Sigfox Sensor With Analog Input WSSFC-AI

Smart Agriculture, Smart Building, Smart City, Smart Energy, Smart Facility, Smart Factory, Smart Farm, Smart Retail, Smart Utilities

SKU: WSSFC-AI

daviteq

✓ Safe Zone   ◯ Hazardous Zones

SIGFOX SENSOR - ANALOG INPUT BATTERY POWERED

External Power Supply or connect to Additional Battery Box

Analog Input port with Power Supply to external sensor

FIXED EXTERNAL ANTENNA 2.67 dbi

WSSFC-AI-H1.PNG

WSSFC-AI is the modular design Sigfox wireless sensor, based on 10-year experience in design and manufacturing Industrial sensor of Daviteq Company. It can accepts the analog output signal 0-20mA/ 0-10VDC from any sensor, transmitter... It can supplies the power to external sensor at 15VDC @ 50mA max. With Ultra-low power design and smart firmware allow the complete Wireless and Sensor package run on a single battery C type up to 10 years. WSSFC-AI can support all regions of Sigfox network in over the World, RC1, RC2, RC3, RC4, RC5, RC6, RC7.

Applications
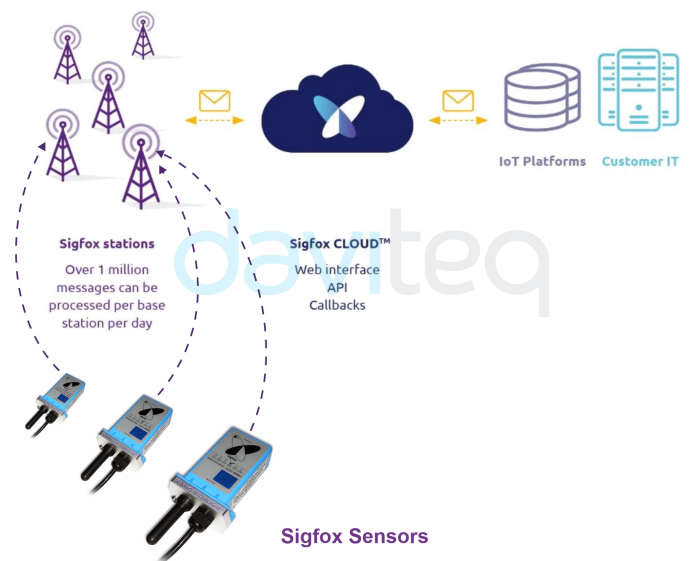Process Monitoring, Safety Monitoring

Notes For Applications

✓ **Sigfox Ready**
Device are best operating performance on the SIGFOX network

✓ **10 Year battery**
Ultra-low power sensing technology from Daviteq with Ultra-low power wireless technology allow the sensor can last up to 10 years with a single battery C

✓ **Plug & Play**
Smart Firmware allow it can detect and work right away with any sensor plugged in

✓ **Pre-calibrated**
Analog input 0-10VDC or 0-20mA is pre-calibrated at factory for quick installation

✓ **Outdoor design**
IP67 design for both Indoor and Outdoor applications

SYSTEM ARCHITECTURE

Sigfox stations
Over 1 million messages can be processed per base station per day

Sigfox CLOUD™
Web interface
API
Callbacks

IoT Platforms   Customer IT

Sigfox Sensors

WSSFC-AI-H2.PNG

Specification

Input	01 x Analog input, 0~20mA or 0~10VDC, selectable
Accuracy	0.05% of span
Resolution	1/3000
Temperature drift	< 50ppm
Power supply to sensor	15VDC @ max 50mA
Electrical connection	M12-M connector
Sigfox zones	select RC2-RC3-RC4-RC5 or RC1-RC6-RC7
Antenna	Fixed external Antenna 2.67 dbi
Battery	01 x C Type 1.5~3.6VDC, working time up to 10 years (depends on configuration), extendable by external battery box or power supply
RF Module complies to	CE, FCC, ARIB
Working temperature	-40~85℃ (using LS26500 battery)
Dimensions	H106xW73xD42 (Wireless part only)
Netweight	190 grams (Wireless part only)
Housing	Aluminum + Polycarbonate plastic, IP67

SIGFOX SENSOR ANALOG INPUT
CONNECT WITH 4-20mA LEVEL SENSOR

4-20mA
Loop powered

WSSFC-AI-H3.PNG

SIGFOX SENSOR ANALOG INPUT
CONNECT WITH 4-20mA SOIL MOISTURE SENSOR

Soil Moisture Sensor

WSSFC-AI-H4.PNG

SIGFOX SENSOR ANALOG INPUT
CONNECT WITH 4-20mA PRESSURE SENSOR

4-20mA Pressure Sensor
Loop Powered

WSSFC-AI-H5.PNG

DIMENSION DRAWINGS FOR
SIGFOX SENSOR WITH ANALOG INPUT

72.80

35.05

96.30

58.00

42.02

Fixed external
Antenna 2.67 dbi
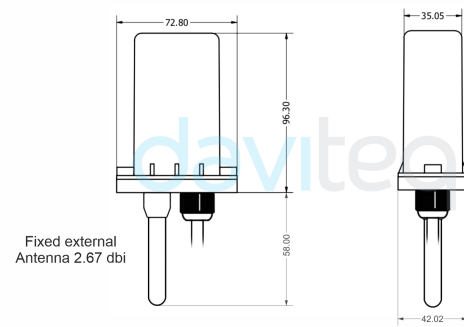
UNIT: mm

WSSFC-AI-H6.PNG

WIRING FOR SIGFOX SENSOR WITH ANALOG INPUT

CASE 1 - WORK WITH LOOP POWERED SENSOR

SIGFOX NODE   SENSOR
PWR+
AI-   AI+

SENSOR IS POWERED
BY SIGFOX NODE

PWR+
SIGFOX NODE   SENSOR
AI-   AI+
GND

SENSOR IS POWERED
BY EXTERNAL POWER SUPPLY
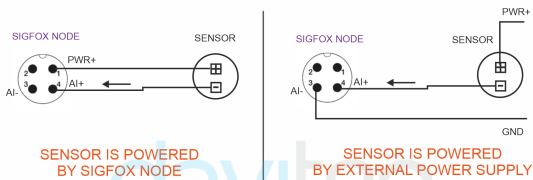
CASE 2 - WORK WITH NON - LOOP POWERED SENSOR

SIGFOX NODE   SENSOR
PWR+
AI-   AI+

SENSOR OUTPUT:
0 - 20maDC
OR
0 - 10 VDC
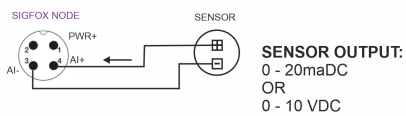
WSSFC-AI-H7.PNG

RECOMMENDED BATTERIES FOR SIGFOX SENSOR

E93 C type Alkaline battery 1.5VDC	Ls26500 C type Li-SOCl2 battery 3.6VDC
-18 .. + 55 oC working temperature	-60 .. + 85 oC working temperature
10-year shelf life	20-year shelf life
12.000 mWh Capacity	27.700 mWh Capacity
Price: 1X	Price: 8X

WSSFC-AI-H8.PNG

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Ordering Information

ITEM CODES	DESCRIPTIONS
WSSFC-AI-9-01	Sigfox Sensor with Analog input 0-20mA or 0-10VDC, pre-calibrated, Internal antenna, Type C battery 1.5 - 3.6VDC, IP67, M12-M for sensor connection, M12-F for external power supply, RC2-RC3-RC4-RC5 zones
WSSFC-AI-8-01	Sigfox Sensor with Analog input 0-20mA or 0-10VDC, pre-calibrated, Internal antenna, Type C battery 1.5 - 3.6VDC, IP67, M12-M for sensor connection, M12-F for external power supply, RC1-RC6-RC7 zones
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