



Datasheet

RS PRO Digital Smart Multi-function Load Manager

Stock number: 179-7579

EN

Features:

1. True RMS measurement.
2. Simultaneous sampling of Volts & Amps.
3. High / low recording, VLL, VLN, A, Hz, W, VA, PF, VAr value storage with time stamp.
4. Byte order option - Field Programmable Float / Little Endian / Big Endian data format.
5. Accuracy class 1.0 as per IEC 62053-21
6. User programmable Password Protection.
7. Auto-Scaling of Kilo, Mega and Giga decimal point.
8. Neutral Current (calculated), RPM display.
9. Clearance and Creepage distance meets UL- 61010.
10. Programmable starting current in % of 5A secondary. Default 0.4%.
11. Selectable VA measurement – Arithmetic / Vector.
12. THD, K-Factor V & A (all three phase).
13. Programmable parameter update rate - 1sec. to 5sec. (Default 1sec.).
14. Programmable Auto scrolling time - 1 sec. to 10 sec. (Default 5 sec.).
15. Dynamic communication - user selectable register map.
16. Programmable Energy display - Counter based or Resolution based.
17. Energy resetting @ 999999 kVAh × Transformer ratio.
18. Reverse lock, user programmable for positive energy accumulation.
19. Front LED pulse 10000 imp/kWh.
20. OLD register to store previously cleared energy & LH values.
21. % of unbalance V & A for all the phases.
22. THD for Voltage & Current. Ampere hour (Ah) and PF average parameters.
23. Phase Angle measurement.

Technical specs:

Specification	Description
Accuracy:	Class 1 (Default) as per IEC 62053-21
Sensing/Measurement:	True RMS, 1 Sec update time. 4 Quadrant Power & Energy
Input Voltage:	4 Voltage inputs (VR, VY, VB, VN). Programmable 110 or 415V LL Nominal (Range 50 to 550V LL). Primary Programmable up to 999 kV. <i>Burden:</i> 0.2VA Max. per phase.
Input Frequency:	45 - 65 Hz
Input Current:	Current inputs (AR, AY, AB) 50mA - 6A (Field configurable 1A or 5A). Primary programmable up to 99 kA. <i>Overload:</i> 10A max continuous, 50A max for 3 Sec. <i>Burden:</i> 0.2VA Max. per phase.
Aux-Supply (control power):	(Control Power) 80 - 300V AC/DC, 40-70Hz. <i>Burden:</i> 5VA Max
Display Type:	10mm height bright red LED 4 Row display.
Display Resolution:	4 digits for instantaneous, Integrated: 6 digits
CT PT Ratio Max:	2000 MVA programmable.
Weight:	Unpacked: 300 gms, <i>Packed:</i> 400 gms
Communication:	RS485 serial channel connection, Industry standard Mod- bus RTU protocol. <u>Baud rate:</u> 4800 bps to 19200 bps. <u>Isola- tion:</u> 2000 volts AC isolation for 1 minute between communi- cation and other circuits.

Multiplication factor for counter based energy mode:

Full Scale in kW = $[\sqrt{3} \times V_{Pri} \times A_{Pri}] / 1000$	0.4k to 4.0k	4.01k to 40k	40.1k to 400k	400.1 to 4,000k	4 M to 40 M	40 M to 400 M	400 M to 4000 M
Multiplication Factor:	0.01	0.1	1	10	100	1000	10000
Unit of display	KWh			MWh		GWh	

Energy Reset: 999999 kVAh × Multiplication Factor

Mechanical Specifications:

Dimension Bezel:	96 x 96 mm (<i>Depth 55mm behind Bezel</i>)
Panel Cutout:	$90_{-0}^{+2} \times 90_{-0}^{+2}$ mm