

Sigfox Load Cell Transmitter



Smart Agriculture, Smart City, Smart Facility, Smart Factory, Smart Farm, Smart Healthcare, Smart Retail, Smart Transportation, Smart Utility, Smart Logistic

SKU: WSSFC-LC



Safe Zone



Hazardous Zones

SIGFOX LOADCELL TRANSMITTER WSSFC-LC



WSSFC-LC is a Sigfox transmitter for a load cell channel. The transmitter consists 4-terminal for an external resistive bridge strain gauge load cell and a M12 female connector for an external power supply. The load cell inputs are adjustable sensitivity to ensure high resolution readings and up to 1Hz sampling rate. With ultra-low power design and smart firmware, the device powered by a Solar panel/External power with rechargeable batteries to allow continuous operation up to 10 years. WSSFC-LC could support all regions of Sigfox network in over the World, RC1, RC2, RC3, RC4, RC5, RC6, RC7. The applications of the transmitter are weighing scales, towing loads and rope tension, structural stress measurement in metrology, web control, aerospace, medical devices, automotive testing, and manufacturing.

Applications

Weighing Scales, Tank, Hopper, and Vessel Scales, Towing Loads and Rope Tension, Structural Stress Measurement

Notes For Applications

Consider following factors to select right device:

Compatibility: Ensure it matches your load cell's signal type and range.

Environment: Suitable for the operating conditions (temperature, humidity, etc.).

Calibration: Easy to calibrate and set up.

Accuracy: Maintains required accuracy and resolution.

Power Supply: Matches your system's power requirements.



Sigfox Ready

Best operating performance on the SIGFOX network



High precision of load cell input

High resolution for load cell input readings from 0.1mV – 40mV/V



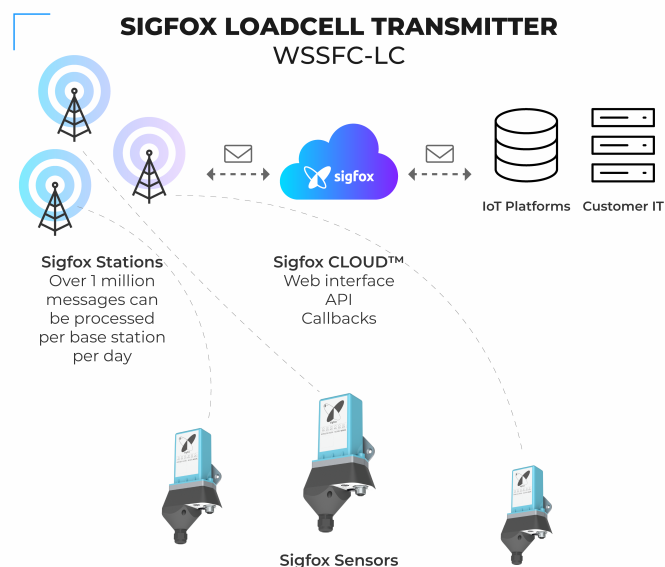
Up to 10-year continuous operation

With ultra-low power design and smart firmware, rechargeable batteries to allow continuous operation up to 10 years



Up to 10-point calibration table

10-point calibration table to enhance linearity of the load cell measurement



SYSTEM ARCHITECTURE

DAVITEQ TECHNOLOGIES INC

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Created date: Oct-29-2024

Updated date: Mar-05-2025

Specification

Input	1 x Loadcell channel
Loadcell input	4-wire resistive bridge loadcell (strain gauge loadcell)
Loadcell resolution	0.000715mV
Loadcell linearity	INL error ±0.000357627 mV and DNL error ±0.000357627 mV
Loadcell input sampling rate	1Hz max
Loadcell connectors	PG9, 4 terminals
COMMUNICATION	
Sigfox zones	Select RC2-RC3-RC4-RC5 or RC1-RC6-RC7
Antenna	Internal Antenna 2.0 dbi
Primary power supply	External power supply, 7-48 VDC
Secondary power supply	Rechargeable battery, 02 x AA Type 1.2VDC
RF Module complies to	CE, FCC, ARIB
Working temperature	-40~60°C (using Energizer® L91 battery)
Dimensions	H180xW94xD53
Netweight	300g (without battery)
Housing	Aluminum + Polycarbonate plastic, IP67

SIGFOX LOADCELL TRANSMITTER WSSFC-LC



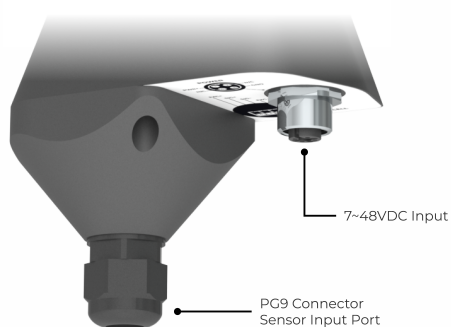
USED IN FACTORY TO MONITOR
THE WEIGHT OF MATERIALS AND PRODUCTS

SIGFOX LOADCELL TRANSMITTER WSSFC-LC



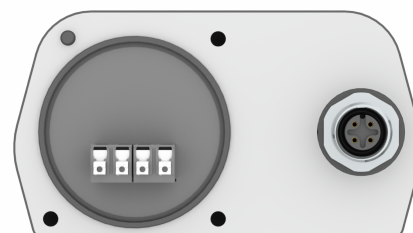
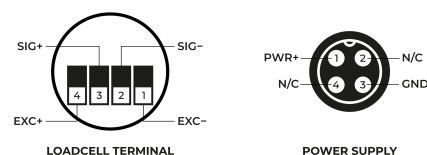
USED TO MONITOR
THE WEIGHT OF METAL STRUCTURES

SIGFOX LOADCELL TRANSMITTER WSSFC-LC



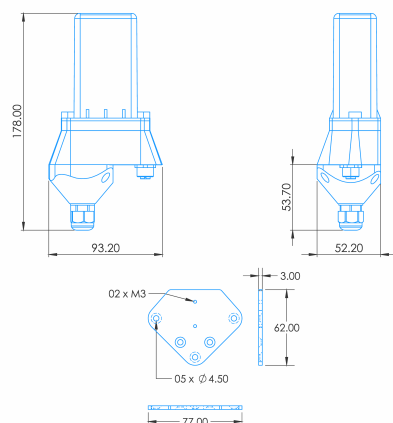
SIGFOX NODE CONNECT TO
LOADCELL SENSOR VIA PG9 CONNECTOR

SIGFOX LOADCELL TRANSMITTER WSSFC-LC



CONNECTORS OF
SIGFOX LOADCELL TRANSMITTER

SIGFOX LOADCELL TRANSMITTER WSSFC-LC



DIMENSION DRAWING OF
WIRELESS NODE (Unit: mm)

SIGFOX LOADCELL TRANSMITTER WSSFC-LC



AA RH6
rechargeable battery

-20~50°C working temperature
2000 mAh capacity



AA NiMH
rechargeable battery

-20~50°C working temperature
2000 mAh capacity

RECOMMENDED BATTERIES

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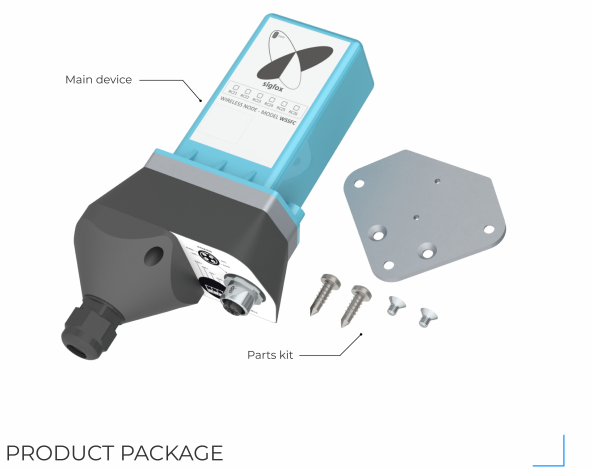
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SIGFOX LOADCELL TRANSMITTER
WSSFC-LC



PRODUCT PACKAGE

Ordering Information

ITEM CODES	DESCRIPTIONS
WSSFC-LC-01	Sigfox Load Cell Transmitter, internal antenna, 7-48 VDC external power & rechargeable battery AA 1.2VDC, IP67, PG9 connection for external load cell, for all RC zones.