

# Digital Panel Meter From IMA

# Breeze Display Series 30



# /// Key Features

- up to 4 alarm relays
- up to two thresholds for EACH relay
- optional current output
- 24 V power supply for transmitters



# **/// Cost Effective Reliability**

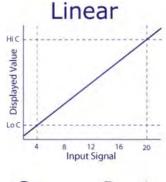
The Breeze Series 30 process panel meter offers a cost effective, high reliability, solution for loop powered transmitters and other measurement needs. Current, voltage, PT100, or Modbus inputs may be displayed. Input signals can be converted using linear, square, square root or up to 21 user defined points combined with a current output giving the Breeze 30 the flexibility to become the user interface for a variety of linear or non-linear measurement systems. The peak hold function allows a maximum peak value to be held and displayed.

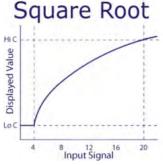


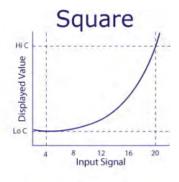
#### /// More Features

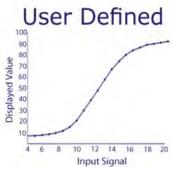
- peak hold
- large 20 mm display
- RS-485/Modbus RTU communications
- programmable relay delays
- audible alarm

### /// A Variety of Input Signal Conversions



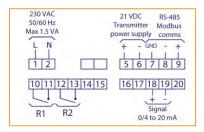






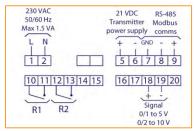
# /// Specifications

ELECTRICAL			
Power supply	85 to 265 VAC/DC or 19 to 50 VDC or 16 to 35 VAC		
	4.5 VA max for AC supplies: 4.5 W max. for DC supply		
Display	LED, Red, 4 x 20 mm		
Inputs	0 to 20 mA, 4 to 20 mA; <b>OR</b> 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		
Accuracy	± 0.25 % ± one digit in the entire range		
Outputs (when fitted)	2 or 4 relays 1 A at 250 VAC; <b>OR</b> 2 or 4 relays OC 30 mA / 30 VDC / 100 mW		
	With optional 0 or 4 to 20 mA current output		
Transmitter power supply	24 VDC +5V -10 V, non-stabilized, not insulated from measuring inputs;		
	maximum 100 mA		
Communications	RS-485, 8N1, 1200 bit/s to 115200 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	90.5 W x 43 H mm		
Case dimensions	96 W x 48 H x 100 D mm		
Panel plate depth	Up to 5 mm		
Installation depth	102 mm minimum		



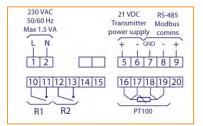
#### Input option I

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.



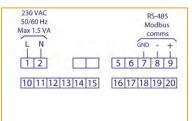
#### Input option V

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.



#### **Input option T**

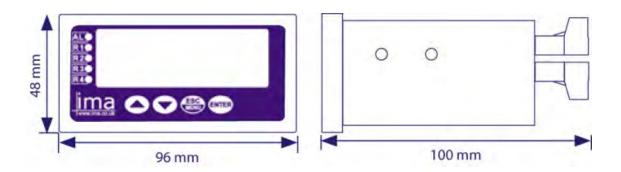
PT 100 input with automatic recognition between 3 or 4 wire connectors. Resistance compensation of up to 20  $\Omega$  of the connecting conductors. Measuring range of -50 °C to 550 °C with a 0.1 °C resolution.



#### Input option M

Modbus input only. Intended for display of 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.

# /// Dimensions



ORDERING INFORMATION									
Breeze 30 panel mounting meter comprising: red 4 x 20 mm LED. Complete with 24 VDC power supply for									
transmitters. Modbus communications over RS-485. Measures 96 x 48 x 100 mm.									
Breeze 30	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			
	Т					PT100 input – display range -50 to 550 °C with 0.1 °C resolution. Transmitter supply not fitted			
	М					RS-485 Modbus input only (output relays not available with this option)			
		Outputs							
		0				No relays fitted			
		2			2 off relays 1 A at 250 VAC (cosφ=1) with up to 2 threshold assigned to each relay				
		3				2 off relays 1 A at 250 VAC with up to 2 thresholds assigned to each relay and a 0 or 4 to 20 mA O/P			
		4				4 off threshold relays 1 A at 250 VAC (cosφ=1) with up to 2 thresholds assigned to each relay			
		6				2 off OC type relays 30 mA / 30 VDC / 100 mW with up to 2 thresholds assigned to each relay			
		7	7			2 off OC type relays with up to 2 thresholds assigned to each relay + 0 or 4 to 20 mA O/P			
		8	8 IP Rating			4 off OC type relays 30 mA / 30 VDC / 100 mW with up to 2 thresholds assigned to each relay			
					g				
		0 1			IP40 on front face, IP20 housing and connection clips				
					IP65 on front face, IP20 housing and connection clips				
			Power S			upply			
	0			85 to 260 VAC					
1			1		24 VDC				
Display					Dis	play			
0					0	Red LED 4 x 20 mm			
					1	Green LED 4 x 20 mm			
Breeze 30									



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