IWTxT SERIES
WIRELESS 4-20 mA TRANSMITTER WITH Tx SUPPLY

The IWTxT is designed to convert any standard 4-20 mA transmitter into a wireless unit.

It works by switching on a supply to the 4-20 mA transmitter, waiting for a suitable settling time and then sending the data to one of Sensata's standard wireless receiver units.

The IWTxT is specially designed to maximise battery life and in a typical application the battery life will exceed 12 months. The data update rate is user selectable to suit the requirement of each measured variable and so maximize battery life.

Typical update rates include 1 second, 10 seconds, 60 seconds or 1 hour. The system also features a signal strength reading and time since last transmission which can be remotely monitored.

The IWTxT is designed to operate with the IWR range of receivers. The IWR-1 can output a 4-20 mA or 1-5V signal whilst the IWR-PORT can store up to 128 variables for transmission to an industrial Ethernet connection or an RS-232/485 communications link.

Inputs

The input types and ranges included below are our standard ones only. Contact Sensata for others.

DC Current & Voltage
0-20 mA, 4-20 mA, 0-10 mA into 15/30Ω
0-1V, 0-10V, 1-5V into 100kΩ/1MΩ

Any standard 4-20 mA transmitter

Features

- Battery powered wireless transmitter
- Supplies excitation voltage to 4-20 mA transmitters
- Long battery life
- Make any transmitter into a wireless transmitter
- Complete thermocouple, RTD, Pressure and Level wireless probes are available

SPECIFICATIONS

Parameter	Min	Typ	Max	Comments
Supply Voltage		3.6V		Battery Powered (18V Tx Supply)
Supply Current (mA)			40	When transmitting data
Input Impedance (Volt)		15Ω		Dependent on range, typical = 4-20 mA
Operating Ambient	-200°C		55°C	
Relative Humidity	0%		90%	
Isolation Voltage	1kV			

Installation Detail

Mounting	Wall mounting
Orientation	Any
Connections	Screw clamp with pressure plate
Conductor size	0.5-4.0mm
Insulation Stripping	12mm
Weight	Approx 100g
Enclosure Size	160 x 90mm x 50mm deep

Connection Details

1. Battery -ve
2. Battery +ve
3. Input +ve
4. Tx Supply +ve

Input/Output Signals

Input (transmitter)	mV AC from an AC current transformer
Receiver Part Number Receiver Outputs	
IoT Gateway	Pairs with up to 128 wireless ransmitters. Sends data via MQTT to on-premises servers or the cloud using the built-in 2G/3G or 4G modem. 8 Digital Inputs, 4 relay outputs.
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:
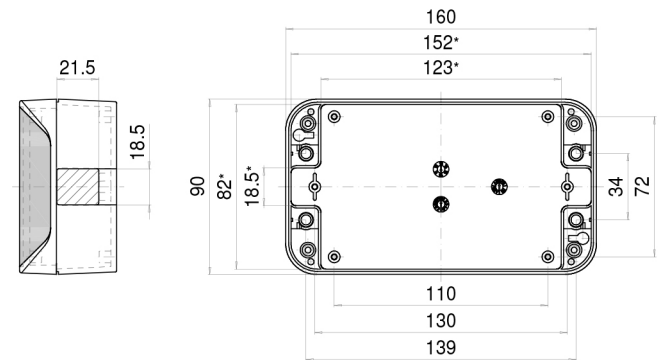- Single channel system is DIL switch configurable
- Five channel system requires set-up using "IWR Set" user software

Part Number	IWTXT-00
Input Type	4-20 mA
Input Range	0-100%
Spare Battery	IBAT-1
Power Supply	Battery powered

DIMENSIONS

All dimensions are in millimeters.