



Crompton Instruments Integra Ri3 Digital Metering System

KEY FEATURES

- DIN-rail enclosure DIN 43880
- Backlit LCD screen
- Programmable CT ratio
- True rms measurement
- User programmable system configuration
- Pulsed output and Modbus as standard

BENEFITS

- Cost Effective
- Simple Navigation
- Crompton renowned quality
- UK manufactured

APPROVALS

- IEC 61326
- IEC 61010-1
- IEC 62053-21

The Integra Ri3 Digital Metering System (dms) represents the first model of a new generation of instruments designed to complement the current Crompton Instruments Integra series.

The Integra Ri3 dms is an accurate and cost effective solution for measurement and display of all major electrical and power quality parameters. Its easy programming, mounting and user-friendly navigation make the Integra Ri3 dms an ideal choice for customers who require reliable energy management.

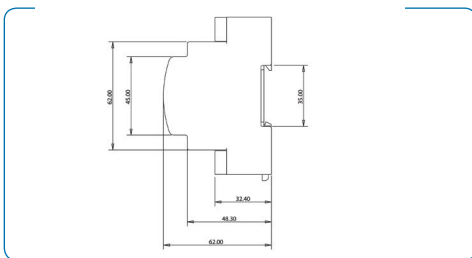
The Integra Ri3 dms is built to high quality standards utilizing the latest microprocessor and manufacturing technology. Designed, developed and manufactured in the UK, the Integra Ri3 dms builds on Crompton Instruments' long established reputation for metering product quality.

The product features a DIN-rail enclosure, backlit LCD display and user programmable CT ratios, all accessible via an intuitive user interface, Integra Ri3 dms measures 17 electrical parameters including total harmonic distortion (THD) measurement up to the 31st harmonic.

Product Codes

Description	Part Number
Integra Ri3	Ri3-01

Parameters:



Specifications:

Button	Screen	Parameters	
V/Hz	1	Volts L1-N	
		Volts L2-N	
		Volts L3-N	
	2	Volts L1-L2	
		Volts L2-L3	
		Volts L3-L1	
	3	Frequency	
		4	Volts L1-N THD%
	Volts L2-N THD%		
	Volts L3-N THD%		
	5	Volts L1-L2 THD%	
		Volts L2-L3 THD%	
		Volts L3-L1 THD%	
	A	1	Current 1
			Current 2
Current 3			
2		Neutral Current	
		3	L1 Current Max Demand
			L2 Current Max Demand
L3 Current Max Demand			
4		Neutral Current Max Demand	
		5	Current L1 THD%
			Current L2 THD%
Current L3 THD%			
P/PF		1	kW
			kVA
			kVA
		2	kW Max Demand
	3		Power Factor
E		1	Import kWh
	Export kWh		
	3	Import kVAh	
		Export kVAh	

Input	
Nominal input voltage	100-289V AC-L-N (173-500V-AC-L-L)
Max. continuous input	120% of nominal
overload voltage	
Max. short duration input voltage	2 x range maximum (1 second application repeated 5 times at 5 minute intervals)
Nominal input voltage burden	<0.2VA per phase
Nominal input current	5A AC rms
Max. continuous input	120% of nominal
overload current	
Max. short duration input current	10 x nominal (1 second application repeated 5 times at 5 minute intervals)
Nominal input current burden	<0.6VA per phase
Frequency	45-66Hz
System CT primary values	1 to 9999
Auxiliary	
Operating range	110-400V AC nominal, +/- 10%(99-440V AC absolute limits) or 120-350V DC +/- 20% (96-420V DC absolute limits)
Burden	<10VA/5W
Accuracy	
Voltage (V)	0.5%
Current (A)	0.5%
Neutral current calculated (A)	4%
Frequency (Hz)	0.1Hz
Power factor (PF)	1% of unity
Active power (W)	+/- 1% of range
Reactive power (Var)	+/- 1% of range
Apparent power (VA)	+/- 1% of range
Active energy (kWh)	Class1 (IEC 62053-21)
Reactive energy (kVAh)	+/-1% of range
THD	1% up to 31st harmonic
Response time	1 sec
Output	
Pulsed output relay	1
Contact rating	50mA max at 250V AC
Type	Solid state relay
RS-485 Modbus output module	1 Modbus channel
Type	2-wire half duplex
Baud rate	2400, 4800, 9600, 19200, 38400
Enclosure	
Enclosure Style	DIN-rail
Dimensions	72 x 90mm (width x height) as per DIN 43880
Front protection rating	IP52
Case protection rating	IP30
Material	Polycarbonate to ULk94VO
Weight	300g
Terminals	Shrouded screw-clam 0.05-4mm wire
Environment	
Operating temperature	-10°C to +55°C
Storage temperature	-20°C to +70°C
Relative humidity	0-90% non-condensing
Shock	30g in 3 planes
Vibration	10Hz to 50Hz
Dielectric Voltage	1 Withstand test 3.25kV rms 50Hz for 1 minute between comms and measuring inputs.

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