



INTEGRA TL 1 TRI LOAD

DIGITAL METERING SYSTEM

KEY FEATURES

- DIN-rail enclosure
- Single meter for 3x three phase loads
- Multiple display modes
- Modbus RTU RS485 as standard
- User-programmable CT ratio and system configuration
- Continuous busbar or individual busbar metering
- RJ12 socket for fast connection

TE Connectivity's (TE) Crompton Instruments Integra TL1 is a Digital Metering System (DMS) which provides measurement, isolation and conversion of all main electrical parameters from 3x three phase loads, in a single meter. It can be used in three-phase unbalanced four-wire electrical systems and has an accuracy of CL1 Energy.

The Integra TL1 has an integrated microprocessor for very good 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.

Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.

Integra TL1 Tri-Load

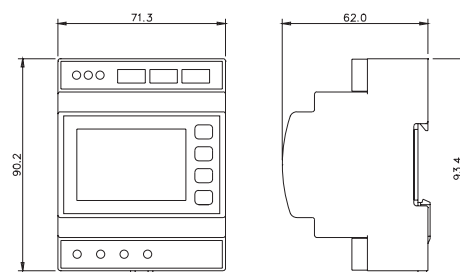


SPECIFICATION

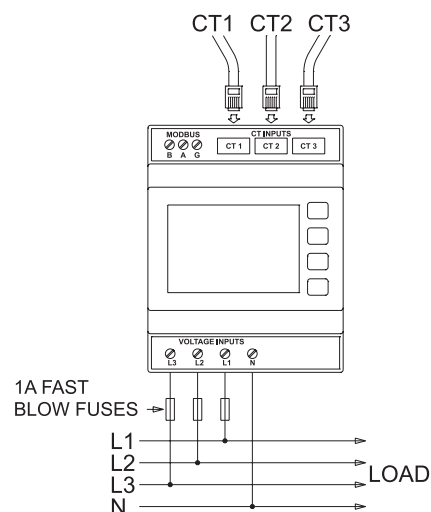
Input	
Nominal input voltage	100V to 230V AC rms., L - N. 173V to 400V AC rms., L - L
Max. continuous input overload voltage	120% of nominal
Max. short duration input voltage (1 sec)	2 x nominal voltage
Nominal input voltage burden	0.2VA per phase (Except L1)**Self powered using the meter electrical input from L1 (6VA)
Nominal input current	100mA AC rms. per CT
System CT primary values	1-9999A(selectable from display)
CT burden	0.1 VA
Accuracy	
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%
Active energy (kWh)	+/- 1.0% Class 1 IEC 62053-21
Range	
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 inKWh (Maximum display 999999, before rollover to 0)
Outputs	
Communication protocol	RS485 Modbus RTU
Type	2-wire half duplex
Baud rate	9600, 19200, 38400
Enclosure	
Enclosure style	DIN-rail mounting EN43880
Dimensions	72 x 90 x 62 mm
Material	Polycarbonate to UL94-V0
Weight	0.25kg
Terminals voltage	Shrouded screw-clamp 0.05-4mm wire
Terminals CT	RJ12 connector
Sealing	IP52 front of panel
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 and vibration of 0Hz to 50Hz IEC 60068-2-6, 2g
Vibration	0Hz to 50Hz, IEC 60068-2-6, 2g. Withstand test 2.2kV, 50Hz for 1 minute between auxiliary / input / output

Product Code

Integra TL1 DMS TL1-01



3 Phase, 4 wire



FOR MORE INFORMATION: TE Technical Support Centers

USA/Canada:	+1 800-327-6996
Brazil:	+55 11-2103-6023
Mexico:	+52 55-1106-0800
South America:	+57 1-319-8962
Benelux:	+32 16-508-695
France:	+33 (0) 38-058-3210
Germany/Switzerland:	+49 (0) 89-608-9903
Italy:	+39 335-834-3453
Middle East/Africa:	+971 4-211-7020
Russia:	+7 495-790-790-2-200
Spain/Portugal:	+34 912-681-885
UK:	+44 08708-707-500
China:	+86 400-820-6015

te.com/energy

© 2020 TE Connectivity. All Rights Reserved. EPP-3051-DDS-07/20-Triload-meter-TE

TE Connectivity, TE connectivity (logo), EVERY CONNECTION COUNTS, AMP, AMPACT, Axicom, Bowthorpe EMP, Crompton Instruments, Raychem, SIMEL, UTILUX are trademarks. Other logos, product and Company names mentioned herein may be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this brochure are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.