TE CONNECTIVITY SENSORS









AERODYNAMIC RESEARCH SENSORS

Pressure scanners and associated data systems allow engineers and scientists to acquire large amounts of pressure measurements for crucial aerodynamic research. TE Connectivity (TE) offers one of the most comprehensive portfolios of test & measurement (T&M) sensors in the industry including sensors for aerodynamic research. NetScanner pressure scanners and miniature ESP pressure scanners from the legacy brand, Pressure Systems Inc. (PSI), coupled with Initium and Optimus Data Systems provide the most accurate and durable pressure scanning solutions for turbomachinery, wind tunnel and flight-testing markets.

- PRESSURE SCANNERS
- MINIATURE PRESSURE SCANNERS
- DATA SYSTEMS
- ACCESSORIES

• RoHS Scope Assessments Available



SENSORS FOR AERODYNAMIC RESEARCH

Pressure Scanners							
Model	Туре	Channels	Accuracy	Ranges	Throughput/Speed	Temperature Range [°C]	Typical Applications
9216	16 Channel Pressure Brick	16	±0.05% Full Scale	10" H ₂ O to 1100 PSI	500 Hz Per Port	-30 to +80	Pressure scanning on or near engine within test cell
9916	16 Channel Rack Scanner	16	±0.05% Full Scale	10" H ₂ O to 850 PSI	100 Hz Per Port	0 to +60	Pressure scanning from within control room location
<u>98RK</u>	Rack for 9916 & 9816	128	±0.05% Full Scale	10" H ₂ O to 850 PSI	100 Hz Per Port	0 to +50	Rack for 9816 and 9916 pressure scanners with three connections for barometers, calibrators, and standards
9032	Barometer	1	±0.05% Full Scale	11 to 16 PSIA	10 Hz	0 to +50	Barometric monitoring to sum with pressure scanner for absolute data
9034	Pressure Calibrator	1	±0.05% Full Scale	1 to 1200 PSIA	10 Hz	0 to +50	In-situ pressure calibration of scanners for verification before engine test
	9216 9916 98RK 9032	Model Type 9216 16 Channel Pressure Brick 9916 16 Channel Rack Scanner 98RK Rack for 9916 & 9816 9032 Barometer	Model Type Channels 9216 16 Channel Pressure Brick 16 9916 16 Channel Rack Scanner 16 98RK Rack for 9916 & 9816 128 9032 Barometer 1	Model Type Channels Accuracy 9216 16 Channel Pressure Brick 16 ±0.05% Full Scale 9916 16 Channel Rack Scanner 16 ±0.05% Full Scale 98RK Rack for 9916 & 9816 128 ±0.05% Full Scale 9032 Barometer 1 ±0.05% Full Scale	Model Type Channels Accuracy Ranges 9216 16 Channel Pressure Brick 16 ±0.05% Full Scale 10" H ₂ O to 1100 PSI 9916 16 Channel Rack Scanner 16 ±0.05% Full Scale 10" H ₂ O to 850 PSI 98RK Rack for 9916 & 9816 128 ±0.05% Full Scale 10" H ₂ O to 850 PSI 9032 Barometer 1 ±0.05% Full Scale 11 to 16 PSIA	Model Type Channels Accuracy Ranges Throughput/Speed 9216 16 Channel Pressure Brick 16 ±0.05% Full Scale 10" H ₂ O to 1100 PSI 500 Hz Per Port 9916 16 Channel Rack Scanner 16 ±0.05% Full Scale 10" H ₂ O to 850 PSI 100 Hz Per Port 98RK Rack for 9916 & 9816 128 ±0.05% Full Scale 10" H ₂ O to 850 PSI 100 Hz Per Port 9032 Barometer 1 ±0.05% Full Scale 11 to 16 PSIA 10 Hz	Model Type Channels Accuracy Ranges Throughput/Speed Temperature Range [°C] 9216 16 Channel Pressure Brick 16 ±0.05% Full Scale 10" H₂O to 1100 PSI 500 Hz Per Port -30 to +80 9916 16 Channel Rack Scanner 16 ±0.05% Full Scale 10" H₂O to 850 PSI 100 Hz Per Port 0 to +60 98RK Rack for 9916 & 9816 128 ±0.05% Full Scale 10" H₂O to 850 PSI 100 Hz Per Port 0 to +50 9032 Barometer 1 ±0.05% Full Scale 11 to 16 PSIA 10 Hz 0 to +50

	Miniature Pressure	Miniature Pressure Scanners								
	Model	Туре	Channels	Accuracy	Ranges	Throughput/Speed	Temperature Range [°C]	Typical Applications		
10	<u>64HD</u>	Miniature Pressure Scanner	64	±0.03% Full Scale	14" H ₂ O to 100 PSI	500 Hz Per Port	0 to +80	In-model windtunnel testing, aircraft flight testing and automotive track testing		
	<u>32HD</u>	Miniature Pressure Scanner	32	±0.03% Full Scale	4" H ₂ O to 150 PSI	1000 Hz Per Port	0 to +100	High speed acquisition for wind engineering and turbulence measurements		
	<u>16HD</u>	Miniature Pressure Scanner	16	±0.03% Full Scale	4" H ₂ O to 150 PSI	500 Hz Per Port	0 to +80	In-model windtunnel testing, aircraft flight testing and automotive track testing		
-	<u>4602</u>	Accelerometer	Single Axis or Tri-Axial	<2.0% Total Error Band	2 to 200 g	2.7 kHz Frequency Response	-55 to +125	Accelerometer for flutter testing of model within windtunnel		
	EPL	Surface Mount Pressure	12	±0.5 % Full Scale	5 to 1000 PSI	70 kHz Rrequency Response	-40 to +90	Dynamic pressure measurement on aerodynamic surfaces		
A Track	<u>16MS</u>	Direct Mount Scanner	16	±0.05% Full Scale	4" H ₂ O to 180 PSI	2000 Hz Per Port	0 to +80	Motorsports aerodynamics, hypersonic missile flight testing		



SENSORS FOR AERODYNAMIC RESEARCH

	Data Systems										
	Model	Туре	Channels	Accuracy	Ranges	Throughput/Speed	Temperature Range [°C]	Typical Applications			
	FDS1	Flight Data System	512	±0.05% Full Scale	4" H ₂ O to 150 PSI	1080 Hz Per Port	0 to +70	Flight data system located within fuselage for 1-8 64HD or 32HD pressure scanners			
	<u>Initium</u>	Data System	512	±0.05% Full Scale	4" H ₂ O to 150 PSI	1080 Hz Per Port	0 to +50	Data system for up to eight pressure scanners popular for wind tunnel testing			
- 1	<u>Optimus</u>	Data System with Calibrators	2048	±0.03% Full Scale	4" H ₂ O to 150 PSI	1575 Hz Per Port	0 to +50	Highest accuracy data system with online calibration for aerospace windtunnels			



SENSORS FOR AERODYNAMIC RESEARCH

Accessories							
Model	Туре	Channels	Accuracy	Ranges	Details	Temperature Range [°C]	Typical Applications
QDCC	Circular Quick Disconnect	19, 37, 55, 73	-	4" H ₂ O to 750 PSI	0.040" and 0.063" Tubes	-55 to +100	Pneumatic quick disconnect, socket head screw connections
QDCS	Rectangular Quick Disconnect	20, 36, 52	-	4" H ₂ O to 750 PSI	0.040" and 0.063" Tubes	-55 to +100	Pneumatic quick disconnect, rectangular shaped for form factor installations
QDCM	Miniature Quick Disconnect	19, 31, 36, 55	-	4" H ₂ O to 150 PSI	0.025" and 0.040" Tubes	-40 to +80	Miniature pneumatic quick disconnect, small diameter tubes
STP2	Tool - Tubing Pliers	1	-	-	Hand Tool	-55 to +100	Attach tubing and retaining springs to scanner tubes
Reducer	Tubing Size Converter	1	-	-	0.040", 0.063", 0.125", 0.250"	-55 to +100	Convert tubing diameters, also use within compression fittings
Multi Connectors	Manifold For Multiple Tubes	8, 9, 17, 18	-	-	0.040" or 0.063" Tubes	-55 to +100	Combines multiple tubes, used for calibration or reference connections





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