sensorProbe - Wireless Tunnel™ (SP-WT)

Connect up to 4 AKCP Intelligent Sensors

sensorProbe Wireless Tunnel™ allows you to connect up to 4 AKCP Intelligent sensors to a single radio. Communicate sensors over long distance with LoRa™ based wireless communications. AKCP's proprietary Wireless Tunnel™ protocol provides guaranteed message delivery without loss of data and low power utilization for superior battery life.
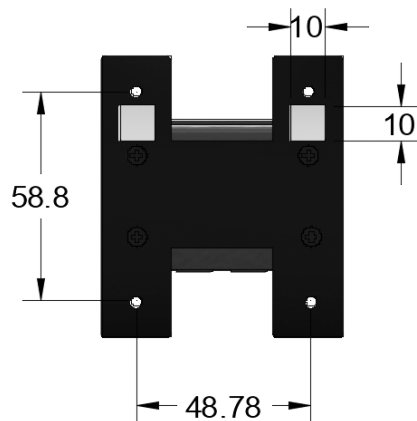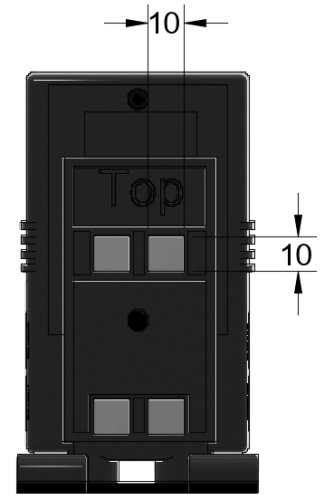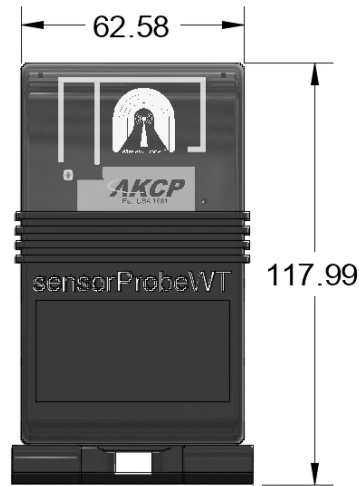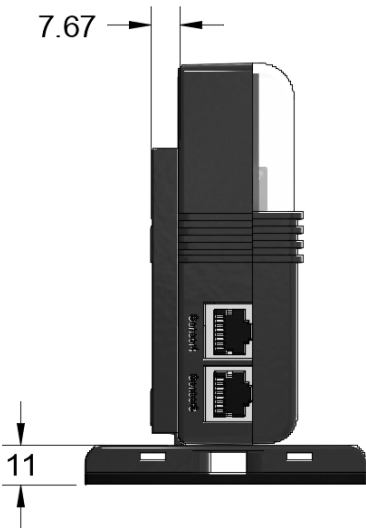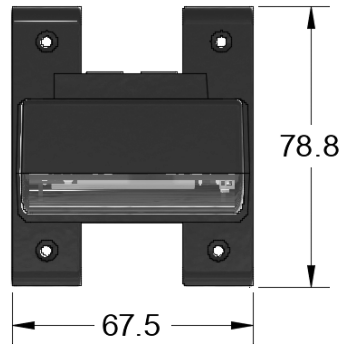
Build your own private LoRa based network without the need for any cloud services. Data is transmitted to the sensorProbe Wireless Tunnel Server (SP-WTS). Multiple SP-WTS can be monitored centrally with AKCPro Server, which can run locally or on a cloud service.

5VDC USB

**5VDC input
EXT Battery pack input**

Sensor Ports

Sensor Ports

SP-WT - Technical Specification

Status Indication	LED indication for power LED for Radio connectivity LED for Status
Components	Manufactured using highly integrated, low power surface mount technology to ensure long term reliability.
Operating Environment	Temperature : Min. -15° C – Max.50° C Humidity: Min. 20% – Max. 80% (Non-Condensing)
MTBF	1,400,000 Hours based on field experience with sensorProbe units.
Connectivity	Wireless Tunnnel™ connection to sensorProbe-Wireless Tunnel Server (SP-WTS)
Inputs	1x USB for external 5VDC power 1x 5VDC Terminal for external power or external battery pack 4x intelligent sensor ports for connecting AKCP wired sensors 3x intelligent sensor ports and 1x 4-20mAmp input* 3x intelligent sensor ports and 1x Modbus input*
LoRa (R) Radio Regional plans	- EU868 : 863~868Mhz Max TX Power +14dBm Duty Cycle 1% - US915: 903~915Mhz Max TX Power +20dBm - 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 Part 15C, CE EN300220-2
Power	External 5.5V 3A Power Adapter AKCP External Battery Pack with 6x AAA batteries (non rechargeable)* 3x AAA Batteries (non-rechargeable)
Dimension	111 (W) x 62 (H) x 87 (D)
Mounting	Desktop, wall mount, DIN rail, Magnetic
* Optional feature on custom units	

SP-WT - Technical Drawing

SP-WT-EXTBAT - Technical Drawing

85.19mm

75.14mm

5V Ext Battery

Sensor 4

Sensor 2

75.52mm

107.12mm

sensorProbeWT
Wireless Tunnel ™