



# Z-HEAD

## UNIVERSAL INPUT ZIGBEE WIRELESS TRANSMITTER

- Battery Powered Wireless ZigBee Pressure Transmitter
- Wide Range of Inputs Including: RTD, Thermocouple, mA and Volts
- Long Battery Life, Low level Alarm
- Wide 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 three 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 unit also transmits a signal strength reading 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  $\Omega$   
0-1V, 0-10V, 1-5V into 100k $\Omega$  / 1M $\Omega$

#### 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

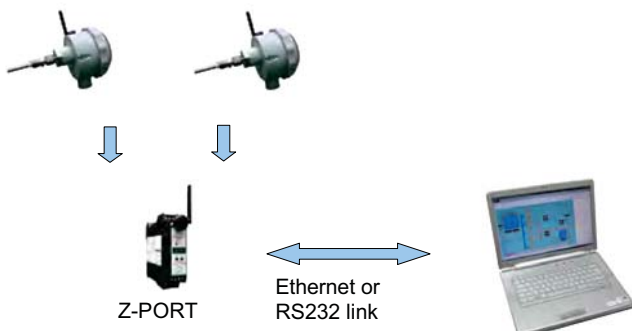
Most standard bridge circuits with mV outputs.

#### Pressure and Level Sensors

A full range of ZigBee 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





Parameter	Min	Typ	Max	Comments
Supply Voltage		3.6V		Battery Powered
Supply Current (mA)			40	When transmitting data
Input Impedance (Volt)		100k $\Omega$		Dependent on range, typical = 0-10V
Operating Ambient	-200°C		70°C	
Relative Humidity	0%		90%	
Isolation Voltage <sup>see note 1</sup>	1kV			
Notes				



Installation Data	
<b>Mounting</b>	In Head or wall mount
<b>Orientation</b>	Any
<b>Connections</b>	Screw Clamp with pressure plate
<b>Conductor size</b>	0.5-4.0mm
<b>Insulation Stripping</b>	12mm
<b>Weight</b>	Approx 70g
<b>Enclosure Size</b>	85mm dia x 57mm deep

### Connection Details

1. Power Supply -ve
2. Power Supply +ve
  
3. Input +ve
4. Input -ve
5. RTD 3<sup>rd</sup> wire
6. Bridge Excitation

### Ordering Information

Please supply:

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