



X24-ACMi-SA

ATEX / IECEx Wireless Load Cell / Strain Transmitter Module



Introduction

Load Cell Central's ATEX / IECEx wireless transmitter module measures strain input and periodically transmits data for receipt by X24 or T24 receivers.

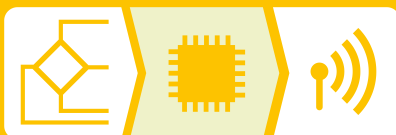
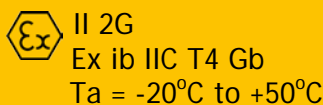
High accuracy ratio-metric input allows for calibration and linearization for pressure, force, torque and weight measurement in explosive atmospheres.

Housed in an environmentally sealed IP67 enclosure with battery holder for two Lithium Energizer L91 AA batteries.

This flexible transmitter supports a wide range of bridge sensors and is ideal for places that are difficult for a wired connection.

Product Features

- **Intrinsically Safe Electronics**
Approved for use in explosive atmospheres Zone 1, Zone 2
- **Flexible**
Supports a wide range of bridge sensors
- **High accuracy**
Extremely low temperature drift
High resolution ratiometric / bridge measurement
- **Power Efficient**
Long battery life of up to 5 years
- **High Quality Measurement**
Calibration and linearisation to engineering units
- **Cross Compatible**
Operates with X24 and T24 receivers



Accessories



X24-HD
ATEX/IECEx Handheld Telemetry Display



X24-SAe
ATEX/IECEx Telemetry Strain Transmitter OEM Module

Extend Your Capabilities with our T24 Wireless Modular System



Adaptable and expandable system for safe zones.

Certified transmitters send to 'safe zone' base stations, gateways, analog and digital outputs.

Find out more at www.800loadcel.com

Specifications

Specification with 1000R bridge, 2.5mV/V, at 3V supply at 25°C

Measurement Specifications

Strain gauge excitation system	4 wire
Strain gauge excitation	5 Vdc
Strain gauge resistance (min)	85 Ω
Strain gauge sensitivity (max)	±3.2 mV/V
Offset temperature stability (max)	4 ppm/°C
Gain temperature stability (max)	5 ppm/°C
Non linearity before linearization (max)	25 ppm of FR
Internal resolution/Bits	16,000,000 / 24
Noise free resolution at 1 sample per second	400,000/ 18.75
Transmission rates	From 5ms to 1 day

Environmental Specifications

Operating Temperature Range	-20 to +55 °C
Storage Temperature	-40 to +85 °C
Humidity	0 to 95 %RH

Radio

Radio type	License exempt transceiver
Radio frequency	2.4 GHz
Transmit power	10 mW
Range	Up to 800 m

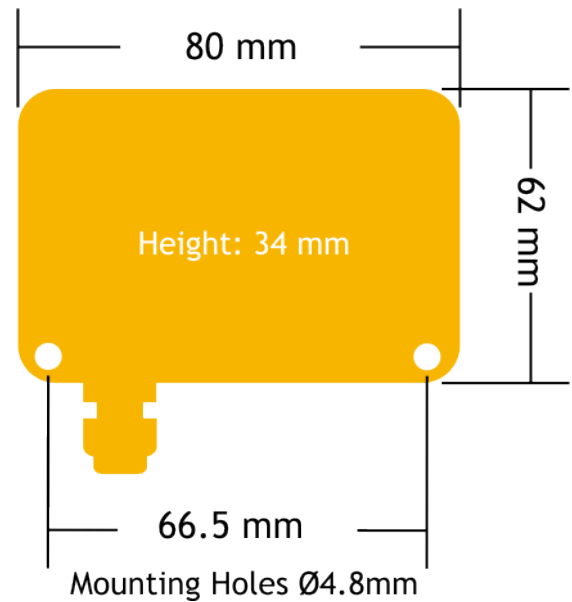
Power Supply

Power Supply Voltage	2.1 to 3.6 Vdc
Must use Energizer L91 batteries	
1. Power supply must be capable of supplying 300 mA for 250 μs (Required on start-up, waking and during low power operation)	

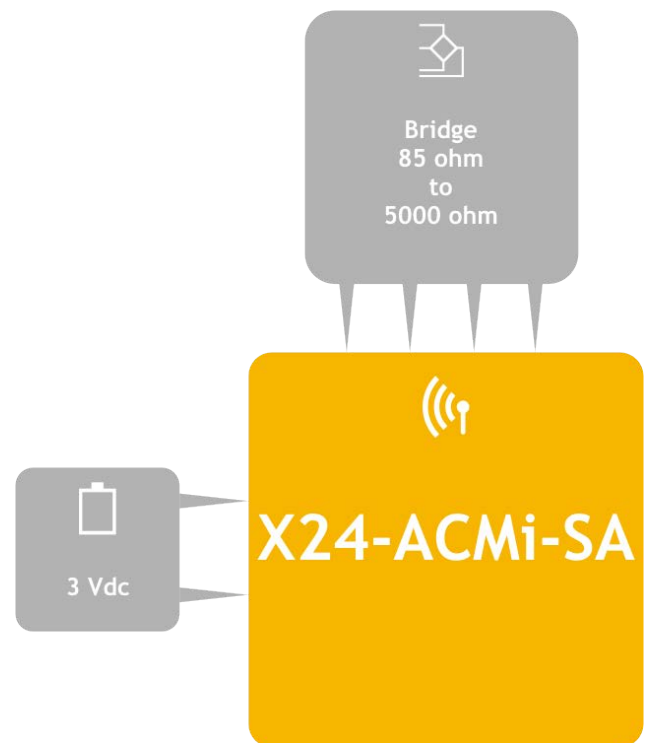
Battery Life in Low Power Mode Generating Results at 3Hz with a 350 Ohm Load Cell

Pair Energizer L91 Lithium AA cells:	Battery Life:
Constantly on transmitting at 3Hz	30 days
12 sessions per day of 5 minutes at 3Hz	2 years
Constantly on transmitting every 20 secs at 3Hz	5 years

Mechanical



Electrical



Order Codes

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