

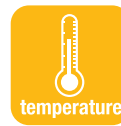
Condition Monitoring for Car Washes

Monitoring the equipment and components of car wash systems is more important than ever due to the system's advanced technologies and today's competitive marketplace. To ensure operations run smoothly, all facets must be closely monitored for any anomalies that should arise, from temperature fluctuations and pressure changes to inadequate fluid levels.

Track measurements of hydraulic and pneumatic lines of moving parts from brushes and bay doors to drying equipment. Monitor levels of soaps, chemicals and liquids.



SensoNODE™ Gold Sensors & Voice of the Machine™ Cloud Software



Engineered for continuous condition monitoring, Parker's series of SensoNODE Gold Sensors and Voice of the Machine Cloud Software monitor real-time temperature, pressure and fill levels, and deliver data and alerts. By having this unmatched accessibility, technicians can effectively and efficiently service equipment.

- Avoid shutdowns
- Maintain optimum performance of equipment
- Monitor ambient temperature of bays
- Know when to refill liquids and materials
- Reduce maintenance costs
- Improve safety with non-contact chemical level monitoring
- Enhance delivery and fleet management
- Eliminate manual inventory and replacement tracking
- Reduce spillage, contamination and loss of chemicals

Contact Information:

Parker Hannifin Corporation
Quick Coupling Division
8145 Lewis Road, Minneapolis, MN 55427

(763)-544-7781
Parker.com/ConditionMonitoring



SensoNODE™ Gold Fill Level Sensor

Sensor Technical Data		Water (1 cSt)	Chemical A (> 15 cSt)
Range	Height of sensor active area [inches (mm)]	26 (660)	26 (660)
Sensor Output	Percent of height (%)	0 to 100	0 to 100
Resolution	[inches (mm)]	0.65 (17)	1.3 (33)
Accuracy*	See Accuracy chart below	±1.5% for 50 to 100% range ±2.5% for 0 to 50% range	±2.5% for 50 to 100% range ±5% for 0 to 50% range
Linearity	See Linearity chart below	2%	5%
Hysteresis		1%	2%
Sample Rate	1 sample/min (default settings)		

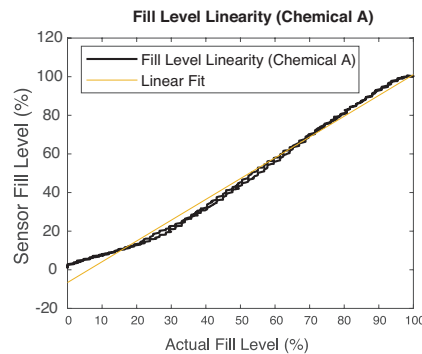
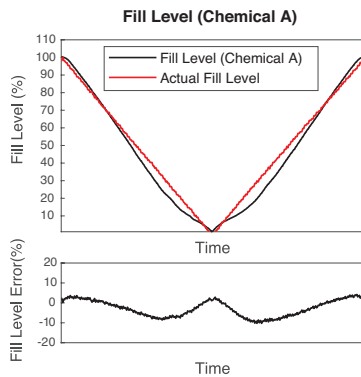
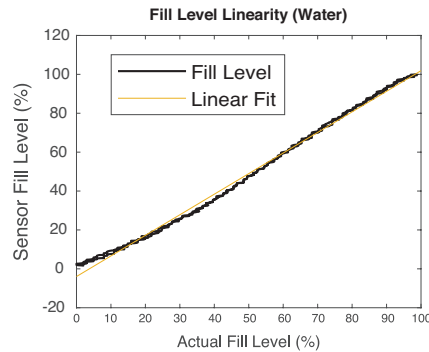
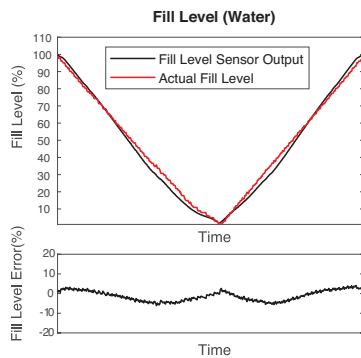
Transmitter Technical Data	
Base Material	Brass and Steel
Housing Material	Polycarbonate
Ambient temperature (battery limited)	-4 to +158°F
Radio Certifications	FCC & IC
Battery [Panasonic is recommended]	CR123A
IP Rating (Transmitter only)	IP65

Important Technical Notes:

All data derived from testing that utilized non-metallic 55 gal barrels calibrated at Full.

*Factors that may affect accuracy of measurements:

- Viscosity and consumption rate of substance
- Environmental factors such as EMI and physical contact of chemicals or equipment









SensoNODE™ Gold Pressure Sensors



Features:

- Available in a variety of pressure ranges from -14.5 psi to 8700 psi.
- User-definable measurement units (psi/bar) for convenient and familiar data readings.
- Port options: Male NPT or SAE thread and EMA or PD quick couplers for fast and easy connecting.
- Corrosion resistant materials for challenging environments.
- Sensor also provides ambient temperature values.
- Configurable measurement and broadcast intervals*. Refer to Voice of the Machine Cloud for more information about capabilities and modalities.

Sensor Technical Data

						
Housing Material	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate
Port	1/4" Male NPT	1/4" Male NPT	-4 SAE	-4 SAE	-4 SAE	-4 SAE
Wetted Parts Material	17-4 Stainless	17-4 Stainless	17-4 Stainless and Nitrile	17-4 Stainless and Nitrile	17-4 Stainless and Nitrile	17-4 Stainless and Nitrile
Measurement Range (pressure)	-14.5 to 14.5 psi [-1 to 1 bar]	0-150 psi [10 bar]	0-1500 psi [100 bar]	0-3625 psi [250 bar]	0-5800 psi [400 bar]	0-8700 psi [600 bar]
Max. Overload Pressure	29 psi	225 psi	2250 psi	5440 psi	8700 psi	13,050 psi
Burst Pressure	3x	4x	4x	4x	4x	4x
Accuracy (at 77°F/ 25°C)	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Resolution	.01 psi	.1 psi	1 psi	1 psi	1 psi	1 psi
Response Time (min)	1 sec	1 sec	1 sec	1 sec	1 sec	1 sec
Ambient Temperature (battery limited)**	-4°F to 158°F [-20°C to 70°C]	-4°F to 158°F [-20°C to 70°C]	-4°F to 158°F [-20°C to 70°C]	-4°F to 158°F [-20°C to 70°C]	-4°F to 158°F [-20°C to 70°C]	-4°F to 158°F [-20°C to 70°C]
Fluid Media Temperature Range	-40°F to 185°F [-40°C to 85°C]	-40°F to 185°F [-40°C to 85°C]	-40°F to 185°F [-40°C to 85°C]	-40°F to 185°F [-40°C to 85°C]	-40°F to 185°F [-40°C to 85°C]	-40°F to 185°F [-40°C to 85°C]
Full Range Life Cycles	> 1 million	> 1 million	> 1 million	> 1 million	> 1 million	> 1 million
Certifications	FCC, IC, CE	FCC, IC, CE	FCC, IC, CE	FCC, IC, CE	FCC, IC, CE	FCC, IC, CE
Battery (Panasonic is recommended brand)	CR123A	CR123A	CR123A	CR123A	CR123A	CR123A
IP Rating	IP65	IP65	IP65	IP65	IP65	IP65

Note: Consult QCD for other port options, pressure ratings, and port seal materials.

*Consult Subscription Agreement and Order Form or Parker QCD for any changes regarding data rates.

**Ambient temperature range can be broadened by installing Wired Power Adapter (SNWP2-2)






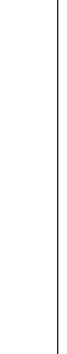

SensoNODE™ Gold Temperature Sensors



Features:

- User-definable measurement units (F°/C°) for convenient and familiar data readings.
- Port Options: Male NPTF and SAE
- Corrosion-resistant materials for challenging environments.
- Configurable measurement and broadcast intervals*. Refer to Voice of the Machine Cloud for more information about capabilities and modalities.
- Available in unique foot design for quick attachment to pipe or hard tubing.

Sensor Technical Data

					
Housing Material	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate
Port	1/4" Male NPTF	-4 SAE	1/4" Male NPTF	-4 SAE	Foot
Wetted Parts Material	17-4 Stainless	17-4 Stainless and Nitrile	17-4 Stainless	17-4 Stainless and Nitrile	Stainless
Measurement Range (Fluid Temperature)	-40°F to 230°F [-40°C to 110°C]	-40°F to 230°F [-40°C to 110°C]	-40°F to 230°F [-40°C to 110°C]	-40°F to 230°F [-40°C to 110°C]	-40°F to 257°F [-40°C to 125°C]
Working Pressure	0-10k psi [0-700 bar]	0-9k psi [0-630 bar]	0-1500 psi [0-100 bar]	0-1500 psi [0-100 bar]	N/A
Max. Overload Pressure	3x	3x	2x	2x	N/A
Burst Pressure	4x	4x	3x	3x	N/A
Accuracy (at 77°F/ 25°C)	±3.0%	±3.0%	±3.0%	±3.0%	±5.0%
Resolution (from 14°F to 120°F)[-10°C to 44.8°C]	1°F [.56°C]	1°F [.56°C]	1°F [.56°C]	1°F [.56°C]	2°F [1.12°C]
Response Time (minimum)	1 sec	1 sec	1 sec	1 sec	1 sec
Ambient Temperature (battery limited)**	-4°F to 158°F [-20°C to 70°C]	-4°F to 158°F [-20°C to 70°C]	-4°F to 158°F [-20°C to 70°C]	-4°F to 158°F [-20°C to 70°C]	-4°F to 158°F [-20°C to 70°C]
Full Range Life Cycles	> 1 million	> 1 million	> 1 million	> 1 million	> 1 million
Certifications	FCC, IC, CE	FCC, IC, CE	FCC, IC, CE	FCC, IC, CE	FCC, IC, CE
Battery (Panasonic is recommended brand)	CR123A	CR123A	CR123A	CR123A	CR2450
IP Rating	IP65	IP65	IP65	IP65	IP65

Note: Consult QCD for other port options, pressure ratings, and port seal materials.

*Consult Subscription Agreement and Order Form or Parker QCD for any changes regarding data rates.

**Ambient temperature range can be broadened by installing Wired Power Adapter (SNWP2-2)