Wireless Sensors & Systems

Z-HEAD

UNIVERSAL INPUT WIRELESS TRANSMITTER

- Battery Powered Wireless Transmitter
- Wide Range of Inputs Including:
  RTD, Thermocouple, mA and Volts
- Long Battery Life
- Range of connection heads
- Complete Thermocouple, RTD, Pressure and Level probes available

Description

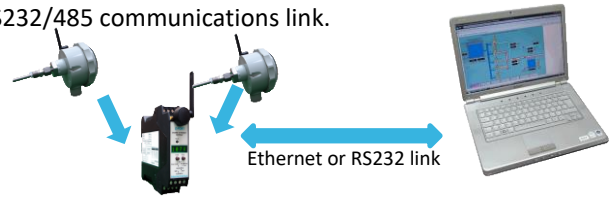
The Z-HEAD universal input ZigBee transmitter can accept a wide range of inputs from most process measurement devices and transmits the measured variable to a 2.4GHz ZigBee receiver unit.

The Z-HEAD is specially designed to maximise battery life and in a typical application the battery life can exceed five years. The data update rate is user selectable to suit the requirement of each measured variable and so maximise 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 unit mounts in most standard process connection heads and complete assemblies are available for RTD, Thermocouple, Pressure and Level sensors.

The Z-HEAD is designed to operate with the Z-200 or Z-PORT units. The Z-200 can output a 4-20mA or 0-10V signal whilst the Z-PORT can store up to 1024 variables for transmission to an Industrial Ethernet connection or an RS232/485 communications link.



Inputs

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

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

Thermocouples
Types E,J,K,N,R,S,T,B linearised or non-linearised
Ranges: Wide range of inputs
Cold junction compensation (can be turned off)
Upscale or downscale t/c burnout options

Resistance Thermometers
2, or 3 wire PT100 , linearised or non-linearised.
Wide range of inputs, upscale or downscale burnout.

Bridge Circuits
Most standard bridge circuits with mV outputs.

Pressure and Level Sensors
A full range of wireless enabled pressure and level sensors are available, please see Pressure and Level Section

Digital Inputs
A module for digital inputs is available which can operate in counting mode or status on/off mode

Industrial Interface

Email: sales@industrialinterface.co.uk

Web: www.industrialinterface.co.uk

Technical Specifications

Parameter	Min	Typ	Max	Comments
Supply Voltage		3.6V		Battery Powered
Supply Current (mA)			40	When transmitting data
Input Impedance (Volt)		100kΩ		Dependent on range, typical = 0-10V
Operating Ambient	-200 ºC		55ºC	
Relative Humidity	0%		90%	
Isolation Voltage see note 1	1kV			
Notes				

Installation data

Mounting	DIN Rail TS32/35
Orientation	Any
Connections	Screw Clamp with pressure plate
Conductor size	0.5-4.0mm
Insulation Stripping	12mm
Weight	Approx 70g
Enclosure Size	85mm dia x 57mm deep

Connection details

1	Power Supply -ve
2	Power Supply +ve
3	Input +ve
4	Input -ve
5	RTD 3rd wire
6	Bridge Excitation

Ordering information

Please supply:	
Part Number	Z-HEAD
Input Type	e.g mA, Volt, T/C, RTD
Input Range	e.g 4-20, 0-10, 0-500ºC
Power Supply	Battery powered