Wireless Pipe Pressure Sensors

Upgrade Your Analog Gauges

Knowing the pressure in your pipes can be essential information for safety, function and maintenance. Analog gauges can be unreliable, unsafe and require a physical presence. With AKCP Wireless Tunnel™ Pipe Pressure Sensors you can install alongside existing analog gauges, or as a replacement. Remotely monitor your pressures via the internet, receive alerts when pressures are outside of pre determined parameters, and publish reports with graphs of pressure over time.

Pipe Pressure Sensors

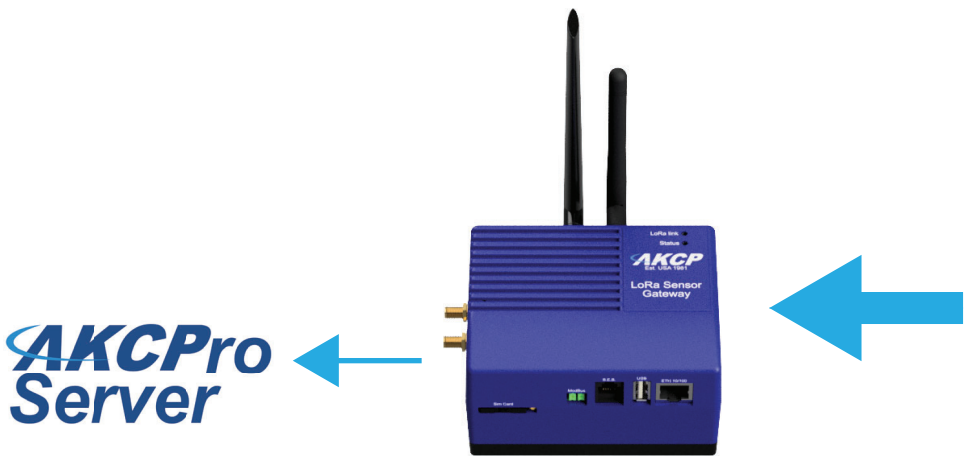
Choose a suitable pressure gauge for your installation.
Monitor a range of pressures from 0 to 10 bar.

Differential Pressure Sensors

Check ΔP across a filter. Pressure drops can alert to maintenance required for the filter.

Pressure and Temperature

Combined pressure and temperature measurement of hot or chilled pipes.

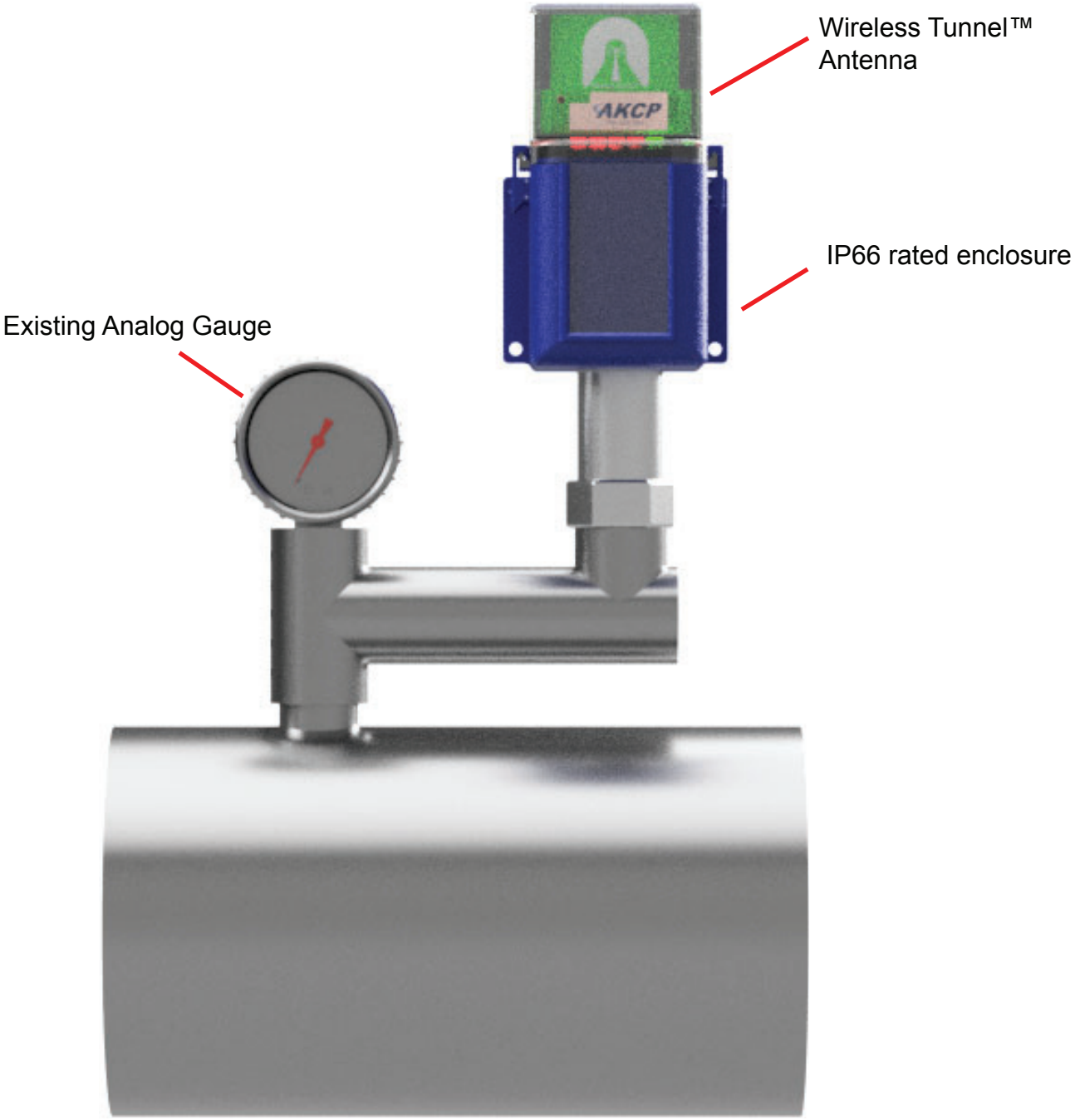


WTG

Wireless Pipe Pressure Sensor (WTS-PPS)

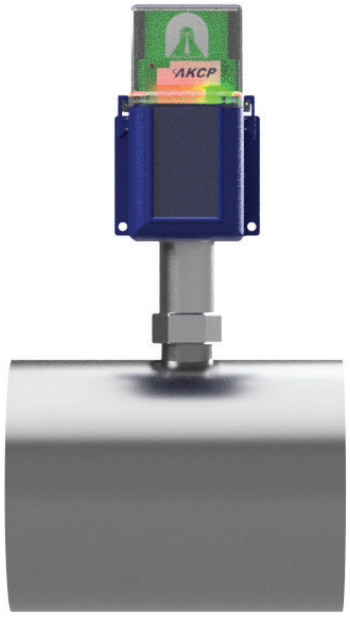
Pipe Pressure Monitoring and Alerts

Choose a suitable pressure gauge for your installation. Monitor a range of pressures from 0 to 30 bar. We provide adapters to fit your existing thread size, and T piece to keep your existing analog gauge alongside the AKCP digital Wireless Tunnel™ pressure gauge. Mounting options cover a range of different installation methods as illustrated on the next page. Sensors are battery powered (4x AA), or optional 5/12VDC input.



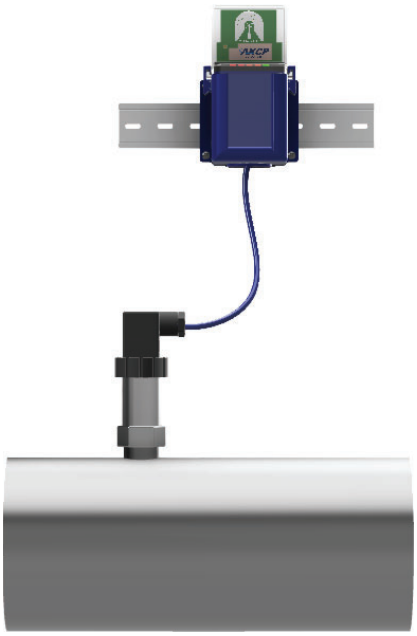
WTS-PPS - Installation Options Sensor Only

Installed without an existing analog gauge, the Wireless Tunnel™ radio and battery can be mounted in several different configurations. DIN and Pipe mounting requires optional mounting kit.

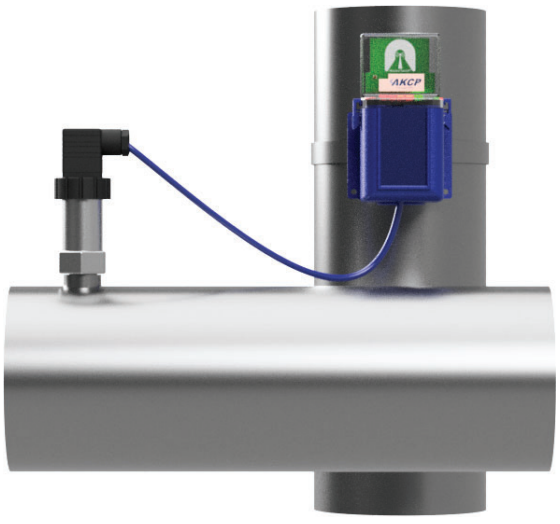


Sensor Mounted

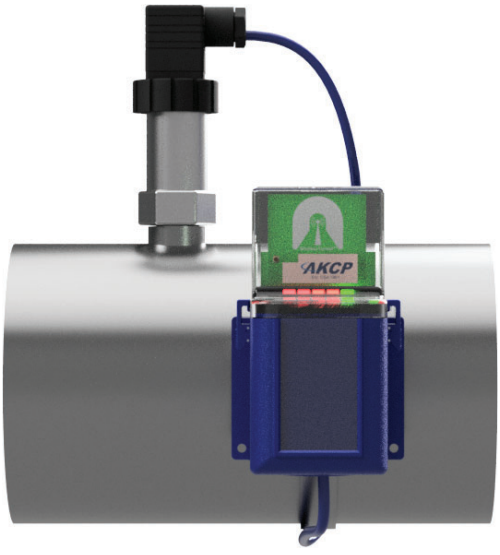
Wall Mounted



DIN Rail Mounted



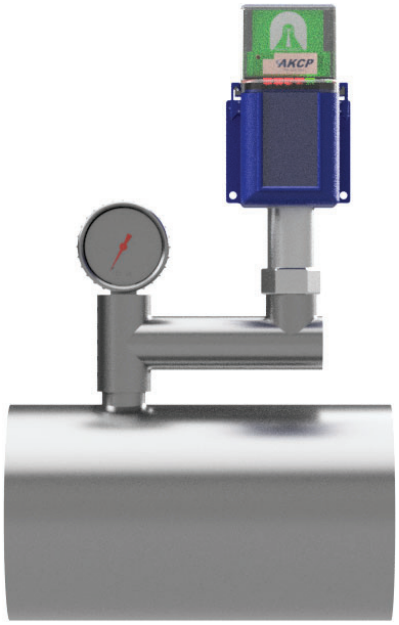
Vertical Pipe Mounted



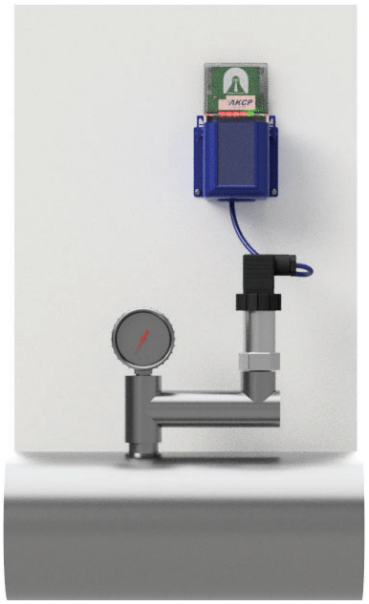
Pipe Mounted

WTS-PPS - Installation Options Sensor and Gauge

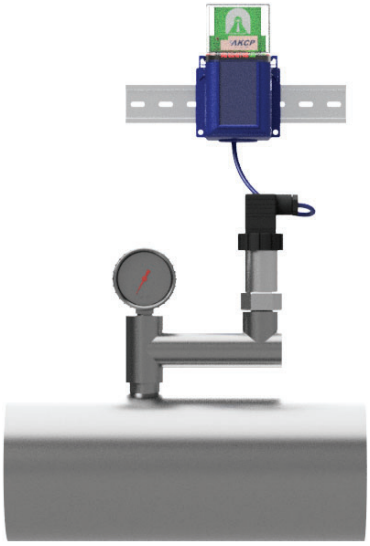
Installed alongside analog gauge, the Wireless Tunnel™ radio and battery can be mounted in several different configurations. DIN and Pipe mounting requires optional mounting kit.



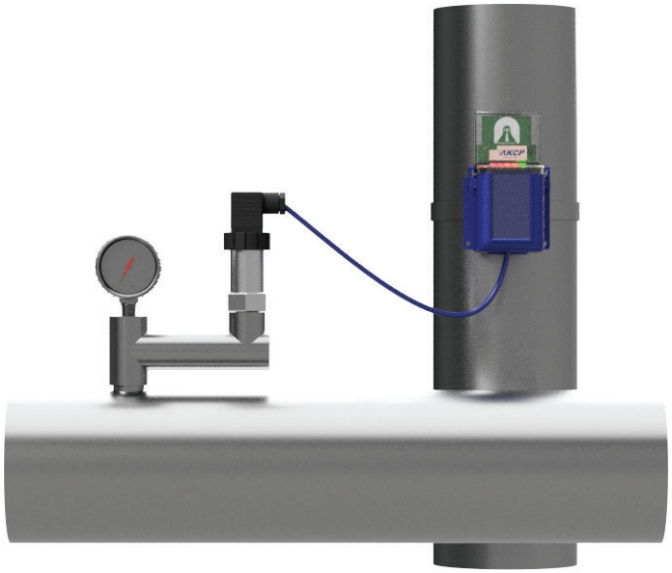
Gauge with Sensor Mount



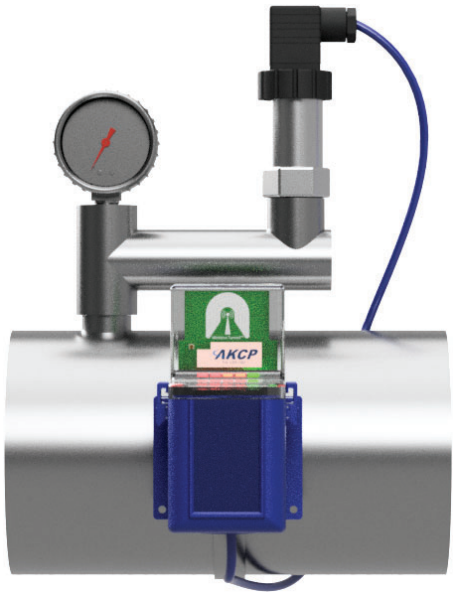
Gauge with Wall Mount



Gauge with DIN Rail Mount



Gauge with Vertical Pipe Mount

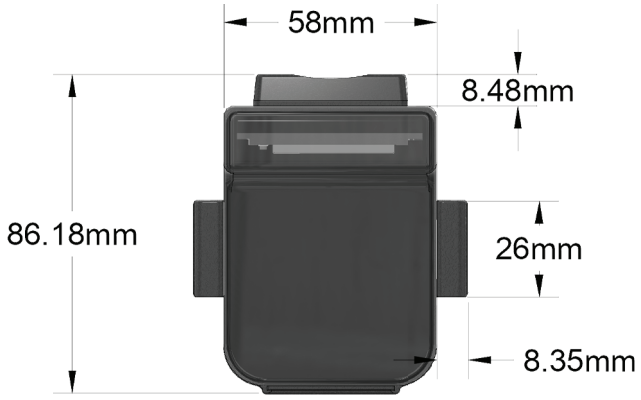


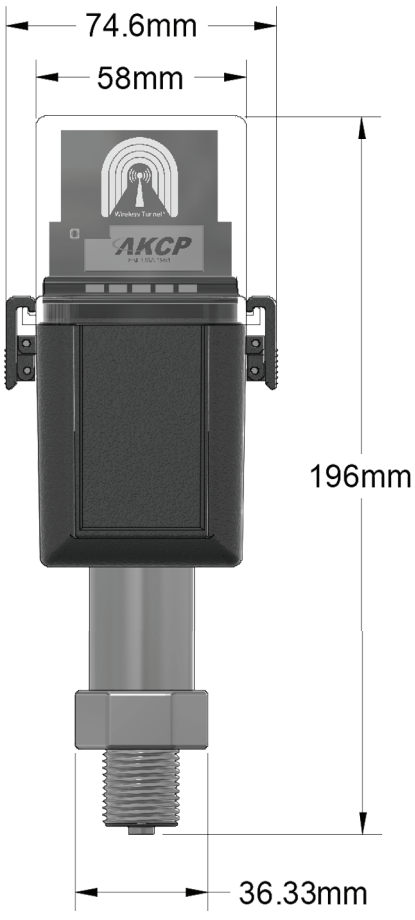
Gauge with Pipe Mount

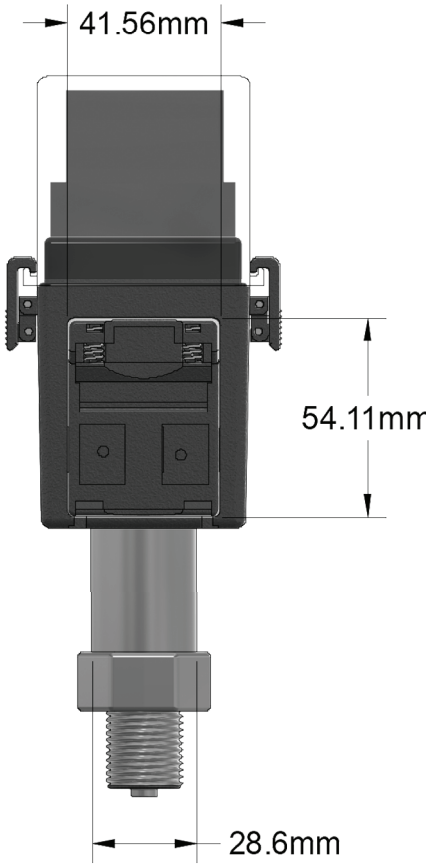
WTS-PPS - Technical Specification

Status Indication	LED indication for - Mode - Status - RSSI
Components	Manufactured using highly integrated, low power surface mount technology to ensure long term reliability.
Operating Environment	Temperature : Min. -35° C – Max.80° C Humidity: Min. 20% – Max. 80% (Non-Condensing)
LoRa (R) Radio Regional plans	- EU868 : 863~868Mhz, Max TX Power +14dBm, Duty Cycle 1% - US915: 903~915Mhz, Max TX Power +17dBm - AS923 : 920~925Mhz, Max TX Power +14dBm, Duty Cycle 1% - KR920 (Korea) : 922~923Mhz, Max TX Power +14dBm, Duty Cycle 1% - IL917 (Israel) : 915~917Mhz , Max TX Power +14dBm, Duty Cycle 1%
Certification	FCC Part15C, CE EN300220-2
Interface	Micro-USB port for powering, adding and upgrading to the Gateway base unit
Dimension	76x77x120mm
Mounting	Wall hanging, DIN rail, Pipe Clamp
Power source	4xAA batteries or via micro-USB port
Power Consumption	Average 12 mWatt, 10uA in Idle, Up to 10 years of battery life
Sensor Type	Piezo resistive pressure sensor
Measurement Range	0-1MPa (0-10 Bar, 0-145 PSI)
Measurement Resolution	1KPa (0.01 Bar, 0.15 PSI)
Measurement Accuracy	Maximum ±0.5% FS
Total Error	±1% FS
Gateway sensor count	4 (3 + 1)

WTS-PPS - Technical Drawing







WTS-PPS-H - Technical Drawing

Pipe Pressure Sensor with Hirschmann Plug