

Crompton Instruments Integra Ri3 Digital Metering System

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) mesurement up to the 31st harmonic.

Product Codes

Description	Part Number
Integra Ri3	Ri3-01







connectivity

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

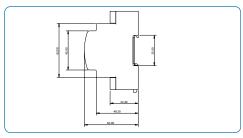
- Cost Effective
- Simple Navigation
- Crompton renowned quality
- UK manufactured

APPROVALS

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

TE Connectivity Integra Ri3

Parameters:



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%
Α	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
		kVAr
		kVA
	2	kW Max Demand
	3	Power Factor
E	1	Import kWh
	2	Export kWh
	3	Import kVArh
l	4	Export kVArh

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Specifications:

Input		
Nominal input voltage	100-289V AC-L-N (173-500V-AC-L-L)	
Max. continuous input	120% of nominal	
overload voltage		
	0	
Max. short duration input voltage	2 x range maximum (1 second applicationrepeated 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	
Auxillary		
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)	
	+/-1% of range	
Reactive energy (kVArh) THD	1% up to 31st harmonic	
	1 sec	
Response time	1 560	
Output Duland output valous		
Pulsed output relay	1 F0mA may at 250V AC	
Contact rating	50mA max at 250V AC	
Туре	Solid state relay	
RS-485 Mobus output module	1 Mobus channel	
Туре	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 minutebetween comms and measuring inputs.	

