



Digital Panel Meter

From IMA

Breeze Display Series 20



/// Key Features

- up to 2 alarm relays
- a variety of inputs
- power supply for transmitters
- large display up to 13 mm



IMA Ltd, Parkwell House, Otley Road, Guiseley, West Yorkshire, LS20 8BH, England

Tel: +44(0)1943 878877 Email: info@ima.co.uk Website: www.ima.co.uk

/// Cost Effective Reliability

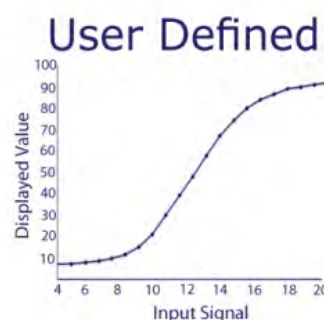
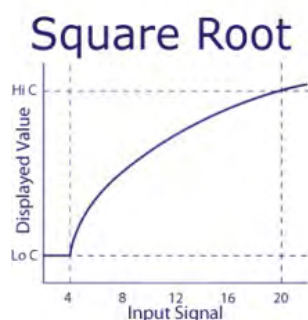
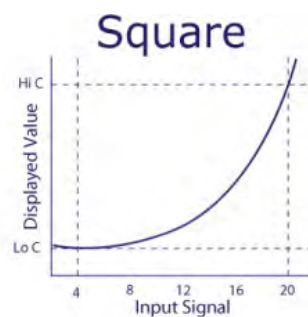
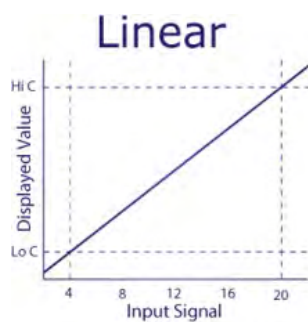
With easily programmable measuring ranges, the **Breeze Series 20** digital panel meter offers a cost effective, high reliability, solution for loop powered transmitters and other measurement needs. Current, voltage, PT100, or Modbus inputs may be displayed. Measurement ranges and alarm set points are user programmable. User adjustable hysteresis avoids alarm chatter, and variable delays for relay activation and de-activation make the **Breeze 20** a flexible device. The integral power supply offers 21 VDC for loop powered systems.



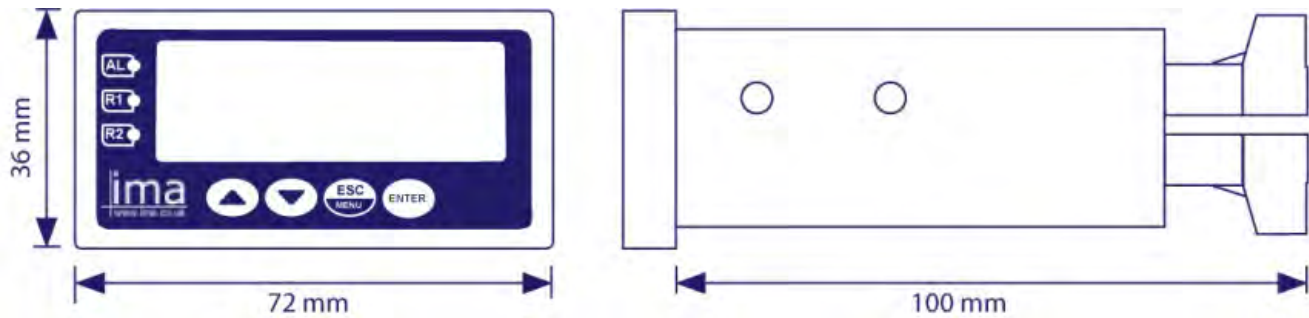
/// More Features

- 4 button user interface
- programmable relay hysteresis
- linear & non-linear inputs (up to 21 point linearisation)
- RS-485/ Modbus RTU communications

/// A Variety of Input Signal Conversions

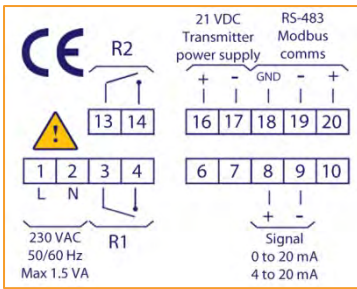


/// Dimensions



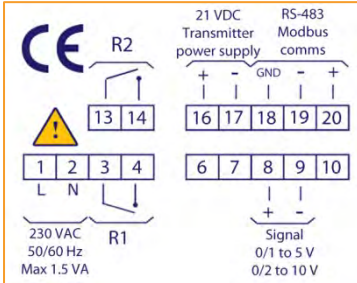
/// Specifications

ELECTRICAL	
Power supply	85 to 265 VAC or 24 VDC
Display	LED, Red, 4 x 13 mm (IP40) or 5 x 9 mm (IP65)
Inputs	0 to 20 mA, 4 to 20 mA or 0 to 5 V, 0 to 10 V, 1 to 5 V, 2 to 10 V or PT100 or Modbus input
Measuring range	-999 to 9999 plus decimal point Or -9999 to 9999 plus decimal point for IP65 version
Accuracy	± 0.25 % ± one digit in the entire range
Outputs (when fitted)	1 or 2 threshold relays 1 A at 250 VAC
Transmitter power supply	21 VDC ± 5 V, non-stabilized, not insulated from measuring inputs; maximum 25 mA for 240 VAC, 100 mA for 24 VDC
Communications	RS-485, 8N1, 1200 bit/s to 19200 bit/s, Modbus RTU (not galvanically isolated)
MECHANICAL	
Operational temperature	0 °C to +50 °C
Storage temperature	-10 °C to +70 °C
Protection class	IP65 front and side (option) IP40 front and side IP20 case and connection clips
Case material	NORYL-GFN2S E1
Panel cut-out	66.5 W x 32.5 H mm
Case dimensions	72 W x 36 H x 97 D mm
Panel plate depth	Up to 5 mm
Installation depth	102 mm minimum



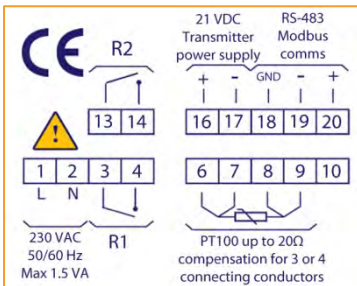
Input option I

Current inputs of either 0 to 20 mA or 4 to 20 mA may be programmed for measurement ranges between -999 to 9999 plus a decimal point. When the IP65 version is selected, the LED height reduces to 9 mm and the measurement range increases to -9999 to 9999 plus a decimal point.



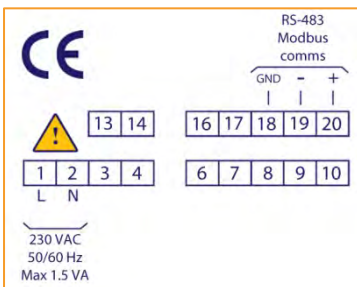
Input option V

Voltage inputs of either 0 to 5 V, 1 to 5 V, 0 to 10 V or 2 to 10 V may be programmed for measurement ranges between -999 to 9999 plus a decimal point. When the IP65 version is selected, the LED height reduces to 9 mm and the measurement range increases to -9999 to 9999 plus a decimal point.



Input option T

PT100 input with automatic recognition between 3 or 4 wire connectors. Resistance compensation of up to 20 Ω of the connecting conductors. Measuring range of -50 °C to 550 °C with a 0.1 °C resolution.



Input option M

Modbus input only. Intended for display data sent via RS-485 where a quick view of critical data is required. For measurement ranges between -999 to 9999 plus a decimal point. When the IP65 version is selected, the LED height reduces to 9 mm and the measurement range increases to -9999 to 9999 plus a decimal point. Note that alarm relays are not available with this option.

ORDERING INFORMATION

Breeze Series 20 panel mounting meter comprising: red 4 x 13 mm LED. Complete with 21 VDC power supply for transmitters. Modbus communications over RS-485. Measures 72 W x 36 H x 97 D mm.

Breeze 20	I	0 to 20 mA or 4 to 20 mA input
	V	0 to 5 V, 0 to 10 V, 1 to 5 V, or 2 to 10 V input
	T	PT100 input – display range -50 to 550 °C with 0.1 °C resolution. Transmitter supply not fitted
	M	RS-485 Modbus input only (output relays not available with this option)
Outputs		
0	No relays fitted	
1	1 off setpoint relay 1 A at 250 VAC (cosφ=1)	
2	2 off setpoint relays 1 A at 250 VAC (cosφ=1)	
IP Rating		
0	IP40	
1	IP65 on front face (display height reduced to 9 mm)	
Power Supply		
0	85 to 260 VAC	
1	24 VDC	
Breeze 20		