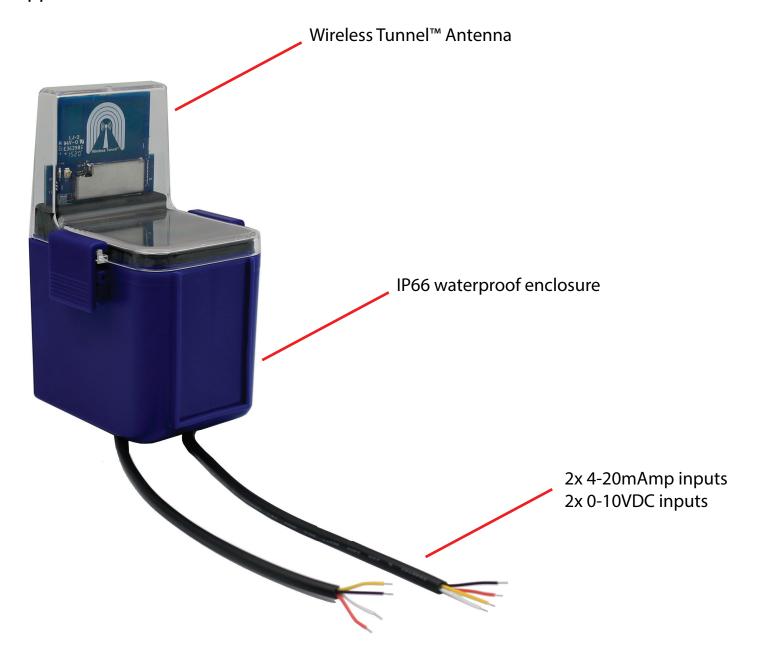# Wireless Tunnel™ Analog to Digital Converter (WTS-A2D)

Integration with third party sensors

Turn any sensor with a 4-20mAmp or 0-10VDC output into a Wireless Tunnel™ sensor that is compatible with the AKCP monitoring system.

A wide range of third party and scientific grade sensors use this voltage or current scale output, which opens up the AKCP monitoring system to a wide range of applications.

Wireless Tunnel™ Antenna

IP66 waterproof enclosure

2x 4-20mAmp inputs
2x 0-10VDC inputs

WTS-A2D - 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
Environment monitoring	
Input Voltage	2x Analog input voltage
Measurement Range	0-10V
Measurement Resolution	0.1V increment
Measurement Accuracy	Maximum ±0.1V
Input Current	2x Analog input 4-20mA current
Measurement range	0-20mA current
Resolution	0.1mA increment
Accuracy at	Maximum ±0.1mA
Gateway sensor count	7 (3 + 4)
Important Note	* Analog inputs are not isolated, they all share the same ground. * Care should be taken on voltage potentials when connecting the WTS-A2D inputs to sources.

WTS-A2D - Technical Drawing

58mm

8.48mm

86.18mm

26mm

8.35mm

86.18mm

18.38mm

57.14mm

57mm

68mm

73.6mm

58mm

125mm

200mm

41.56mm

54.11mm