



Datasheet

RS PRO Digital kWh meter

Stock number: 179-7578

EN

Features:

1. Accuracy Class 1.0 (default) as per IEC 62053-21
2. True RMS measurement.
3. Simultaneous sampling of Volts & Amps.
4. Energy display programmable-counter based or resolution based.
5. Energy resetting at 999999 kVAh* Transformer Ratio
6. Positive energy accumulation even with CT polarity reversal, reverse lock programmable.
7. User programmable password protection.
8. Auto scrolling.
9. Auto-scaling of Kilo, Mega, Giga and Decimal point.
10. Low PT, CT burden.
11. Front LED pulse 1250 imp/kWh of secondary input.
12. Programmable PT, CT ratio upto 2000 MVA.
13. Programmable kVAh (default kWh) for meters with Energy parameter.
14. Wide Measurement range - 50mA - 6A.
15. Clearance and Creepage distance meets safety standard.
16. Finger touch proof terminals to voltage and current connections.
17. Parameter name & value displaying using 7 segment LEDs.
18. 6 digits display on each row for better readability.
19. Field programmable Star (Wye) or Delta or Single phase configuration.
20. Field programmable W or VA or PF or Wh (any one parameter).
21. Displays programmed parameter name and value for instantaneous parameters.
22. OLD register to store the previously cleared energy value.

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 display.
Display Resolution:	4 digits for instantaneous, Integrated: 6digits
CT PT Ratio Max:	2000 MVA programmable.
Weight:	Unpacked: 300 gms, <i>Packed:</i> 400 gms

Multiplication factor for counter based energy mode:

Full Scale in kW = $[\sqrt{3} \times \text{VPri} \times \text{APri}] / 1000$	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