IWLoadT

Wireless Temperature & RIeative Humidity Sensor

The IWLoadT strain gauge and load cell transmitter has been designed to take an input from virtually any 4-wire load cell or strain gauge and send the value to any of the range of wireless receivers designed and manufactured by Industrial Interface.

It is easily paired to any of the range of IWR receivers - thus offering a “plug and play” solution to your load cell and strain gauge measurement applications.

The IWRhT sensor can 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 data sheets for further information).

Typical Applications Include

- Monitoring Load Cells and Strain Gauge units in any industrial environment
- Weighing applications

- Asset monitoring
  - Monitoring of remote structures such as bridges, and the load pins used in supports and struts
- Service Contract
  - temporary installation for servicing and field trials

Features

- High accuracy digital sensing 4-wire load cells and strain gauges
- Wall mounting enclosure
- 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
- Single, five and multi-channel channel receivers available (up to 128)
- User-selectable transmission update rates
- Analog digital, RS-232/485, Ethernet & USB receiver outputs
- Receiver clean contacts provide process alarm functions

System Performance

Accuracy (Non-linearity & Hysteresis)	Better than <± 1% b
Ambient Temperature Range	-40 to + 80 ˚C

Instrument Power Source

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

Material Specifications

Wireless Enclosure Material	Acetal
Weight	300g typical including battery
****Installation Position**	Any
** Consult installation manual to ensure adequate signal path between transmitter and receiver.	

Receiver Output Signals

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	

Transmitter Output

***Transmission Frequency**	2.4 Ghz IEEE 802.15.4
Transmit Power	18 dBm
System Channel	User selectable via DIL switch
Antenna	Integral 0dBi

*Compliant with EN 300 328, V1.8.1

Environmental Conditions & Thermal Effects

Media Temperature	-40°C to +80°C
Op. /Ambient Temperature	-40°C to +80°C
Storage Temperature	-40°C to +80°C
Humidity	10% to 90% Rh non-condensing

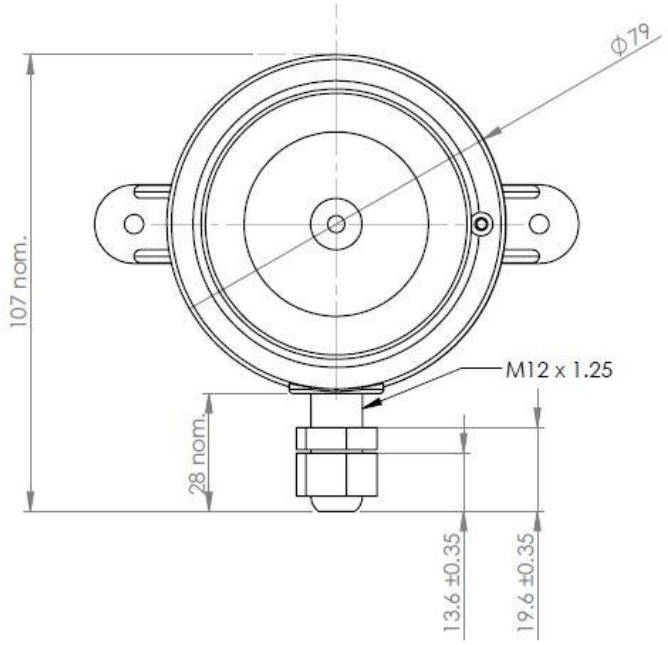
Mechanical Stability

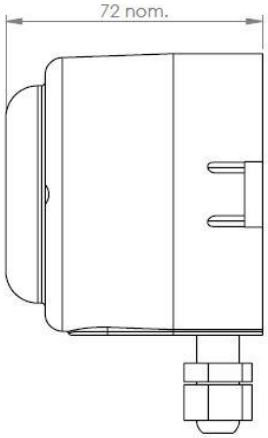
See user manual

DIMENSIONS

All dimensions are in millimeters.

Please Note: Cable gland not required for IWRhT transmitter





ORDERING OPTIONS

Example : IWLoadT-00

Wireless Transmitter	See table below
Spare Battery	IBAT-1
Receivers	See IoT Gateway, IWR-PORT, IWR-USB, IWR-5 and IWR-1 data sheets
Five Channel Configuration Software* See Datasheet IWPTL	IWR-Set

*Download free user configuration software:

Part No.	Description	Enclosure
IWLoadT-00	Load Cell	Ind Enclosure

Made in the UK