



X24 ATEX / IECEx WIRELESS TELEMETRY SENSOR SYSTEM

TRANSMISSION POSSIBLE



WIRELESS TELEMETRY DESIGNED FOR EXCEPTIONAL PERFORMANCE IN THE HARSHTEST OF CONDITIONS

The X24 range of products are ATEX and IECEx approved members of our industry-leading T24 wireless sensor family. High accuracy ratiometric inputs allow for calibration and linearisation for pressure, force and weight measurement in explosive atmospheres.

Approved for European & International Accreditations



MEASURES

Load, Strain, Pressure, Force and Torque

INDUSTRIES

Petrochemical, Industrial Processing and other Hazardous Environments

MEmantracourt
wirelessensorsystem.com

PICK UP THE SIGNAL

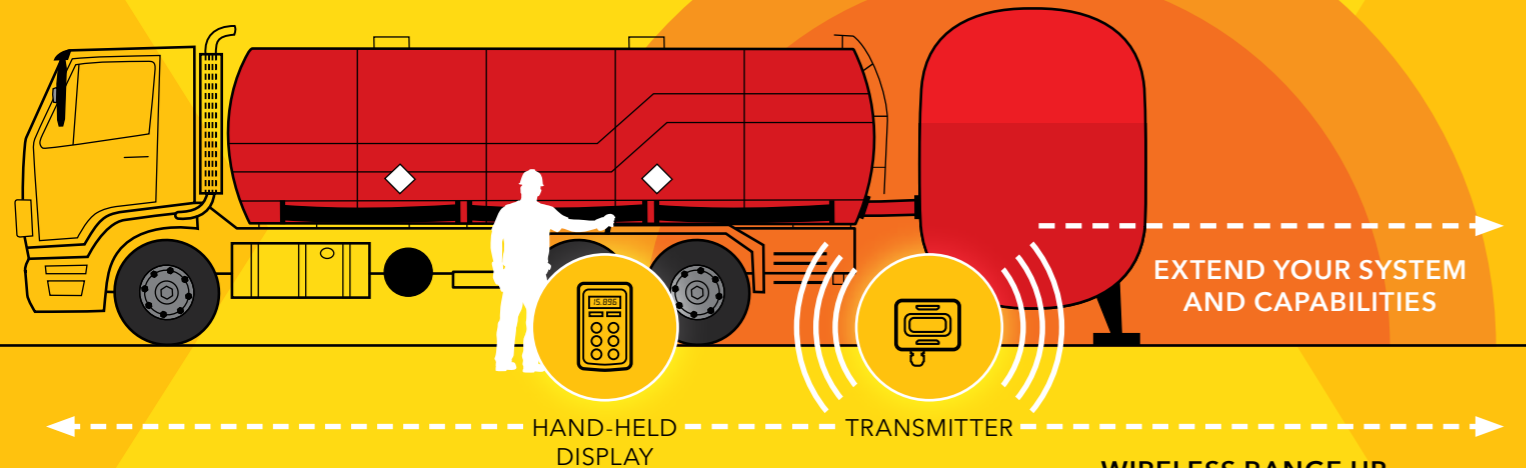
WATCH THE ANIMATION AT wirelessensornsystem.com

THE LATEST X24 PRODUCTS FOR USE IN HAZARDOUS ENVIRONMENTS

Systems can be created using X24 in hazardous areas and T24 in safe areas as your application demands.

The radios operate on the licence free 2.4 GHz band and are approved for FCC, IC and European standards.

The flexible transmission rates and low power usage allow for up to five years battery / cell life for remote modules.



X24 PROVIDES

- ▶ Intrinsically safe electronics approved for ATEX / IECEx Zones 1 & 2
- ▶ Adaptable and expandable wireless system for safe zones
- ▶ Long battery life of up to 5 years in the field
- ▶ Wireless transmission range of up to 800 m (half a mile)
- ▶ Proprietary licence free 2.4 GHz, approved for FCC, IC and European use
- ▶ Intuitive software which calibrates to sensors in under three minutes

HANDHELD DISPLAY X24-HD



CASED TRANSMITTER X24-ACMi SA



X24 transmitter fitted to load cell on tank foot



X24 FEATURES & BENEFITS

MULTIPLE USAGE SCENARIOS

Certified wireless transmitters now available to cover multiple usage scenarios in potentially lucrative markets.

INTRINSICALLY SAFE

Intrinsically safe electronics approved with the latest CSA certification for ATEX / IECEx Zones 1 & 2.

ADAPT TO CHANGING ENVIRONMENTS

Adapt to changing environments with an easy to add, expandable wireless system for new or retrofit installation. Certified transmitters send to 'safe zone' base stations, gateways, analogue and digital outputs.

EXCEPTIONALLY RELIABLE SIGNAL

Exceptionally reliable signal in environments which are likely to have a high density of metal equipment. High performance for assured and secured transmission.

REDUCE INSTALLATION AND MAINTENANCE

Installation costs vastly reduced with quick set up. Save on maintenance down time.

UP TO HALF A MILE TRANSMISSION DISTANCE

Transmission distance up to half a mile (800 m / 2600 ft) and battery lifetime of up to five years.

ENHANCE YOUR EX SOLUTION WITH TRUSTED WIRELESS TECHNOLOGY

Benefit from our established, tried and tested technology designed and manufactured by the industry leader.

OEM OPTION

OEM option for embedding within sensors and enclosures.

FREE LOGGING AND VISUALISATION SOFTWARE

Powerful logging and visualisation software, which is entirely free to download from our website, is used to display and build visual representations of systems with live readings.

SMART DIAGNOSTICS FOR EARLY WARNING

Intuitive software provides audible alarms to indicate under and over range as well as loss in communications. Indicates low battery and other remote sensor states and allows the creation of customised reports.

WHY GO WIRELESS?

- ▶ Save time and cost compared to installing a similar wired system
- ▶ Ideal for temporary applications and reusable
- ▶ The ability to place transmitters in hard to reach locations without the cost and logistics of cabling
- ▶ Maximum flexibility to respond to all types of industry applications
- ▶ Low maintenance costs with reliable data collection for many years



EXTEND YOUR EX SYSTEM & CAPABILITIES WITH T24

PICK UP THE SIGNAL

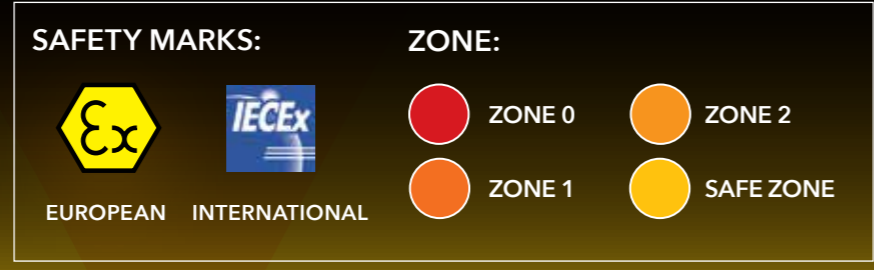
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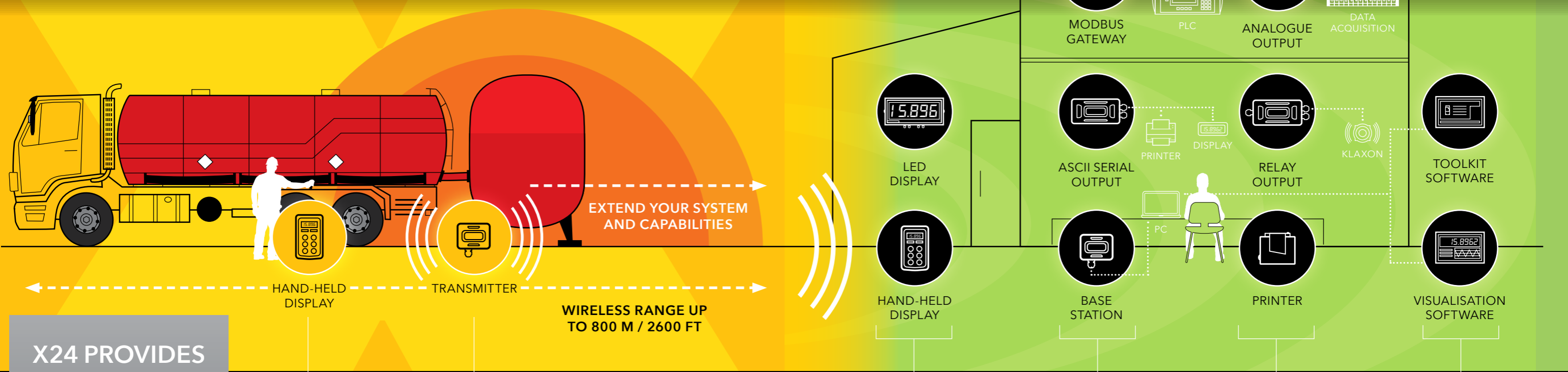
The radios operate on the licence free 2.4 GHz band and are approved for FCC, IC and European standards.

The flexible transmission rates and low power usage allow for up to five years battery / cell life for remote modules.



EXTEND YOUR CAPABILITIES WITH OUR T24 WIRELESS MODULAR SYSTEM

HIGHLY CONFIGURABLE TRANSMITTERS & RECEIVERS WITH POWERFUL SOFTWARE



X24 PROVIDES

- ▶ Intrinsically safe electronics approved for ATEX / IECEx Zones 1 & 2
- ▶ Adaptable and expandable wireless system for safe zones
- ▶ Long battery life of up to 5 years in the field
- ▶ Wireless transmission range of up to 800 m (half a mile)
- ▶ Proprietary licence free 2.4 GHz, approved for FCC, IC and European use
- ▶ Intuitive software which calibrates to sensors in under three minutes

HANDHELD DISPLAY X24-HD



CASED TRANSMITTER X24-ACMi SA



X24 transmitter fitted to load cell on tank foot



DISPLAYS



INTERFACES



OUTPUTS



FREE SOFTWARE



Our software provides simplified configuration, logging and visualisations for Windows PCs.



X24 ATEX / IECEx WIRELESS TELEMETRY SENSOR SYSTEM

SPECIFICATIONS

HANDHELD DISPLAY: X24-HD

Approved for use in explosive atmospheres Zone 1, Zone 2

Covers multiple usage scenarios

Use with single or multiple transmitters

Long battery life: 50 days at 12 sessions of 5 minutes per day; 54 hours continuous

Audible warnings and feedback

User controlled backlight

Up to 800 m (½ mile) range

Compatible with X24 and T24 transmitters

Indication of remote errors

Overload indication and alarm

Uses readily available Energizer L91 batteries

Sealed to IP67 in a robust handheld enclosure

Simple operator interface

Assign names to transmitters

Independent transmitter scaling (Unit conversion)

Tare / Zero / Gross functions

Operating temperature range of -10°C to +50°C

152 mm X 90 mm X 34 mm



Ex I M2
Ex ib I

Ex II 2G
Ex ib IIC T4 Gb
TA = -20°C to +50°C

CASED TRANSMITTER: X24-ACMI-SA

Approved for use in explosive atmospheres Zone 1, Zone 2

Up to 800 m (½ mile) range

Long battery life: 2 years at 12 sessions of 5 minutes per day; 30 days continuous

High accuracy, extremely low temperature drift

High resolution ratiometric / bridge measurement

Up to 1 part in 400,000 (18.75 bits) noise free resolution

Bipolar input, up to ±3.2 mV/V

Calibration and linearisation to engineering units

Capable of driving 4 X 350 R load cells

Up to 200 Hz transmission rates

5 V bridge excitation

Compatible with X24 and T24 receivers

Efficient omnidirectional antenna removes requirement for external enclosure antenna

Environmentally sealed to IP67 in robust enclosure

Operating temperature range of -20 °C to +50 °C

80 mm X 62 mm X 34 mm (Not including cable gland)

Uses readily available Energizer L91 batteries



Ex I M2
Ex ib I

Ex II 2G
Ex ib IIC T4 Gb
TA = -20°C to +50°C

OEM TRANSMITTER: X24-SA

Approved for use in explosive atmospheres Zone 1, Zone 2, Zone 21, Zone 22

Facilitates construction of certified load cells and products

Up to 800 m (½ mile) range

Long battery life: 2 years at 12 sessions of 5 minutes per day; 30 days continuous

High accuracy, extremely low temperature drift

High resolution ratiometric / bridge measurement

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Ex I M2
Ex ib I

Ex II 2GD
Ex ib IIC Gb
Ex ib IIIC T135°C Db
TA = -20°C to +50°C

WHEN IT COMES TO COMPATIBILITY WE'VE GOT THE EX FACTOR

CONTACT US

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wirelessensorsystem.com



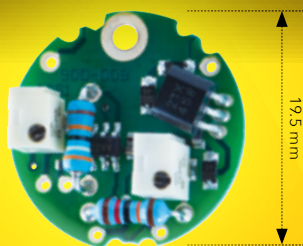
WIRELESS NOT FOR YOU? WE HAVE WIRED ANALOGUE AND DIGITAL SOLUTIONS FOR YOU



ALA5
ATEX CERTIFIED 4-20 mA
LOAD CELL AMPLIFIER

- Certified amplifier for hazardous Zones 0, 1 & 2
- Designed for fitting in-line to strain gauge sensors such as load cells
- Intrinsically safe to EN60079-11
- Provides 2 wire, 4 - 20 mA current loop output
- Waterproof to IP67 / NEMA 4

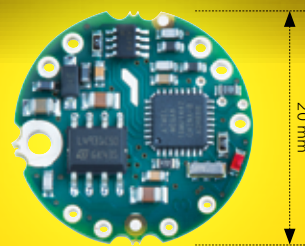
Ex II 1G Ex ia IIC T4
T_{amb} = -40°C to +85°C



ICA5ATEX
ATEX CERTIFIED MINIATURE
LOAD CELL AMPLIFIER

- For hazardous Zones 0, 1 & 2
- Miniature PCB format for fitting inside sensors, 19.5 mm diameter, 7.6 mm height
- 2 wire current loop 4 - 20 mA output
- Low interaction between the trimmers makes calibration fast and easy

Ex II 1G Ex ia



DCELL
ATEX CERTIFIED DIGITAL
LOAD CELL CONVERTER

- For hazardous Zone 2
- High performance strain gauge to RS485 or CAN digital load cell converter
- Designed for fitting inside strain gauge sensors such as load cells
- Linearisation and temperature compensation
- Option of miniature digital temperature sensor module

Ex II 3G Ex nA II

ALL IMAGES NOT TO SCALE