

# NEW – Integra Ri3

## Smart on...

- Service
- Metering
- Application
- Reliability
- Trade Price



The smart choice for  
your metering needs

## 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 measurement.

The Integra Ri3 dms is built to high quality standards utilising 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.

### 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

### Product Codes

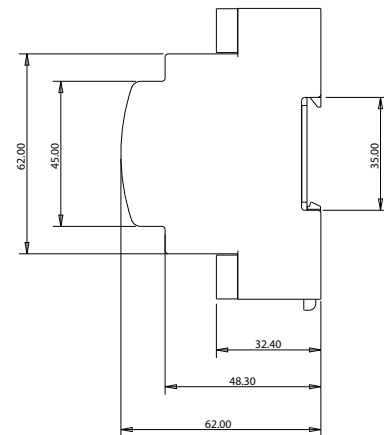
Description	Part number
Integra Ri3	RI3-01

## Specifications

<b>Input</b>	
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 5 times at 5 minute intervals)
Nominal input voltage burden	< 0.2VA per phase
Nominal input current	5A AC rms
Max. continuous input overload current	120% of nominal
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
<b>Auxiliary</b>	
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
<b>Accuracy</b>	
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 31st harmonic
Response time	1sec
<b>Output</b>	
Pulse output relay	1
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
<b>Enclosure</b>	
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
<b>Environment</b>	
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, comm and aux, aux and measuring inputs

## 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%
A	1	Current L1 Current L2 Current L3
	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
	4	Export kVArh



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