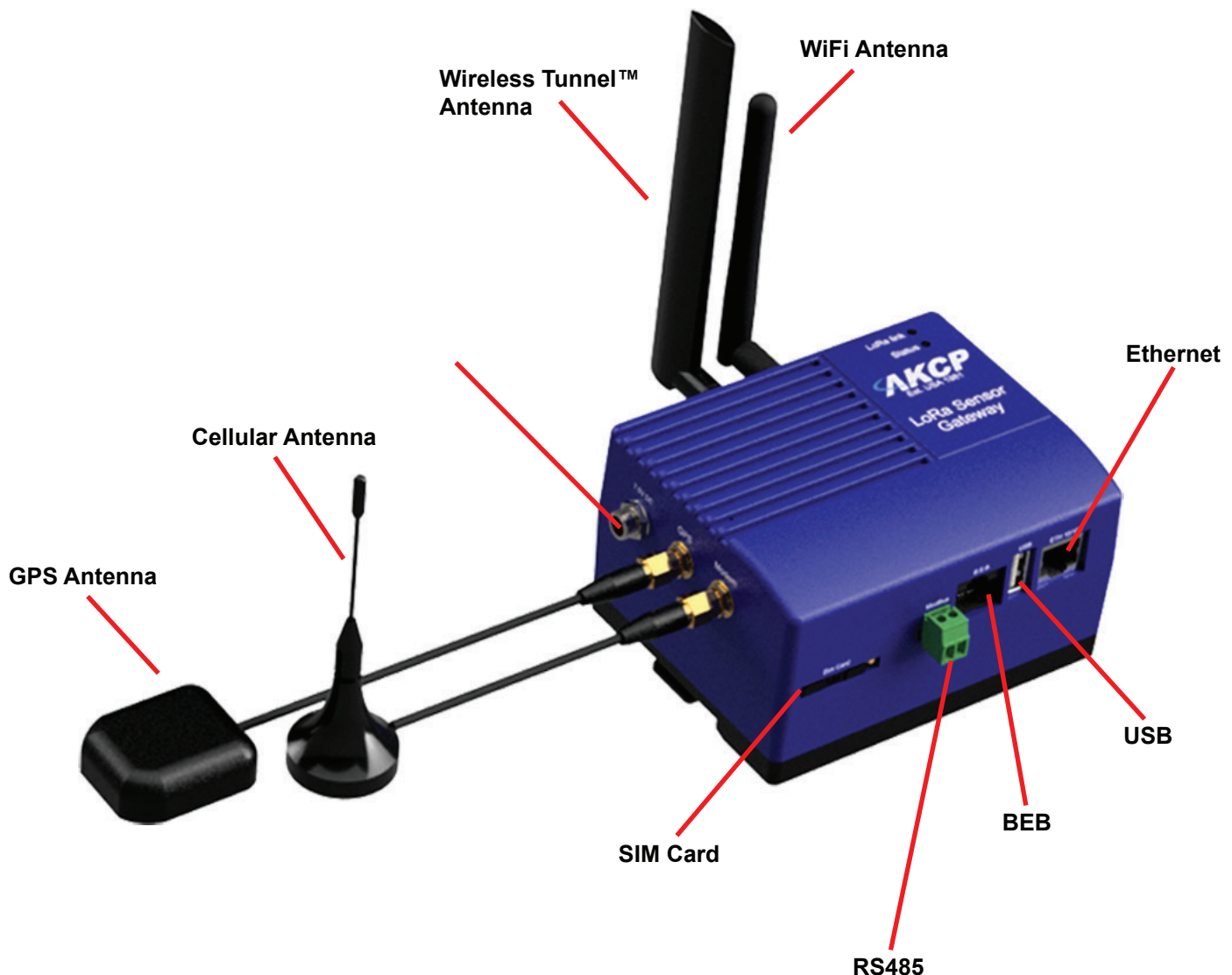## Wireless Tunnel™ Gateway (WTG)

Collect up to 30 Wireless Tunnel™ Sensors

Wireless Tunnel™ Gateway collects, stores and graphs data from all AKCP wireless sensors. With Ethernet and WiFi as standard sensor data is SNMP addressable. Cellular modem, GPS, Modbus and BEB are optional.

Access your data through the built in web UI, or aggregate multiple gateways in a single AKCPro Server installation.
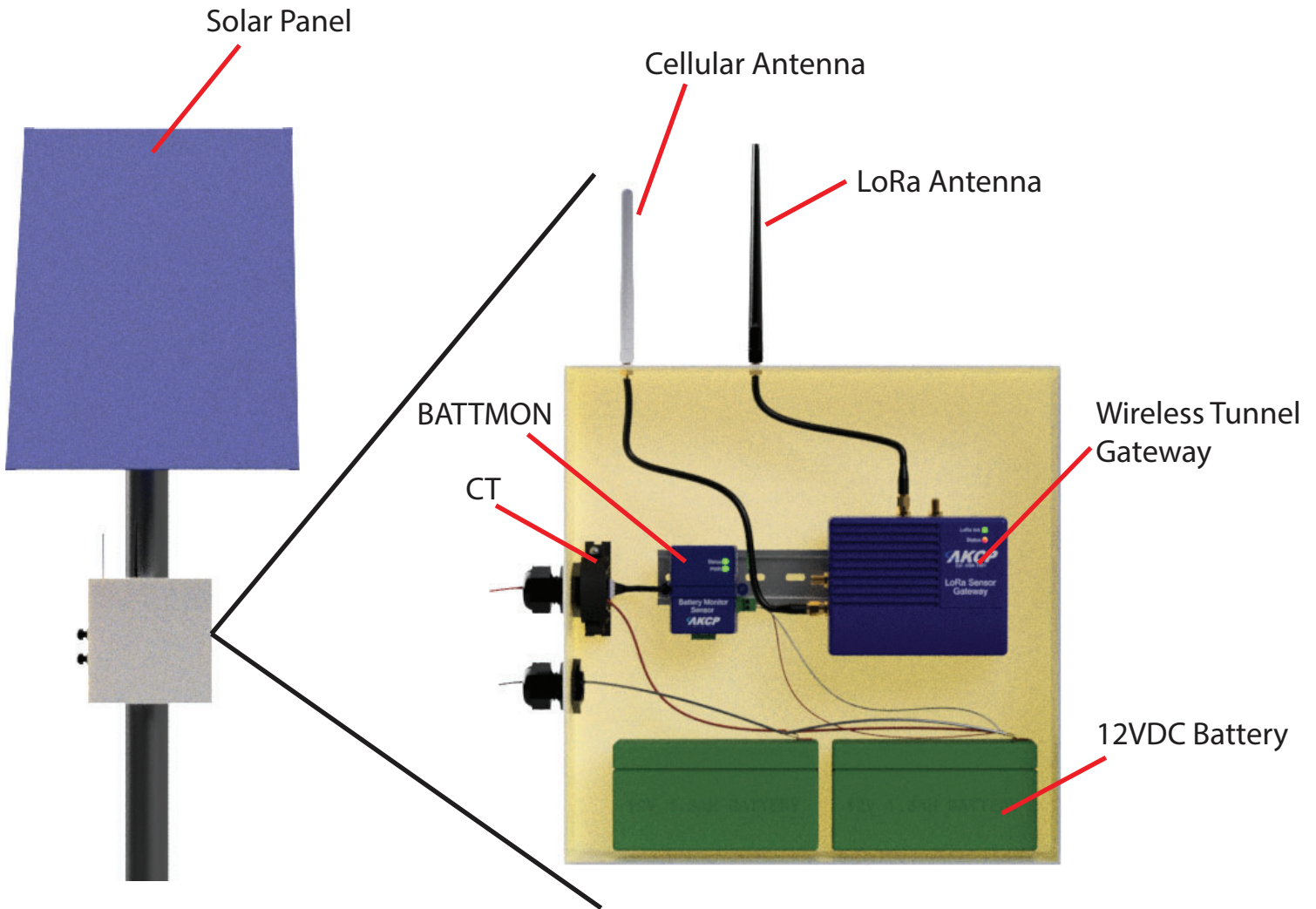
WiFi acts as hotspot for direct access, or connect with your existing WiFi network.

Setup remote access through firewalls with no port forwarding needed through AKCP Cloud Access feature.

WTG - Outdoor and Remote Site Installation

Example of Wireless Tunnel™ Gateway installed outdoors. Solar powered monitoring and collection of sensor data with communication over Cellular Network.

Solar Panel

Cellular Antenna

LoRa Antenna

BATTMON

CT

Wireless Tunnel Gateway

12VDC Battery

WTG - 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	Ethernet 10/100 Mbps 2.4GHz IEEE 802.11 b/g/n wireless LAN Optional Integrated 4G cellular modem with external antenna Optional GPS with external antenna (requires 4G modem)
Inputs	1x USB for LoRa devices adding/software upgrade 1x 10/100 Ethernet Port Optional Basic Expansion Bus (BEB) Port Optional Modbus RS485
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 Part 15C, CE EN300220-2
Software features	- up to 30 Wireless device connected - up to 32 Wireless sensors can be graphed - Total of up to 150 sensors can be online (Wireless and Virtual)
Power	External 5.5V 3A Power Adapter Power Adapter Input Voltage and Current ratings : 100V~240V - 0.22A Optional internal UPS with 4x AA Batteries (non-rechargeable)
Dimension	111 (W) x 62 (H) x 87 (D)
Mounting	Desktop, wall mount, DIN rail, Magnetic

WTG - Technical Drawing

155.41mm

115.04mm

154.46mm

40.4mm

9.56mm

AKCP Est. USA 1981 LoRa Sensor Gateway

LoRa link Status

111.77mm

111.77mm

95.83mm

86.77mm

62.42mm

95.7mm

Reset Power

Reset

AP STa

Ethernet

USB

B.F.B. Sensor

Sim card

5.5VDC