



# TE'S CROMPTON INSTRUMENTS SL1 SINGLE LOAD METERING SYSTEM

# Integra SL 1 single load metering system

## FEATURES

- Modbus RTU RS485 as standard
- User-programmable CT ratio and system configuration
- True rms measurement
- Continuous busbar or individual busbar metering

## APPLICATIONS

- IEC 61326
- IEC 61010-1
- IEC 62053-21
- RoHS Compliant

## BENEFITS

- Cost-effective
- UK manufactured
- CLO.5 accuracy
- Modbus communications
- Fully configurable
- Additional facility to accumulate the total system power/kWhs - displaying the combined system total parameters



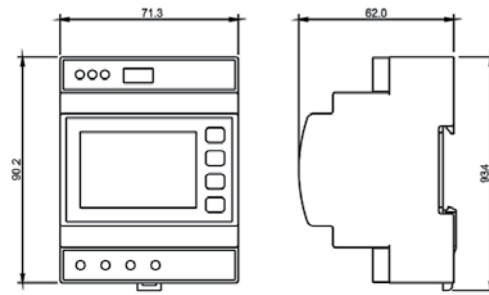
Designed, developed and manufactured in the UK, the Integra SL1 is a digital metering system which provides measurement, isolation and conversion of all main electrical parameters from a three-phase load, in a single meter. It can be used in single and three-phase unbalanced four-wire electrical systems and as an accuracy of CLO.5.

The Integra SL1 has an integrated microprocessor for exceptional waveform handling of distorted waveforms, and is ideal for low voltage applications. It provides a cost effective way of metering split load distribution and panel boards, in a single metering solution.

## PRODUCT CODES

DESCRIPTION	PART NUMBER
Integra SL1 multifunction DIN-rail LCD Input 400 V L-L, 100 mA AC Modbus RTU RS 485 Self powered	SL1-01

## DIMENSIONS



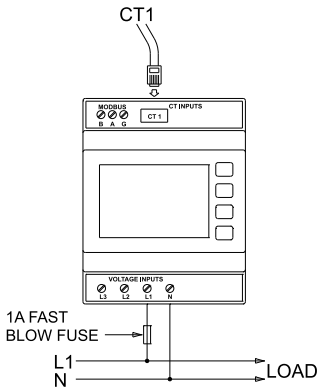
## DISPLAYED PARAMETERS

POWER (LOAD 1)
Current L1
Current L2
Current L3
kW L1
kW L2
kW L3
Average System Volts
Average System Current
Average System kW
kWh Import

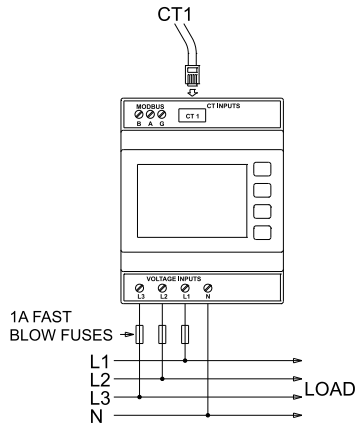
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## WIRING DIAGRAMS



Single-phase, 2-wire



3 phase, 4-wire

## SPECIFICATION

INPUT	
Nominal input voltage	100 V to 230 V AC rms., L - N. 173 V to 400 V AC rms., L - L
Max. continuous input overload voltage	120% of nominal
Max. short duration input voltage (1 sec)	2 x nominal voltage
Nominal input voltage burden	0.2 VA per phase (Except L1)**Self powered using the meter electrical input from L1 (6 VA)
Nominal input current	100 mA AC rms. per CT
System CT primary values	1-9999 A (selectable from display)
CT burden	0.1 VA
<b>Accuracy</b>	
Voltage (V)	< 0.5%
Current (A)	< 0.5%
Frequency (Hz)	< 0.2% of mid range
Power factor (PF)	1% of unity
Active power (W)	+/- 1.0% Class 1 IEC 62053-21
Active energy (kWh)	+/- 1.0% Class 1 IEC 62053-21
<b>Range</b>	
Voltage (V)	5% to 120% for nominal
Current (A)	5% to 120% of nominal
Frequency	45 - 65 Hz
Power	1 - 144% of nominal 0.8 capacitive - 1 - 0.8
Power factor	Inductive (functional 4 quadrant, 0-1 lag lead)
Energy	6-digit resolution and to be displayed in kWh (Maximum display 999999, before rollover to 0)
<b>Outputs</b>	
Communication protocol	RS485 Modbus RTU
Type	2-wire half duplex
Baud rate	9600, 19200, 38400
<b>Enclosure</b>	
Enclosure style	DIN-rail mounting EN43880
Dimensions	72 x 90 x 62 mm
Material	Polycarbonate to UL94-V0
Weight	0.25 kg
Terminals voltage	Shrouded screw-clamp 0.05 - 4 mm wire
Terminals CT	RJ12 connector
Sealing	IP52 front of panel
<b>Environment</b>	
Operating temperature	-10°C to +55°C
Storage temperature	-20°C to +70°C
Relative humidity	0-90% non-condensing
Shock	30 g in 3 planes and vibration of 0 Hz to 50 Hz
	IEC 60068-2-6, 2 g
Vibration	0 Hz to 50 Hz, IEC 60068-2-6, 2 g. Withstand test 2.2 kV, 50 Hz for 1 minute between auxiliary / input / output

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