



TE SENSOR SOLUTIONS FOR ENVIRONMENTAL MONITORING

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TE Connectivity (TE) is a global technology leader, providing connectivity and sensor solutions essential in today's increasingly connected world. With the acquisition of Measurement Specialties (MEAS), a global designer and manufacturer of sensors and sensor-based systems, TE is one of the largest sensor companies in the world. Our broad portfolio of sensor technologies is designed for a wide range of applications. We collaborate with engineers to help transform concepts into creations—redefining what's possible using intelligent, efficient and high-performing TE products and solutions proven in harsh environments.



INNOVATION

SENSOR SOLUTIONS

- PRESSURE
- TEMPERATURE
- VIBRATION
- WATER LEVEL

TE Sensor Solutions leads the water-resources monitoring market with long standing industry experience in the design and manufacture of water-level sensors and systems. Our expertise in media-isolated pressure sensors provides our customers with unique advantages in creative product development and consistent product performance.

KPSI and TruBlue water-level transducers are available in custom ranges and a wide choice of accuracies, materials, and cabling. With your choice of analog or digital output, our sensors are easily adapted to any data system. Or, use self-powered units with on-board memory for remote monitoring or long term deployment.



ENVIRONMENTAL MONITORING APPLICATION SOLUTIONS

TE Sensor Solutions supports customers in water level markets, including government agencies, research institutions, academia, engineers and consultants, contractors, integrators, distributors, and OEMs. Highly accurate and precise, rugged and reliable instruments meet the most demanding requirements for monitoring surface waters, ground waters, estuary and ocean waters, and for managing drinking water, wastewater, storm water, landfill leachate, managing agricultural systems and hydropower systems. Our broad technology portfolio and easy-to-use products make us the supplier of choice for professionals responsible for monitoring natural waters or managing water processes.

WATER USAGE

- Dam operations
- Landfill leachate level
- Line pressure monitoring
- Pump and lift stations
- Pump control
- Submersible pump monitoring
- Tank level monitoring

WATER RESOURCE

- Aquaculture
- Flood warning and storm surge monitoring
- Groundwater monitoring
- Oceanographic research
- Remediation
- Slug test and aquifer characterization
- Stream gauging
- Surface water monitoring
- Tide gauging



TE SENSOR SOLUTIONS FOR ENVIRONMENTAL MONITORING

PRESSURE

Analog Pressure Sensors



KPSI 27, 28

Accuracy	±0.5%, ±0.25%
Options	IP68 submersible option
Range	1 - 300 psi (Vented) 5 - 2000 psi (Sealed) 15 - 2000 psi (Absolute)
Max Over-range	2X FS
Output	4-20 mA, 0-5 VDC, 0-2.5 VDC 0-4 VDC, 0-10 VDC, 1.5-7.5 VDC
Operating Temp	-20°C to 60°C
Dimensions (mm)	25.4 x 86.6
Typical Apps	Line pressure monitoring, pump and lift stations, pump control, tank level monitoring, underwater research
Agency Approvals	CE, WEEE, RoHS, UL and FM (Intrinsically Safe)



KPSI 30

Accuracy	±0.1%
Options	IP68 submersible option
Range	2 - 300 psi (Vented) 5 - 500 psi (Sealed, Absolute)
Max Over-range	2X FS
Output	4-20 mA, 0-5 VDC, 0-2.5 VDC 0-4 VDC, 0-10 VDC, 1.5-7.5 VDC
Operating Temp	-20°C to 60°C
Dimensions (mm)	25.4 x 86.6
Typical Apps	Line pressure monitoring, pump and lift stations, pump control, tank level monitoring, underwater research
Agency Approvals	CE, WEEE, RoHS, UL and FM (Intrinsically Safe)

TEMPERATURE

Digital Temperature Sensors



KPSI 380

Accuracy	±0.1°C
Range	-20°C to 60°C
Connection	Open port nosepiece
Output	SDI-12, RS-485
Operating Temp	-20°C to 60°C
Dimensions (mm)	19.0 x 127.0
Typical Apps	Groundwater monitoring, surface water monitoring, storm water, dam operations and stream gauging

VIBRATION

Submersible Accelerometers



8042

Package	Titanium
Type	Stud mount
Sensitivity (mV/g)	500, 100, 10
Unique Features	<ul style="list-style-type: none">• Industrial applications• Submersible• IP68, >100 meters• 16kHz bandwidth
Operating Temp	-20°C to 80°C
Dimensions (mm)	22.23 x 48.26
Typical Apps	Submersible pump monitoring, underwater research

TE SENSOR SOLUTIONS FOR ENVIRONMENTAL MONITORING

WATER LEVEL

Water Level Data Loggers



TruBlue 555, 575 Baro, 585 CTD

Accuracy	±0.05% FS TEB (TruBlue 555, 575, 585) 1% of reading or 20 µs/cm (TruBlue 585)
Range	0 - 5 ft H ₂ O to 0 - 700 ft H ₂ O (TruBlue 555, 585) 8 - 16 psia (TruBlue 575) 5 - 200,000 µs/cm (TruBlue 585)
Max Over-range	3X FS (TruBlue 555, 575, 585) 32 psia (TruBlue 575)
Output	RS-485 / SDI-12
Data Logging Memory	8 MB
Operating Temp	0°C to 50°C
Dimensions (mm)	19 x 390
Typical Apps	Groundwater monitoring, surface water monitoring, oceanographic research, barometric pressure monitoring



TruBlue 255 Level

Accuracy	0.05% FS TEB
Range	0-658 ft H ₂ O
Max Over-range	3X FS
Output	RS 485
Data Logging Memory	8 MB or 56 MB
Operating Temp	-20°C to 80°C
Dimensions (mm)	19 x 222
Typical Apps	Flood and storm monitoring, wave studies and rapid sampling, stream and stage gauging, slug and pump test, aquifer characterization



TruBlue 275 Baro

Accuracy	0.05% FS TEB
Range	8-16 psia
Max Over-range	3X FS
Output	RS 485
Data Logging Memory	8 MB or 56 MB
Operating Temp	0°C to 50°C
Dimensions (mm)	19 x 222
Typical Apps	Barometric pressure monitoring

Digital Level Sensors



KPSI 500

Accuracy	±0.05% FS TEB
Range	10 - 230 ft H ₂ O
Max Over-range	2X FS
Output	SDI-12
Operating Temp	-20°C to 60°C
Dimensions (mm)	25.4 x 197
Typical Apps	Groundwater monitoring, surface water monitoring, oceanographic research



KPSI 501

Accuracy	±0.01 ft H ₂ O
Range	10 - 50 ft H ₂ O
Max Over-range	2X FS
Output	SDI-12
Operating Temp	-20°C to 60°C
Dimensions (mm)	25.4 x 197
Typical Apps	Groundwater monitoring, surface water monitoring, oceanographic research



KPSI 353, 355

Accuracy	±0.10% FS TEB (KPSI 353) ±0.05% FS TEB (KPSI 355)
Range	10 - 230 ft H ₂ O
Max Over-range	2X FS
Output	SDI-12
Operating Temp	-20°C to 60°C
Dimensions (mm)	19 x 243
Typical Apps	Groundwater monitoring, surface water monitoring, oceanographic research



KPSI 351

Accuracy	±0.01 ft H ₂ O
Range	10 - 50 ft H ₂ O
Max Over-range	2X FS
Output	SDI-12
Operating Temp	-20°C to 60°C
Dimensions (mm)	19 x 243
Typical Apps	Groundwater monitoring, surface water monitoring, oceanographic research

WATER LEVEL

Analog Level Sensors—1" Bore



KPSI 700, 710, 720

Accuracy	±0.25%, ±0.50%, ±1.00% FSO
Range	Custom ranges from: 2.3 - 700 ft H ₂ O (Vented) 10 - 700 ft H ₂ O (Sealed) 35 - 700 ft H ₂ O (Absolute)
Max Over-range	2X FS
Output	4 - 20 mA, 0 - 5 VDC, 0 - 2.5 VDC, 0 - 4 VDC, 0 - 10 VDC, 1.5 - 7.5 VDC
Operating Temp	-20°C to 60°C
Dimensions (mm)	25.4 x 86.6
Typical Apps	Groundwater monitoring, surface water monitoring, oceanographic research, pump control, life stations, landfill leachate
Agency Approvals	CE, WEEE, RoHS, UL and FM (Intrinsically Safe)



KPSI 730, 735

Accuracy	±0.10%, ±0.05% FSO
Range	Custom ranges from: 5 - 700 ft H ₂ O (Vented: KPSI 730) 0 - 5 ft H ₂ O to 0 - 700 ft H ₂ O (Sealed, Absolute: KPSI 730) 6 - 700 ft H ₂ O (Vented KPSI 735)
Max Over-range	2X FS
Output	4 - 20 mA, 0 - 5 VDC, 0 - 2.5 VDC, 0 - 4 VDC, 0 - 10 VDC, 1.5 - 7.5 VDC
Operating Temp	-20°C to 60°C
Dimensions (mm)	25.4 x 86.6
Typical Apps	Groundwater monitoring, surface water monitoring, oceanographic research, pump control, life stations, landfill leachate
Agency Approvals	CE, WEEE, RoHS, UL and FM (Intrinsically Safe)

Analog Level Sensors—0.75" Bore



KPSI 320, 330, 335, 342

Accuracy	±0.10%, ±0.05% FSO (KPSI 330, 335) ±0.25% FSO (KPSI 320) ±0.25% FS TEB (KPSI 342)
Range	Custom ranges from: 5 - 700 ft H ₂ O (Vented: KPSI 320, 330, 335) 10 - 700 ft H ₂ O (Vented KPSI 342) 0 - 5 ft H ₂ O to 0-700 ft H ₂ O (Sealed: KPSI 330, 342) 10 - 700 ft H ₂ O (Sealed: KPSI 320) 35 - 700 ft H ₂ O (Absolute: KPSI 320, 330, 342)
Max Over-range	2X FS
Output	4 - 20 mA, 0 - 5 VDC, 0 - 2.5 VDC, 0 - 4 VDC, 0 - 10 VDC, 1.5 - 7.5 VDC (KPSI 320, 330, 335) 4 - 20 mA (KPSI 342)
Operating Temp	-20°C to 60°C (KPSI 320, 330, 335) -20°C to 85°C (KPSI 342)
Dimensions (mm)	19 x 151
Typical Apps	Groundwater monitoring, surface water monitoring, oceanographic research, pump control, lift stations, landfill leachate, tailrace and forebay monitoring
Agency Approvals	CE, WEEE, RoHS, UL and FM (Intrinsically Safe) (KPSI 320, 330, 335) CE, WEEE, RoHS (KPSI 342)



KPSI 300DS

Accuracy	±0.50% FSO
Range	Custom ranges from: 700 - 4614 ft H ₂ O
Max Over-range	2X FS
Output	4 - 20 mA, 0 - 5 VDC, 0 - 2.5 VDC, 0 - 4 VDC, 0 - 10 VDC, 1.5 - 7.5 VDC
Operating Temp	-20°C to 60°C
Dimensions (mm)	19 x 215
Typical Apps	Down hole, level control, pump control
Agency Approvals	CE, WEEE, RoHS

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WATER LEVEL

Flexible Diaphragm Level Sensors



KPSI 705

Accuracy	±0.25% FSO
Options	Optional ETFE
Range	Custom ranges from 6 - 115 ft H ₂ O
Max Over-range	2X FS
Output	4 - 20 mA, 0 - 5 VDC, 0 - 2.5 VDC, 0 - 4 VDC, 0 - 10 VDC, 1.5 - 7.5 VDC
Operating Temp	-20°C to 60°C
Dimensions (mm)	25.4 x 86.6
Typical Apps	Wastewater, lift stations, pump control, slurry tank liquid level, tank level
Agency Approvals	CE, WEEE, RoHS, UL and FM (Intrinsically Safe)



KPSI 745, 750

Accuracy	±0.25% FSO
Options	Optional standoff (KPSI 745)
Range	Custom ranges from 10 - 115 H ₂ O
Max Over-range	2X FS
Output	4 - 20 mA, 0 - 5 VDC, 0 - 2.5 VDC, 0 - 4 VDC, 0 - 10 VDC, 1.5 - 7.5 VDC
Operating Temp	-20°C to 60°C
Dimensions (mm)	KPSI 745: 88.9 x 279.4 (with standoff) 88.9 x 253.3 (without standoff) KPSI 750: 104.1 x 279.4
Typical Apps	Wastewater, lift stations, pump control, slurry tank liquid level, tank level
Agency Approvals	CE, WEEE, RoHS, UL and FM (Intrinsically Safe)

OEM Level Sensors



LTA, LT Series

Accuracy	±0.25% FSO
Options	Optional lightning protection
Range	0 - 1 psi up to 0 - 300 psi Custom ranges available
Max Over-range	2X FS
Output	4 - 20 mA
Operating Temp	-20°C to 60°C
Dimensions (mm)	LTA: 25.4 x 93.0 LT: Ø 25.4 x 170.5 (Dependent on fitting)
Typical Apps	Pump control, tank liquid level, landfill leachate monitoring, construction bypass pumping, dewatering, lift station monitoring, submersible tank liquid level, liquid line pressure, slurry tank liquid level, wastewater
Agency Approvals	CE, WEEE, RoHS, with optional UL, CUL, and FM (Intrinsically Safe)



LTB, LTR Series

Accuracy	±0.25% FSO
Options	Optional lightning protection
Range	0 - 11.5, 23.1, 34.6, 69.2, 115.4 ft H ₂ O Custom ranges available
Max Over-range	2X FS
Output	4 - 20 mA, 0 - 5 VDC, 0 - 10 VDC, 0 - 2.5 VDC, 0 - 4 VDC, 1.5 - 7.5 VDC
Operating Temp	-20°C to 60°C
Dimensions (mm)	LTB: 104.1 x 206.5 LTR: 11.30" with overmold conduit connection 9.78" with gland seal conduit connection
Typical Apps	Pump control, tank liquid level, landfill leachate monitoring, construction bypass pumping, dewatering, lift station monitoring, submersible tank liquid level, liquid line pressure, slurry tank liquid level, wastewater
Agency Approvals	CE, WEEE, RoHS, with optional UL, CUL, and FM (Intrinsically Safe)

PRODUCT AND APPLICATION MATRIX

	Water Level Data Loggers	Digital Level Sensors	Analog Level Sensors	Flexible Diaphragm Level Sensors	Pressure Sensors	Temperature Sensors	Submersible Accelerometers
Aquaculture	●	●					
Dam Operations		●	●				
Flood Warning and Storm Surge Monitoring	●	●	●				
Groundwater Monitoring	●	●	●				
Landfill Leachate Level			●				
Line Pressure Monitoring					●		
Oceanographic Research	●	●	●				
Pump and Lift Stations			●	●	●		
Pump Control			●	●	●		
Remediation	●	●	●	●			
Slug Testing and Aquifer Characterization	●	●	●				
Stormwater Monitoring	●	●	●				
Stream Gauging	●	●	●			●	
Submersible Pump Monitoring							●
Surface Water Monitoring	●	●	●			●	
Tank Level Monitoring			●	●	●		
Tide Gauging	●	●	●				

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