

Z-200

WIRELESS CABLE REPLACEMENT 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 the use of IsoSlice I/O Modules
- Receiver Output either analogue or Ethernet/RS232/485 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, digital or an Ethernet or RS232/485 comms port.

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:

- To transmit a single variable to a receiver unit which outputs a 4-20mA or 0-10V signal corresponding to the input.
- 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

0-1V, 0-10V, 1-5V into a minimum 2kΩ

Digital Relay Contacts

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 or Digital Inputs

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

Additional I/O

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

Technical Specifications

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

Installation data

Mounting	DIN Rail TS35
Orientation	Any
Connections	Screw Clamp with pressure plate
Conductor size	0.5-4.0mm
Insulation Stripping	12mm
Weight	Approx 120g

Connection details

3	Tx supply +ve	RTD 4th wire
5	Input mA +ve T/C +ve	RTD +ve
4	Input mA -Ve T/C -ve	RTD -ve
6		RTD 3rd wire
1	Power Supply -ve	
2	Power Supply +ve	
10	Output -ve	
12	Output +ve	

Ordering information

Please Supply	
Part Number	Z-200
Input Type	e.g mA, Volt, T/C, RTD
Input Range	e.g 4-20, 0-10, 0-500 $^\circ\text{C}$
Power Supply	24Vdc
Options	Extra I/O available through ISO-SLICE modules Ethernet or RS232/485 comms port