range	Compensated: 32 °F to 140 °F (0 °C to 60 °C) Storage: -40 °F to 257 °F (-40 °C to 125 °C)
Wetted Material	Housing: 304 SS Cable: PTFE or Polyurethane Diaphragm: 316L SS Seal Ring: Viton Oil Filling: Silicone Oil
Net Weight	0.9 lbs (408 g)

TEK-SUB 4800C

BOREHOLE SUBMERSIBLE LEVEL TRANSMITTER

Service	Liquids
Pressure Range	10 psig to 50 psig (7 mH2O to 35 mH2O), Optional ranges available
Accuracy	0.25% FS
Long Term Stability	±0.2% FS/year (typ.), ±0.3% FS/year (max.)
Output Signal	4-20 mA, RS-485, 0.5-4.5 VDC
Power Supply (Vs)	12 to 36 VDC
Temperature Range	Compensated: 32 °F to 140 °F (0 °C to 60 °C) Operating: 32 °F to 160 °F (0 °C to 70 °C) Storage: -40 °F to 257 °F (-40 °C to 125 °C)
Wetted Material	Housing: 304 SS Cable: PTFE or Polyurethane Diaphragm: 316L SS Seal Ring: Viton Oil Filling: Silicone Oil
Net Weight	0.49 lb (225 g)

TEK-SUB 4800D

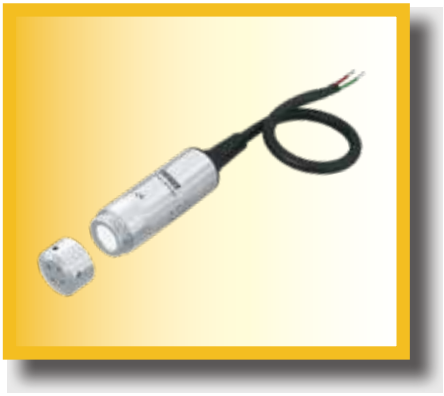
WASTEWATER SUBMERSIBLE LEVEL TRANSMITTER

Service	Muddy liquids,
Pressure Range	5 psig to 20 psig (3.5 mH2O to 14 mH2O), Optional ranges available
Accuracy	0.5% FS
Long Term Stability	±0.2% FS/year (typ.), ±0.3% FS/year (max.)
Output Signal	4-20 mA, RS-485, 0.5-4.5 VDC
Power Supply (Vs)	12 to 36 VDC
Temperature Range	Compensated: 32 °F to 140 °F (0 °C to 60 °C) Operating: -4 °F to 158 °F (-20 °C to 70 °C) Storage: -40 °F to 257 °F (-40 °C to 125 °C)
Wetted Material	Housing: 304 SS Cable: PTFE or Polyurethane Diaphragm: 316L SS Oil Filling: Silicone Oil
Net Weight	8.8 lb (4000 g)

TEK-SUB 4800E

OEM SUBMERSIBLE LEVEL TRANSMITTER

Nominal Pressure	1 to 30 Psi (0.7 to 21 mH2O)
Accuracy	0.25%FS@25°C (Typ.)
Operating Temperature	-10 to 50°C
Compensated Temperature Range	-10 to 50°C
Temperature Coefficient - Zero	±0.75 [Typ.], ±1.5 [Max.]
Temperature Coefficient - Span	±0.75 [Typ.], ±1.5 [Max.]
Long Term Stability	0.2% FS / Year
Output Signal	4-20MA DC 1.....5V30VDC DC 0.5....4.5V MODBUS RTU
EMC Test	IEC61000-6-2/IEC61000-6-3
Vibration	20g Force (20 to 2000 Hz)
Operating Temperature	14°F to 140°F (-10°C to 60°C)
Vibration	10g force (20 to 2000Hz)
Shock	100g Force (10ms)
Cycles	$10x10^5$ Cycles
Insulation Resistance	100 MΩ @ 100VDC
Housing / Diaphragm	316 Stainless Steel
Cable	PUR, PE, PTFE
Oil Filling	Silicone Oil
Protection	IP68
Protection Cap	Stainless Steel
Reverse Polarity Protection	No Damage – No Function
Weight	~250g (without cable)



TEK-SUB 4800F

FLUSH CERAMIC SUBMERSIBLE LEVEL TRANSMITTER

Pressure Range	5 to 20 Psi (3.5 to 14 mH2O)
Pressure Type	Gauge (Vented)
Overpressure	500% F.S.
Accuracy	±0.25 % F.S.
Temperature Coefficient - Zero	±0.75 F.S. (typ.), ±1.5 F.S. (Max) Over Compensated
Temperature Coefficient - Span	±0.75 F.S. (typ.), ±1.5 F.S. (Max) Over Compensated
Long Term Stability	0.2% FS
Output Signal	4-20 mA + HART, RS 485, 0.5-4.5 VDC
Power Supply (Vs)	12 to 36 VDC
Loop Resistance (R_L)	R_L < (Vs - 12) / 0.02A
Operating Temperature	114°F to 140°F (-10°C to 60°C)
Vibration	10g force (20 to 2000Hz)
Shock	100g force (10ms)
Cycles	$10x10^5$ cycles
Insulation Resistance	100 MΩ 100VDC
Compensated Temperature Range	32°F to 140°F (0°C to 60°C)
Housing	316 Stainless Steel
Cable	PUR, PE, PTFE
Diaphragm	Ceramic
Seal Ring	Viton
Weight	~1.32 lbs (600 g) [without cable]

PRESSURE MEASUREMENT

Our high-quality pressure measuring devices provide stable, reliable and accurate measurements in-process industries that require high-precision.

TEK-BAR 3110A

EXPLOSION-PROOF CAPACITIVE MULTIFUNCTIONAL DIFFERENTIAL PRESSURE TRANSMITTER

Service	Compatible gases, steam or liquids
Wetted Materials	316L S.S. Diaphragm, O-ring-PTFE, V
Accuracy	±0.075% of Span
Rangeability	100:1
Range	30" W.C to 300psid
Stability	±0.125% URL for 36 Months
Output Signal	4mA to 20mA or HART®
Power Supply	12 to 45VDC
Electrical Connection	½" NPT Female
Process Connection	¼" NPT Female
Display	5-digit LCD Display
Approvals	FM (Class I Div I), ATEX(ATEX Exd/Exia), IEC(Exd IIC T4...TP6)
Types	Differential Pressure Transmitter , Gauge Pressure transmitter, Absolute Pressure transmitter, Differential High Line Pressure Transmitter

TEK-BAR 3110B

EXPLOSION-PROOF PIEZO DIFFERENTIAL PRESSURETRANSMITTER

Service	Gases, steam or liquids
Wetted Materials	Hastelloy C and 316 L SS
Accuracy	±0.075% F.S.
Rangeability	100:1
Range	24" W.C to 1500 psid
Stability	±0.2% URL for 5 years
Output Signal	4mA to 20mA with HART® Communication, Optional / Modbus RS485
Power Supply	10.5-55 VDC (Standard)
Electrical Connection	½" NPT Female
Process Connection	½" NPT Female
Weight	8.81lb (without mounting bracket and process connection adapter)
Display	Integrated LCD Display
Approvals	CE, CS Class I Div I
Temperature	-40 °F to 185 °F (-40 °C to 85 °C)

TEK-BAR 3120A

EXPLOSION-PROOF MULTIFUNCTIONAL GAUGE/ABSOLUTE PRESSURE TRANSMITTER

Service	Compatible gases, steam and liquids
Wetted Materials	316L S.S., 316 SST, Hastelloy C, Tantalum
Accuracy	0.075% of Span Standard, High enhanced accuracy +/-0.04% of span available in conformance to +/-3 Sigma
Rangeability	100:1 turn down
Range	-14.5 to 8700psig, 0.36 to 360psia
Stability	3 years standard, 3 year +/-0.10% of URL available
Output Signal	4 mA to 20 mA with HART®
Power Supply	12 to 45VDC
Electrical Connection	½" NPT female
Process Connections	½" female NPT
Weight	3.43lb (1.56 kg)
Display	Optional 5-digit LCD
Approvals	FM(Class I Div I), ATEX(ATEX Exd/Exia), IEC(Exd IIC T4...TP6)
Temperature	-40 °F to 284 °F

TEK-BAR 3120B

EXPLOSION-PROOF PIEZO PRESSURE TRANSMITTER

Service	Gases, Steam, and Liquids
Wetted Material	316L SS and Hastelloy C
Accuracy	±0.075% of F.S. (Optional ± 0.04% F.S.)
Rangeability	20:1
Range	5 to 10000psig (5 to 1500psig)
Stability	±0.2% URL/5 year
Output Signal	4 mA to 20 mA with HART® Communication (optional Modbus RS485 and 1-5VDC)
Power Supply	10.5-55VDC (Hart 16.5-55VDC, 250 Ω)
Electrical Connection	½" NPT Female
Process Connection	½"MNPT (other options available)
Weight	3.43 lb (1.55kg)
Display	IEC60770
Approvals	CE, CSA Class I Div I
Temperature	-40 °F to 180 °F (-40 °C to 82 °C)

TEK-BAR 3120S

OEM PRESSURE TRANSMITTER

Accuracy	±0.5 or 1.0%FSO
Thermal Effects	Temp Coeff-Zero: ±0.75%FSO Temp Coeff-Span: ±0.75%FSO
Stability	±0.2%FSO/year
Pressure Range	-14.7psi to 8000psi Over Pressure: 1.5xFS
Process Temperature	Operating Temperature: -4˚F to 185˚F(-20˚C to 85˚C) Compensated Temperature Range: 14˚F to 158˚F(-10˚C to 70˚C) Storage Temperature: -40˚F to 257˚F(-40˚C to 125˚C)
Vibration	10G (20 to 2000Hz)
Output Signal	4 to 20mA, 0 to 10Vdc, 0 to 5Vdc
Power Supply	10 to 36VDC 15 to 36VDC
Material	Media Compatible: with 316L stainless steel Housing: 304 stainless steel Diaphragm: 316L stainless steel Oil Filling: Silicon Oil
Protection	IP65 (Standard) IP66 (Only for cable)
Weight	Approx. 185g

TEK-BAR 3800E

UTILITIES/NON-EXPLOSION-PROOF MULTIVARIABLE TRANSMITTER

Accuracy	± 0.075% FS
Measuring Range	Differential Pressure: 24" w.c. to 290psid Static Pressure: 36psi to 5800psi
Stability	±0.1% FS for 3 years
Materials	Sensor Body: 316 SS Isolating Diaphragm: 316 SS or Hastelloy C Cover Flange: 316 SS Nuts and Bolts: 304 SS Process Connector: 316 SS Fill Fluid: Silicone Oil or Fluorinated Oil
Protection	IP67
Weight	7.27 lb (3.3 Kg)
Process Connections	¼" Female NPT, Relief valve
Electrical Connections	½" NPT conduit connections
Power Supply (Vs)	24VDC
Output	2-wire 4-20 mA Modbus RS 485 or Pulse
Prcoess Temperature	Measuring: -58 °F to 1202 °F (-50 °C to 650 °C) Ambient: -40 °F to 185 °F (-40 °C to 85 °C) Storage: -40 °F to 185 °F (-40 °C to 85 °C); -58 °F to 185 °F (-50 °C to 85 °C)
Response Time	0.1-1.6 sec.

TEK-BAR 3800XA

EXPLOSION-PROOF MULTIVARIABLE TRANSMITTER

Measuring Range	Differential pressure sensor: 1 kPa, 10 mbar, 4 in H2O, -1 kPa, -10 mbar, -4 in H2O, 0.05 kPa 0.5 mbar 0.2 in H_2O Absolute pressure sensor: 600 kPa 6bar 87 psi, 0 abs, 6 kPa 0.06 bar 0.87 psi
Accuracy	%FS
Span Limits	± URL (TD = 0.5)
Relative Humidity	Up to 100 %. Condensation, icing: permitted
Output Signal	• 4 to 20 mA HART • Modbus RS485
Temperature	Process temperature range -200oC to 850oC (-328 to 1562 oF) with external resistance thermometer (Pt100) in four-wire circuit Storage Temperature: -67 to 248°F (-55 to 120°C)
Power Supply	Operates on terminal voltage of 10.5 to 30 VDC
Process Connections	1/4"-18 NPT (F), 1/2"-14 NPT(F), M10 with operating pressure upto 100 bar, M12 with higher operating pressure of 410 bar
Materials	Stainless steel 1.4435 (AISI 316L); Hastelloy C276®; Monel 400®; Monel 400®, gold-plated; Tantalum
Net Weight	8.3pounds (3.8kg) with Aluminum Housing
Mounting Position	Suitable for vertical and horizontal mounting
Approvals	ATEX/IEC, FM

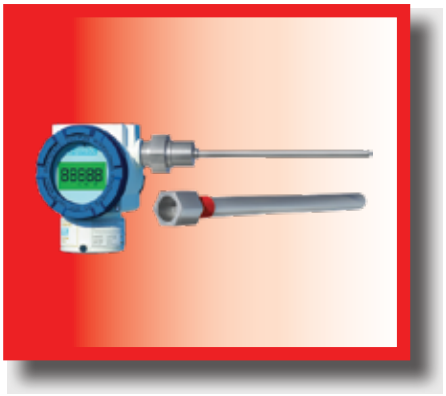
TEK-BAR 3800XP

MULTIVARIABLE TRANSMITTER/FLOW COMPUTER

Alarm Log Storage	User configurable, defaulting to 200 alarm events
Audit Trails	User configurable, defaulting to 200 audit events
Certifications/Compliance	CSA/C-US Class I, Div 1, Groups B, C, D; ambient temperature range of -40°C to +85°C (-40°F to +185°F), temperature code T6 (-40°C to 75°C) T5 (-40°C to 85°C) EN 61326-1: 2013 (Industrial Criteria); FCC 47 CFR Part 15, Subpart B; ICES 003: 2016; Measurement Canada pending
Data Memory	2 MB Static Random-Access Memory (SRAM)
Description	3800 XP – MVT / Flow Computer for Gas and Liquids
Diagnostic	AGA 10 Speed of Sound (Comparison with GC SOS Prediction)
Differential Meters	(DP, Orifice) AGA 3/ANSI/API 2530-1992 Method 2; AGA 3/ANSI/API 2530-1985; ISO 5167 pt5; DP Cone meters; Averaging Pitot; GOST: Venturi Meters – Steam Flow IF97
Display	128 x 65 backlit LCD display; User programmable scroll list and menus
Enclosure Rating	NEMA 4X/IP67
Energy	AGA 5; GPA 2172; ISO 6976
Ethylene Density Calculation	API 2565 (Ch 11.3.2.1); Ethylene NBS 1045
Input Power	10VDC to 30VDC
Keypad	4 IR sensors through glass key input. (hazardous area isolation method).
Linear Meters	(Turbine) AGA 7; AGA 9; AGA 11
Live Density Input	Sarasota liquid density meter, Solartron, UGC, 4-20mA & density meters
Operating Humidity	0-95% RH, (non-condensing)
Operating Temperature Range	-40° to +185°F (-40° to +85°C)
Processor	32 Bit
Program Memory	4 MB of flash memory
Propylene Density Calculation	API Ch 11.3.3.2
Super Compressibility	(Fpv) AGA 8 Gross-1992; AGA 8 Detail-1992; AGA 8 Short-1988; NX19; NX-19 Analysis; GERG (ISSN 0178-9414 -2004/8 – European Gas Research Group)
Turbine Meter Linearization	10 Point Frequency/K-factor Table
Volume Correction Factors	Consistent with API 2540/ASTM D1250-80/IP 200; 5/6 A/B; 23/24 A/B; 53/54 A/B; 6/24/54 C; CH 11.1 2004; Note: natural gas liquids (NGL) and liquefied petroleum gases (LPG): OLD 23/24, OLD 53/54; (Note: Table E is new standard to replace the Older version 23/24)

TEMPERATURE MEASUREMENT

Tek-Trol's Temperature measurement devices provides accurate measurement of temperature even in the most challenging conditions.



Tek-Temp 2100A

EXPLOSION-PROOF TEMPERATURE TRANSMITTER

Relative Humidity Range	0% to 100% RH
Accuracy	±0.3 of F.S.
Hysteresis	±1%
Repeatability	±0.05% of Span
Temperature	Ambient: -40 °F to 140 °F (-40 °C to 60 °C) Storage: -40 °F to 176 °F (-40 °C to 80 °C) Compensated: -40 °F to 185°F (-40 °C to 85 °C)
Power Requirements	12 VDC to 45 VDC
Output Signal	4 mA to 20 mA with HART®
Response Time	15 s
Electrical and Housing Connections	½" to 14" NPT
Material	Aluminium
Display	Optional 5 digit LCD display
Weight	2.64 lb (1.2 kg)
Enclosure Rating	For Class 1, Division 1
Agency Approvals	CE, FM

Tek-Temp 2100B

TEMPERATURE TRANSMITTER

Accuracy	Better than 0.1% of span
Sensor	**RTD:** Pt 100, Ni100, lin. R, **TC:** B, E, J, K, L, N, R, S, T, U, W3, W5
Ambient Temperature	-40°F to 185°F (-40°C to 85°C)
Output	RTD, TC, 4-20mA, 4-20mA with HART
Process Connections	Threaded, Flanged, Tri-Clamp, Special
Update Time	Less than 0.5 seconds
Damping Time	32 seconds maximum. 5 seconds default amping
Material of Construction	Die-Cast Aluminium
Weight	0.5 KG (1.1 LBS)
Enclosure Rating	NEMAX IP66/68 rating
Approval	ATEX, IECEx, FM, CSA, DNV Inmetro, CE

Tek-Temp 2300A

EXPLOSION-PROOF TWO WIRE TEMPERATURE TRANSMITTER

Accuracy	Better than 0.05% of the selected range
Sensor Type	**RTD:** Pt 100, Ni100, lin. R **TC:** B, E, J, K, L, N, R, S, T, U, W3, W5 **Voltage:** -800... +800 mV
Operating Temperature	-40°F to 185°F (-40°C to +85°C)
Compensated Temp	68°F to 82°F (20°C to 28°C)
Power supply	8.0 VDC to 30VDC
Output Signal	4...20 mA
Response Time	01 Sec to 60 Sec
Weight	0.11 lbs (50g)
Enclosure Rating	IP00
Programming	HART
Humidity	<95% RH (non-cond.)
Agency Approval	ATEX, IECEx, FM, CSA, DNV Marine, SIL

SOLUTIONS

Diagnostic systems that provide real-time validation and monitoring.

TEK-DPRO FLOW SOLUTION

Differential Pressure (DP) devices are used widely in many applications and form the largest installed base of all flow measurment devices. DP flow meter designs are simple and sturdy and are therefore reliable. Tek- Trol offers a comprehensive range of DP flow meters-not just the primary elements but also the secondary transmitters and state-of-the-art DP flow monitoring and validation system, popularly known as the TEK-DPro Flow Solutions.

Features

- Supports all differential pressure flow meters
- Supports all smart pressure differential transmitters
- Management and simulation of captured data points
- Enhanced data logging functionality, both on-demand or time-based
- Graphical process variable trending views
- Simultaneously connect to multiple primary and secondary devices
- Ideal tool for evaluating multiple devices simultaneously
- Fault in Repeatability Test Interpretation
- Fault in Control Chart Interpretation
- Fault in Composition Comparison

STEAM QUALITY METER

Unique steam quality meter with two proven technologies provides accurate measurement of steam and steam quality. The meter produces a reliable steam quality (dryness) measurement and steam mass flow rate reading in saturated steam service. It can also measure real-time steam quality in homogenous steam flow.

Features

- Provide fluid density, volume, and mass flow measurement
- Predicts gas volume flow without knowing fluid density
- Provide a reliable steam quality (steam dryness)
- Calculate density of changing gas mixtures
- Measure homogenous flow (both volume and density)
- Mass flow equations for additional diagnostic information and verification
- Reduces initial cost, installation cost and cost-of ownership over the lifetime of the instrument
- Easy to install and commission

IOT MONITORING SYSTEM

Internet of Things (IoT) is Tek-Trol LLC's one stop solution that helps connect your products, plants, systems remotely, enabling you to tackle the wealth of data achieved with advanced analytics. IoT connects real things to the digital world and provides powerful industry applications and digital services to help drive business success. It automates, optimizes and future-proofs systems to achieve new heights of digital performance.

Features

- Elasticity and Scale up/ down
- Self-service provisioning and automatic deprovisioning
- Application programming interfaces (APIs)
- Billing and metering of service usage in a pay-as-you-go model
- Performance monitoring and measuring
- Security

SOLUTIONS

Diagnostic systems that provide real-time validation and monitoring.

MPFM MULTI-PHASE FLOW METER

MPFM Multi-Phase Flow Meter performs continuous three-way separation of gas, oil and water in a one-pass process using a simple mechanical device, without added heat, chemicals or dead-end filters. It represents an inexpensive and scalable improvement in industrial oil and gas, wastewater processing, cleaning of brine waste from oil and gas production and field water purification, and food and beverage processing.

Features

- Ability to accurately meter produced gas, water, and oil
- Completely separates gas from liquids
- Monitors gas volume fraction (GVF) and liquid volume fraction (LVF) from wells
- Measures net oil/water cut

WET GAS

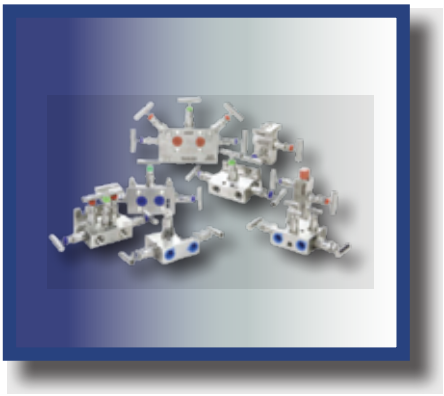
Wet gas flow is defined as a gas flow contains a small amount of liquid. It is an adverse flow condition for all flow meters and incorporates a wide range of flow conditions, where different operators require different wet gas meter capabilities. Tek-Trol's Wet Gas Metering range is uniquely positioned to provide the operator with the optimum solution for wet-gas flow measurement, which is significantly more complicated than measuring the single-phase gas flow.

Features

- Operator friendly
- Low maintenance
- Predict liquid loading value
- Uses wet gas correction algorithm
- Simple and robust

ACCESSORIES

Our wide range of instrumentation accessories, products and configurations for optimum efficiency and durability for all industrial applications.



Tek-Manifold 7500A Series Manifold

End Connections	Flange × Flange, Flange × ½" FNPT, Male × Female ½" NPT
Working Pressure	6000psi (413 Bar) and 10000psi (680 Bar)
Temperature Rating	PTFE, 450 °F (232 °C)
Stem Packing	PTFE
Lubricant	Moly Disulphide
Materials of Construction	SS316

INDICATORS

A full line of digital panel meters, indicators and control instrumentation for process indication and control.

TEK-LCD 7800A

NEMA 4X LOOP-POWERED PROCESS AND LEVEL INDICATOR

Display	Upper: Five digits (-9999 to 99999) 0.70" (17.8 mm) high,7-segment, automatic lead zero blanking; -0L1: 0.6" high with level bar graph. Lower: Seven characters 0.4" (10.2 mm) high, 14 segment alphanumeric. Symbols: for high & low alarm, Password Lock. Backlight: White
Decimal Point	Upper process display has up to four decimal places or none: d.dddd d.ddd, d.dd, d.d, or ddddd
Display Update Rate	Ambient > -25 °C: 2 Updates/Second. Ambient < -25 °C: 1 Update/5 Seconds
Externally Powered Blacklight	Voltage Range: 9-36 VDC
Display Orientation	Display may be mounted at 90° increments up to 270° from default orientation
Range	Over: Display flashes 99999 Under: Display flashes -9999
Noise Filter	Programmable – Lo, Med, Hi, or Off
Advanced Functions	Linear, square root, or programmable exponent
Alarm Indication	Flashing display plus HI/LO indicators
Temperature Range	Operating: -40 °C to 75 °C Storage: -40 °C to 75 °C
Relative Humidity	0 to 90% non-condensing
Connections	Screw terminals accept 12 to 22 AWG wire
Enclosure	EMA 4X, IP65 plastic field enclosure. Color: gray. Material: Polycarbonate with UV Stabilizer. Three ¾" NPT threaded conduit openings. Two ¾" NPT plastic conduit plugs, with 1.29" wrenching flats and a screwdriver slot, are included.
Mounting	May be mounted directly to conduit. Two slotted flanges for wall mounting or NPS 1½" to 2½" or DN 40 to 65 mm pipe
Weight	1.65 lbs (26.4 oz, 0.75 kg)

TEK-LCD 7800B

EXPLOSION-PROOF LOOP-POWERED PROCESS AND LEVEL INDICATOR

Display	Five digits (-9999 to 99999) 0.70" (17.8 mm) high, 7-segment, automatic lead zero blanking
Decimal Point	Upper process display has up to four decimal places or none: d.dddd d.ddd, d.dd, d.d, or ddddd
Display Update Rate	Ambient > -25°C: 2 Updates/Second. Ambient < -25°C: 1 Update/5 Seconds
Externally Powered Blacklight	Voltage Range: 9-36 VDC
Display Orientation	Display may be mounted at 90° increments up to 270° from default orientation
Range	Over: Display flashes 99999 Under: Display flashes -9999
Programming Method	Four SafeTouch® through-window buttons when cover is installed. Four internal pushbuttons when cover is removed
Noise Filter	Programmable – Lo, Med, Hi, or Off
Recalibration	Recalibration is recommended at least every 12 months
Max./Min. Display	Max/Min readings reached by the process are stored until reset by the user or until power to the meter is turned off
Password	Programmable password restricts modification of programmed settings
Advanced Functions	Live input calibration, linearization, square root, or programmable exponent.
Alarm Indication	Flashing display plus HI/LO indicators
Non-Volatile Memory	All programmed settings are stored in non-volatile memory for a minimum of ten years if power is lost
Normal Mode Rejection	64 dB at 50/60 Hz
Temperature Range	Operating: -40 °C to 75 °C Storage: -40 °C to 75 °C
Relative Humidity	0 to 90% non-condensing
Connections	Screw terminals accept 12 to 22 AWG wire
Enclosure	Explosion-proof die-cast aluminum with glass window, corrosion resistant epoxy coating
Mounting	May be mounted directly to conduit. Two slotted flanges for wall mounting or NPS 1½" to 2½" or DN 40 to 65 mm pipe mounting.
Weight	5.00 lbs (80 oz, 2.27 kg)

TEK-LCD 7800C

PANEL MOUNT LOOP-POWERED PROCESS INDICATOR

Note: All specifications apply to operation at 77°F (25°C)

Display	Five Digits Top Display (-9999 to 99999)	¾" (17.8 mm) high 14-segment alphanumeric Automatic lead zero blanking
	Seven Characters (Engineering Units)	½" (10.2 mm) high 14-segment alphanumeric
	Symbols	High & Low Alarm, Password Lock
	Backlight	White
Display Update Rate	Ambient > -13°F: 2 Updates/Second Ambient < -13°F: 1 Update/5 Seconds	
Over Range	Display flashes 99999	
Under Range	Display flashes -9999	
Programming Method	Four through-window buttons when cover is installed Four internal push-buttons when cover is removed	
Recalibration	Recalibration is recommended at least every 12 months	
Max./Min. Display	Max/Min readings reached by the process are stored until reset by the user or until power to the meter is turned off	
Password	Programmable password restricts modification of programmed settings	
Non-Volatile Memory	All programmed settings are stored in non-volatile memory for a minimum of ten years if power is lost	
Normal Mode Rejection	64 dB at 50/60 Hz	
Accuracy	±0.05% FS ±0.001mA	
Temperature Range	Operating Temperature: -40°F to 167°F(-40°C to 75°C) for safe area products -40°F to 158°F (-40 to 70°C) for hazardous area products Storage Temperature: -40°F to 185°F (-40 to 85°C)	
Relative Humidity	0 to 90% non-condensing Printed circuit boards are conformally coated	

TEK-LCD 7801C

NEMA 4X PANEL MOUNT MULTI-CHANNEL CONTROLLER

Display	Color; QVGA (320×240 px), 5.7" (145 mm) diagonally, white backlight; Bar Graph: Twenty divisions; Numerical: Up to 15 digits (±999,999,999,999,999); Feet & Inches Format: 99,999" 11.9"
Screen Bar Graph	Enable/disable: Channels, totals, timers; Bar Graph scale: 0 – 100%, independent of channel scale; Twenty Divisions: 5% each; Screen: Select to show bar graph or not
Color Selection	65 colors selection, customize bar graph, panel background, and text for normal and alarm conditions
Decimal Point	0 to 15 decimal places, user selectable
Display Update Rate	User selectable: 0.1 to 0.5 sec (10 updates/sec to 2 updates/sec)
Programming Method	Front panel buttons, external buttons
Number of Alarms	Up to 64 high or low, logic AND & OR Automatic (non-latching) or latching, On & Off time delays, can be assigned to one or more relays
Internal Buzzer	60 dBA @ 24 inches (61 cm)
Input & Output Cards	Max Number of I/O Cards: 7; Analog Inputs: 4/card; Pulse Inputs: 4/card; Analog Outputs: 5/card; Relays: 5/card
Number of Screens	Up to 20 screens with 1 to 8 PVs or items per screen
Number of Channels	Up to 99 channels; Input Source: 4-20 mA, Pulse, Digital, Modbus, another Channel, Total, Timer, Alarm, Date & Time, mA Output, Relay Output, Digital Output, or Modbus Output
Non-Volatile Memory	Settings stored for a minimum of 10 years
Output	4 to 20mA
Accuracy	±0.03% of full scale ±1 count
Temperature Drift	Better than: 20 ppm/°C from -40 to 60°C ambient
Power Supply	Isolated 24 VDC @ 200 mA/input Max current: 1,600 mA (All inputs), (8) Analog Input @ 200 mA max, (28) Analog Input @ 20 mA max Available on AC or DC powered units
Temperature	Operating Temperature : -40°F to 140°F (-40°C to 60°C) Storage Temperature: -40°F to 140°F (-40°C to 60°C)
Relative Humidity	0 to 90% non-condensing
Connections	Removable screw terminal blocks Inputs/Outputs: 12 to 24 AWG wire; Digital I/O: 16 to 30 AWG; RS-485: 12 to 24 AWG wire RJ45 Ethernet connection; USB ports: Micro-USB (Device), cable included
Enclosure	Enclosure Body: Thermoplastic Polyester, Color: Gray; Display Window: Clear Polycarbonate, GE LEXAN HP12W; Front Panel Keys: Silicone rubber
Mounting	Panel-mounting frame and twelve screws (provided) Cut-out: 10 ¼" x 10 ¼" ±1/16" (254mm x 254mm ±1.3 mm) (H x W); Panel thickness: 1/16" – 1/4" (1.8 mm to 8.9 mm); Clearance behind panel: 6" (150mm)
Dimensions	10 ¾" x 10 ¾" x 4 ¾" (276mm x 276mm x 124mm) (H x W x D)
Weight	7.4lb (3.4kg) approx.
Number of Totalizers	Up to 32 totalizers, 15 digits with comma separator
Date & Time Format	Month, day, year; 24 hour; 00: Midnight hh: mm: ss
Battery	3 V, P/N: CR2032 included
Isolation	1500 V: Input-to-power line; 500 V: Input-to-input, input-to-output; All analog inputs and analog outputs are isolated from each other

BATCHERS

TEK-BATCH 7900A

ANALOG INPUT BATCHER CONTROLLER

Display	Upper display: 0.60" (15 mm) high. Lower display: 0.46" (12 mm) high. Both are 6 digits (-99999 to 999999), red LEDs
Default Display Assignment	The upper display shows batch total. The lower display shows rate with alternating units, and can be switched to show grand total, batch count, or preset with the STOP key
Custom Display Assignment	The upper and lower displays may be assigned to rate, total, grand total, batch count, preset, set points, units (lower display only), alternating R & T, R & GT, preset & rate, max & min, or a Modbus display register. Any rate/total/grand total display may be programmed to alternate with a custom unit or tag
Alternating Display	Displays alternate every 10 seconds when display is selected or the batch is paused
Display Update Rate	5/second (200 ms)
Range	Over: Display flashes 999999 Under: Display flashes -99999
Front Panel	NEMA 4X, IP65
Operating Methods	Three programmable front panel buttons (default START, BATCH, STOP), digital inputs, PC and MeterView Pro software, and Modbus registers.
Programming Methods	Four SafeTouch through-glass buttons when cover is installed. Four internal pushbuttons when cover is removed.
F4 Digital Input Contacts	3.3 VDC on contact. Connect normally open contacts across F4 to COM.
F4 Digital Input Logic Levels	Logic High: 3 to 5 VDC
Power Options	85-265 VAC 50/60 Hz, 90-265 VDC, 20 W max, or optional model with 12-24 VDC ±10%, 15 W max.
Connections	Removable screw terminal blocks accept 12 to 22 AWG wire, RJ45 for external relays, digital I/O, and serial communication adapters.
Enclosure	Explosion-proof die cast aluminum with glass window, corrosion resistant epoxy coating, color: blue. NEMA 4X, 7, & 9, IP68. Default conduit connections: Four ¾" NPT threaded conduit openings and two ¾" NPT metal conduit plugs with 12mm hex key fitting installed. Additional conduit opening configurations may be available; verify quantity and sizes on specific device labeling during installation.
Mounting	Four slotted flanges for wall mounting or NPS 1½" to 2½" or DN 40 to 65 mm pipe mounting
Weight	16.0 lbs (7.26 kg)
USB Connection	Compatibility: USB 2.0 Standard, Compliant Connector Type: Micro-B receptacle Cable: USB A Male to Micro-B Cable Driver: Windows 98/SE, ME, 2000, Server 2003/2008, XP 32/64-Bit, Vista 32/64-Bit, Windows 7 32/64-Bit, Windows 10 32/64-Bit Power: USB Port

TEK-BATCH 7900B

NEMA 4X LARGE DISPLAY BATCHER

Operating Temperature	32°F to 122°F (0°C to 50°C)
Storage Temperature	-40°F to 185°F (-40°C to 85°C)
Humidity	0-95% Non-condensing
Extended Temperature	-4°F to 131°F (-20°C to 55°C)
Power Input	110 VAC Power: 85 to 127 Vrms, 50/60 Hz 220 VAC Power: 170 to 276 Vrms, 50/60 Hz DC Power: 2 VDC (10 to 14 VDC), 24 VDC (14 to 28 VDC) Power Consumption: AC: 11.0 VA (11W), DC: 300 mA max.
Accuracy	0.02% FS at 68°F
Ranges	Voltage: 0-10 VDC, 0-5 VDC, 1-5 VDC, Current: 4-20 mA, 0-20 mA
Listing	UL/C-UL Listed (File No. E192404), CE Compliant
Data Logging	The data logger captures print list information to internal storage for approximately 1000 transactions. This information can be used for later uploading or printing. Storage format is selectable for Comma-Carriage Return or Printer formats.
Relay Outputs	Number of relays: 2 , Contact Style: Form C contacts Contact Ratings: 5 amp, 240 VAC or 30 VDC
Flow Meter and Computations	Meter Types: All linear and square law meters supported including: vortex, turbine, magnetic, PD, target, orifice, venturi, v-cone, coriollis and many others Linearization: Square root, 16 point table or UVC table Computations: Volume, Corrected Volume and Mass Fluid Computations: Temperature, Density, Viscosity and API 2540 for petroleum

FLOW COMPUTERS

TEK-FCA 8000A

FIELD MOUNT FLOW COMPUTER

Electrical Connection	½" and ¾" NPT conduit connections
Power Requirements	DCH option: 12-36 VDC, 300mA, 9W max DCHPOE : 12-28 VDC or Power over Ethernet, 5 Watts maximum
Display	2 Line X 16 Character LCD Alphanumeric Digital Display, Six Push buttons For Full Field Configuration, Mounted In 90° Intervals For Better Viewing
Input Signals	4-20mA (Flow, Pressure), Pulse, Frequency RTD (Ohm), BACnet
Approvals	FM, FMI, ATEX, IECEx
Process Connection	¼" NPT on anges or manifold mount
Materials	316 SS or Hastelloy C
Range	Differential Pressure/ Static Pressure: 150"- 400" in H_2O up to 2000 PSI

TEK-FC 8000B

NEMA 4X FLOW COMPUTER

Temperature	Operating: -20 °C to 55 °C Storage: -40 °C to 85 °C Humidity: 0-95% Non-condensing
Materials	UL, CSA, VDE approved
Display	Type: 2 lines of 20 characters, Types: Backlit LCD, OLED and VFD ordering options Character Size: 0.35"(8.3mm) nominal user programmable label descriptors and units of measure
Enclosure	Materials: Aluminum, UL94V-0 Keypad, Enclosure Rating: NEMA 4X Provisions for sealing unit
Power Input	The factory equipped power option is internally fused. An internal line to line filter capacitors provided for added transient suppression. MOV protection for surge transient is also supported Universal AC Power: 85 to 276 Vrms, 50/60 Hz DC Power Option: 24 VDC (16 to 48 VDC) Power Consumption: AC Power: 6.5 V/A DC Power: 300 mA max
Flow Meter Types	Linear: Vortex, Turbine, Positive Displacement, Magnetic, GilFlo, Laminar and others Square Law: Orifice, Venturi, Nozzle, V-Cone, Wedge, Averaging Pitot, Target and others Multi-Point Linearization: May be used with all flowmeter types. Including: 16 point, UVC and dynamic compensation
Accuracy	0.02% FS at 20 °C
Ranges	Voltage: 0-10 VDC, 0-5 VDC, 1-5 VDC Current: 4-20 mA, 0-20 mA, 4-20 mA stacked, 0-20 mA stacked
Real Time Clock	The Flow Computer is equipped with a non-volatile real time clock with display of time and date. Format: 24 hour format for time Day, Month, Year for date

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