



# CROMPTON INSTRUMENTS

## INTEGRA Ri4 DIGITAL METERING SYSTEM

The Integra Ri4 digital metering system (dms) voltage input of 0.333 volts AC makes it an ideal meter for energy monitoring applications while its compact DIN-rail enclosure allows space saving for retrofit applications.

The Integra Ri4 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 Ri4 dms an ideal choice for customers who require reliable energy measurement.

Designed, developed and manufactured in the UK Integra Ri4 meter is built to high quality standards utilising the latest microprocessor and manufacturing technology.

The product features a DIN-rail enclosure, backlit LCD display and user programmable CT ratios, all accessible via an intuitive user interface. Integra Ri4 dms measures 17 electrical parameters including total harmonic distortion (THD) measurement up to the 31st harmonic.

### Features

- 0.333V AC input rms
- DIN-rail enclosure DIN 43880
- Backlit LCD screen
- Programmable CT ratio
- True rms measurements
- User programmable system configuration
- Import and Export kWh

### Benefits

- Cost effective
- Simple navigation
- Crompton renowned quality
- UK manufactured

### Approvals

IEC 61326  
IEC 61010-1  
IEC 62053-21

### Product Code

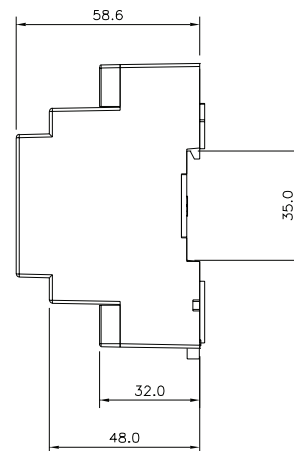
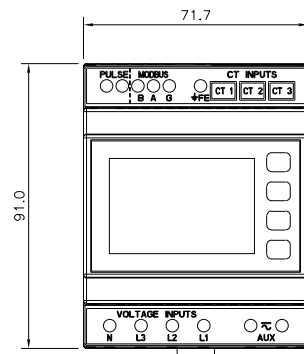
Description	Part Number
Integra	Ri4-01



Specification

Input	
Nominal input voltage	100-289V AC L-N (173-500V AC L-L)
Max. continuous input overload voltage	120% of nominal
Max. short duration input voltage	2 x range maximum (1 second application repeated 5x at 5 minute intervals)
Nominal input voltage burden	< 0.2VA per phase
Nominal input Current	0.333V (333mV) AC rms
Max. continuous input overload current	120% of nominal
Max. short duration input voltage	10 x nominal (1 second application repeated 5x at 5 minute intervals)
Frequency	45-66Hz
Auxiliary	
Operating range	110-400V AC nominal +/-10% (99-440V AC absolute limits) or 120-350V DC +/-20% (96-420V DC absolute limits)
Accuracy	
Voltage (V)	0.5%
Current (A)	0.5%
Neutral current calculated (A)	4%
Frequency (Hz)	0.1 Hz
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)	Class 1 (IEC 62053-21)
Reactive energy (kVARh)	+/- 1% of range
THD	1% up to 31 <sup>st</sup> harmonic
Response time	1sec
Output modules	
Pulsed output relays	1 per module
Contact rating	50mA max at 250V AC
Type	Solid state relay
RS485 Modbus™ output module	1 Modbus™ channel
Type	2-wire half duplex
Baud rate	2400, 4800, 9600, 19200, 38400
Enclosure	
Enclosure style	DIN-rail
Dimensions	72x90mm (width x height) as per DIN 43880
Front protection rating	IP52
Case protection rating	IP30
Material	Polycarbonate to UL94V0
Weight	300g
Terminals	Shrouded screw-clamp 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	Withstand test 3.25kV rms 50Hz for 1 minute between comms and measuring inputs, comms and aux, aux and measuring inputs

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



**FOR MORE INFORMATION**  
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