



## Z-200

### ZIGBEE TRANSMITTER / RECEIVER SYSTEM

- Transmits up to 1024 I/O Values through ZigBee Wireless Link
- Simple Cable Replacement System
- Local indication of Input Values
- Expand the number of Inputs through Iso-Slice I/O Modules
- Receiver Output either analogue or Ethernet/RS232 Connection with Local Display



#### Description

The Z-200 unit allows almost any number of analogue or digital input values to be wirelessly transmitted to a remote receiver with either analogue 4-20mA, 0-10V, Ethernet or RS232 outputs.

The transmitter unit has one universal analogue input but the system can be expanded through the use of the optional slice I/O modules.

These modules connect automatically via the DIN rail mounted bus connector allowing the easy addition and removal of extra I/O.

The built-in display allows local monitoring of the individual inputs and outputs, a useful commissioning and operations tool.

The Z-200 has typically two uses:

- 1) To transmit a single variable to a receiver unit which outputs a 4-20mA or 0-10V signal corresponding to the input
- 2) To transmit multiple input values to a receiver unit which provides either multiple 4-20mA or 0-10V outputs or a single Ethernet or RS232 connection.

The transmitter and receiver units are identical units factory configured for either function.

#### Outputs

##### DC Current and Voltage

0-20mA, 4-20mA, 0-10mA into 750Ω  
0-1 V, 0-10 V, 1-5V into a minimum 2kΩ

#### 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  
0-25mV, 0-100mV, 0-500mV into >10MΩ

Min & Max Full Scale Ranges are:

DC Current	0 - 1mA	0 - 5A
Bipolar DC Current	±5mA	±10mA
DC Voltage	0 - 25mV	0 - 300V*
Bipolar DC Voltage	±5V	±10V
2 Wire Pot	0 - 125Ω	0 - 1kΩ
3 Wire Pot	0 - 1kΩ	0 - 100kΩ

\* Note: For input voltages greater than 60Vdc a Divider unit must be specified.

##### 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, 3 or 4 wire PT100 or PT1000, linearised or non-linearised  
Ranges: Wide range of inputs  
Upscale or downscale RTD burnout options

##### Frequency Input

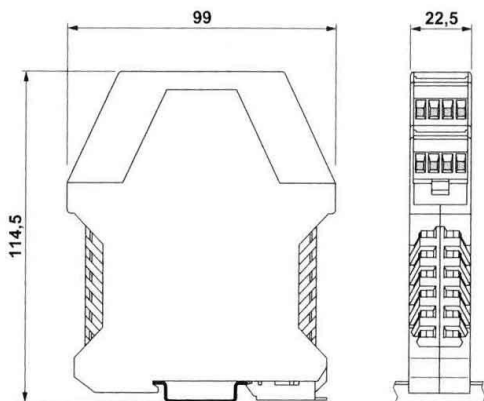
Wide range of freq inputs to 250kHz. Specify -FREQ

##### Additional I/O

Extra analogue and digital inputs and outputs are available through the ISO-SLICE slice I/O modules.



Parameter	Min	Typ	Max	Comments
Supply Voltage	16	24V	30	
Supply Current (mA)	65		120	24 V dc supply
Input Impedance (Volt)		1M $\Omega$		
Input Impedance( mA)		15 $\Omega$		
Volt drop (mA input)		0.3		At 20mA input
Output Linearity Error		$\pm 0.01\%$	$\pm 0.05\%$	
Temp Coefficient			$\pm 100\text{ppm}/^\circ\text{C}$	
Operating Ambient	0 $^\circ\text{C}$		55 $^\circ\text{C}$	
Relative Humidity	0%		90%	
Isolation Voltage <small>see note 1</small>	1kV			
Surge Voltage	2.5kV for 50 $\mu\text{S}$			Transient of 10kV/ $\mu\text{S}$
Notes	The process input level is shown on the 4 digit LED display. Figures based on 24 Vdc supply 20 degC ambient.			



Installation Data	
<b>Mounting</b>	DIN Rail TS35
<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 120g

Connection Details			
3.	Tx supply +ve		RTD 4 <sup>th</sup> wire
5.	Input mA +ve	T/C +ve	RTD +ve
4.	Input mA -ve	T/C -ve	RTD -ve
6.			RTD
3 <sup>rd</sup> wire			
1.	Power Supply -ve		
2.	Power Supply +ve		
10.	Output -ve		
12.	Output +ve		

Ordering Information	
<b>Please supply:</b>	
<b>Part Number:</b>	Z-200
<b>Input Type:</b>	e.g mA, Volt, T/C, RTD
<b>Input Range:</b>	e.g 4-20, 0-10, 0-500 $^\circ\text{C}$
<b>Power Supply:</b>	24 Vdc
<b>Options:</b>	Extra I/O available through ISO-SLICE modules