



APPLIED MEASUREMENTS LTD.
Transducer Specialists...

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X24-ACMi-SA ATEX Wireless Transmitter Module

Key Features:

- Approved for ATEX / IECEx Zones 1 and 2
- High Resolution Ratio-Metric/Bridge Measurements
- Extremely Low Temperature Drift
- High Transmission Rates up to 200 Hz
- IP67 Immersion Protected Enclosure
- Fantastic Transmission Range – Up to 800 metres!
- For use with all T24 and X24 Modules
- Powered by Energizer L91 Batteries
- Drives up to 4 x 350 ohm Load Cells
- Up To 30 Days Continuous Operation
- Operating Temperature -20 °C to +50 °C



The X24-ACMi-SA ATEX wireless transmitter module is intrinsically safe and designed to work in hazardous gas ATEX / IECEx zones 1 and 2. It measures strain input and transmits the data to any of the X24 or T24 wireless telemetry receivers, such as the X24-HD ATEX wireless portable display. It works with both the T24 acquisition modules and the X24 modules. It comes housed in an IP67 robust enclosure.

It delivers high quality measurements thanks to its high accuracy ratio-metric input and extremely low temperature drift, allowing for calibration and linearisation for pressure, force, torque and weight measurement.

The X24-ACMi-SA ATEX wireless transmitter module has up to 1 part in 400,000 (18.75 bits) noise-free resolution.

It has a long transmission range of up to 800m (1/2 mile) with its omni-directional antenna removing the need to house a separate external antenna, making this ideal for places that are difficult for a wired connection.

The X24-ACMi-SA ATEX wireless transmitter module uses easily available Lithium Energiser L91 AA batteries which have a battery life of up to 5 years, with continuous operation of 30 days. It has an operating temperature of -20°C to +50°C and a storage temperature -40°C to +85°C.

The X24-ACMi-SA ATEX wireless transmitter module is capable of driving up to four 350 ohm strain gauges bridges attached in parallel.

If you need an ATEX wireless transmitter module to fit inside a sensor, try our X24-SAe Wireless ATEX OEM Transmitter Module which is the bare PCM module.



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Industries:

- Petrochemical
- Industrial Processing
- Hazardous Environments
- Civil Engineering
- Lifting & Handling
- Waste Management
- Alternative Energy
- Construction
- Automotive
- Silo & Weighing Industry
- Marine

Applications:

- Wireless Monitoring of Bridge Structures
- Wireless Monitoring of Anchor Loads
- Wireless Bridge Surveying via GPRS
- Wireless Truck Load Weight Monitoring
- Wireless Skip Weighing System
- Wireless Platform Weighing with Ticket Printing
- Wireless Monitoring of Building Foundations
- Wireless Telemetry Strain Measurement of Wind Turbines
- Remote Load Monitoring of Construction Shoring Struts
- Force Measurement in Formula Racing
- Wireless Silo Weighing
- Superyacht Sail-Track Development
- Telemetry Monitoring on High Altitude Roads
- Radio Telemetry Monitoring of Underwater Turbine
- Wireless Mooring Rope Monitoring
- Wireless Valve Control
- Torque Measurement Using Wireless Technology

Specification:

Measurement Specifications		Units
Strain Gauge Excitation System	4	wire
Strain Gauge Excitation	5	Vdc
Strain Gauge Resistance (min)	85	Ω
Strain Gauge Sensitivity (max)	± 3.1	mV/V
Offset Temperature Stability (max)	4	ppm/ $^{\circ}$ C
Gain Temperature Stability (max)	5	ppm/ $^{\circ}$ C
Non Linearity Before Linearisation (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 +50	$^{\circ}$ C
Storage Temperature Range	-40 to +85	$^{\circ}$ C
Humidity	0 to 95	%RH
Radio		
Radio Type	License Exempt Transceiver	
Radio Frequency	2.4	GHz
Transmit Powre	10	mW
Range	up to 800	m
Power Supply		
Power Supply Voltage	2.1 to 3.6	Vdc
Must use Energiser L91 batteries.		
Battery Life in Low Power Mode with 350R Load Cell		
Pair Energiser 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	5 years	



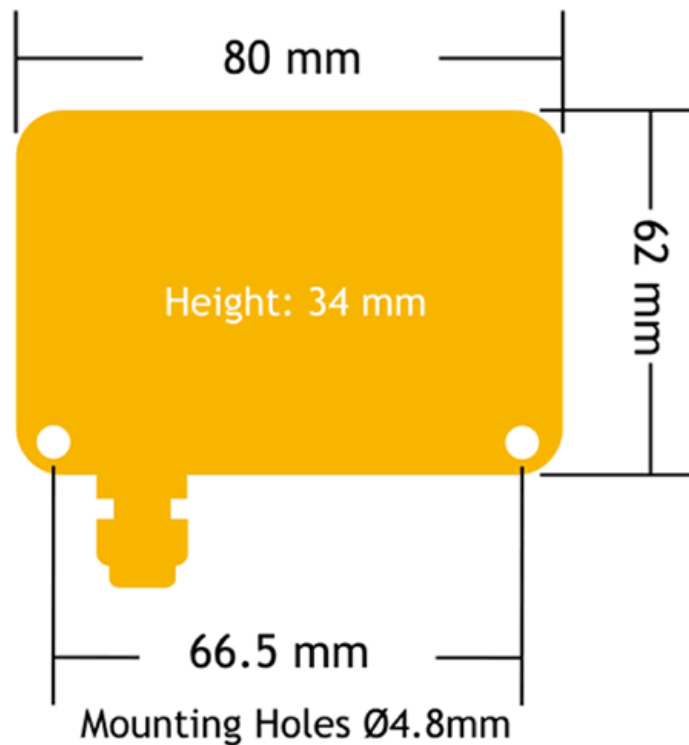
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Dimensions (mm):



Ordering Codes:

X24-ACMi-SA	ATEX wireless OEM transmitter module
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Associated Products:



[X24-SAe ATEX Wireless OEM Transmitter Module](#)



[X24-HD ATEX Wireless Portable Display](#)



[T24-ACM Wireless Sensor Module Enclosure with External Power](#)



[T24-ACMi Mini Sensor Enclosure](#)



[T24-ACMm Mini Data Transmitter Case for Strain, 0-20 mA, 0-10 V](#)



[T24-BSi Radio Telemetry Base Station with USB, RS485 or RS232](#)



[T24-BSu Wireless Radio Telemetry USB Base Station](#)