

## **INTEGRA 1232** DIGITAL METERING SYSTEM

## **KEY FEATURES**

- Programmable backlit LCD screen
- Voltage IN-OUT connections
- CT current measurement 5 A/1 A
- Plug and socket connections
- Programmable VT, CT ratios
- 2 pulsed outputs with LED indication
- 3P4W, 3P3W, 1P2W system types

TE Connectivity's (TE) Crompton Instruments Integra 1232 Digital Metering System (DMS) offers a cost-effective solution for the measurement and display of all electrical parameters including total harmonic distortion (THD) and individual, up to the 63rd harmonic.

The high definition screen features a programmable backlight for high contrast visibility in low light and direct sunlight applications. The light can be programmed to automatically dim after a set period of time for energy saving.

New "petal" array icons show the percentage of full scale power of the measured system and the instantaneous PF measurement gives clear PF indication. Total power consumption is displayed on the screen at all times.

Integra 1232 DMS and the 3-in-1 current transformers feature a Q2C wiring solution for simple yet fast installation utilising plug and socket connections and pre-cut wiring looms, which allow the reduction of assembly time and connection errors. IN-OUT voltage connections reduce wiring and installation time.

Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.





SPECIFICATIONS	
Dimensions	
Nominal input voltage	57.7 - 276 V AC L-N (100 - 480 V L-L) 576 V L-L MAX
Max. continuous input overload voltage	120% of nominal
Max. short duration input voltage	2 x nominal voltage for 1 second
Nominal input voltage burden	< 0.2 VA per phase
Nominal input current	1 A AC or 5 A AC
Nom. Input current burden	< 0.1 VA
Max. continuous input overload current	120% of nominal
Max. short duration input current (300 msec)	20 x nominal current for 1 second
Auxiliary	
Operating range	Self powered (from any of the three phases)
Auxiliary range	65 - 480 V AC / 80 - 600 V DC
Supply burden	< 10 VA
Accuracy	
Voltage (V)	+/- 0.5% of range maximum
Current (A)	+/- 0.5% of range maximum
Frequency (Hz)	+/- 0.2% of mid-frequency
Power factor (PF)	+/- 1% of unity (0.01)
Active power (W)	+/- 0.5% of reading
Reactive power (VAr)	+/- 0.5% of reading
Apparent power (VA)	+/- 0.5% of reading
Active energy (kWh)	+/- 0.5% of reading to IEC 62053-21
Reactive energy (kVArh)	+/- 0.5% of reading to IEC 62053-24
THD	2% to 63rd harmonic
Measured Range	
Voltage (V)	5 - 120% of nominal (Min 100 V - self powered)
Current (A)	5 – 120% of nominal
Frequency (Hz)	44 - 66 Hz
Power (W, VAr, VA)	5 - 144% of nominal (bi-directional)
Energy	8 digit, upto 9999999.9 MWh
Power factor	4 quadrant
THD	0 - 40% upto 63rd harmonic
Environment	
Operating temperature	-25°C to +55°C
Storage temperature	-40°C to +70°C
Relative humidity	0 to 95%, non-condensing
Shock	30 g in 3 planes
Vibration	10 Hz to 50 Hz, IEC 60068-2-6, 2 g
Dielectric Voltage	4 kV between voltage and current to earth
Altitude	3000 m
Warm-up	1 minute
Outputs	
Pulsed output relay (configurable)	Opto-coupled, potential-free SPST-NO contact
Contact Rating current	2 – 27 mA at 27 V DC
Contact Rating voltage	5 - 27 V DC
Pulse Width	60/100/200 ms
Pulse rate	0.001/0.01 /0.1/1/10/100/1000 kWh/kVArh
Pulsed output relay (non-configurable)	3200IMP/kWh
Communications	Modbus RTU (RS485)
Туре	2-wire half duplex
Baud rate	2400, 4800, 9600, 19200, 38400
Address	1 to 247
Enclosure	
Enclosure Style	DIN 96 panel mount
Dimensions	96 x 96 x 62 mm
Panel cut-out	92 x 92 mm
Panel thickness	1 – 5 mm
Protection rating	Front IP54, Rear IP30
Material	UL 94-VO
Weight	340 g
Cable size	0.05 mm <sup>2</sup> – 2.5 mm <sup>2</sup> stranded wire
Terminals	Voltage and Current : Shrouded screw clamp
Display characters	6.2 mm

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PRODUCT CODES	
Description	Part number
INTEGRA 1232 multifunction panel meter LCD Input 480 V L-L, 5 A / 1 A AC Modbus RS485 Self-powered	INT-1232-S-01
Integra 1232 multifunction panel meter LCD Input 480 V L-L, 5 A / 1 A AC Modbus RS485 Auxiliary powered	INT-1232-M-01







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