# IWmAT SERIES
## INDUSTRIAL WIRELESS 4-20 mA TRANSMITTER



The IWmAT Wireless Transmitter is a cost effective alternative to traditional wiring that offers the advantages of a low-cost installation in inaccessible and expensive installation environments.

It is easily paired to any of the range of IWR receivers - thus offering a "plug and play" solution to your 4-20 mA current application.

The IWmAT sensor should be used with any of the IWR range of receivers. A line-of-sight range of up to 500 m is possible depending on the wireless receiver used (refer to specific receiver datasheets for further information).

## Features

- 4-20 mA wireless transmission
- Up to 500 m line-of-site range (depending on receiver)
- Five-year battery life at 10 second transmission update rate
- Simple DIL switch pairing with the single or five channel receiver
- User-selectable transmission update rates
- A range of receivers are available
- Receiver clean contacts provide process alarm functions

## Typical Applications Include

- Simple cable replacement installation
  – dispense with expensive and tortuous cable runs
- Analog Sensor Status
  – transmit 4-20 mA sensor outputs to a remote receiver

## SPECIFICATIONS

### Transmitter Output

| | |
|---|---|
| **\*Transmission Frequency** | 2.4 Ghz using ISM bands |
| **Transmit Power** | 18 dBm |
| **System Channel** | User selectable via DIL switch |
| **Antenna** | Integral 0dBi |

*Compliant with EN 300 328, V1.8.1

### Material Specifications

| | |
|---|---|
| **Wireless Enclosure Material** | Plastic |
| **Weight** | 150g including battery |
| **\*Installation position** | Any |
| **Environmental protection** | Designed to IP68 (not recommended for submersion due to signal loss) |

*Consult installation manual to ensure adequate signal path between transmitter and receiver

### Instrument Power Source

| | |
|---|---|
| **Battery Type** | User replaceable Lithium C cell |
| **Battery Life** | Five years at 10 second update rate |
| **Battery Shelf Life** | 10 years |

### Temperatures

| | |
|---|---|
| **Ambient Temperature range** | -20$^o$C to +50$^o$C |
| **Storage Temperature** | -20$^o$C to +80$^o$C |

## Input/Output Signals

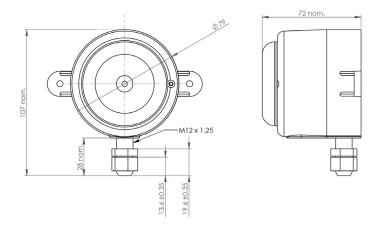| Input (transmitter) | 4-20 mA (passive) |
|---|---|
| **Receiver Part Number Receiver Outputs** | |
| **IoT Gateway** | Built-in cellular modem allows all data to be sent to remote servers |
| **IWR-PORT** | RS-232 or RS-485 or Ethernet MODBUS Communications. Up to 128 off analog 4-20 mA or Relay outputs can be obtained by fitting extra ISOSLICE I/O modules |
| **IWR-USB** | Displays & Logs data on any PC running IWR-USB software |
| **IWR-5** | 5 off 4-20 mA or 1-5 V dc and 1 Relay output |
| **IWR-1** | 1 off 4-20 mA and 1-5 V dc and 1 Relay output |

***Transmission Update Rate 1, 5, 10 and 30 seconds

*** Consult installation manual for set-up:

- single channel system is DIL switch configurable
- five channel system requires set-up using "IWR Set" user software

## ORDERING OPTIONS

| Wireless transmitter | IWMAT-00 |
|---|---|
| **Spare battery** | IBAT-1 |
| **Receivers** | See IoT Gateway, IWR-PORT, IWR-USB, IWR-5 and IWR-1 data sheets |
| **Five Channel Configuration Software** | IWR-Set (free download*) |

## DIMENSIONS

All dimensions are in millimeters