

CROMPTON INSTRUMENTS DGU DIGITAL PANEL METER

AC VOLTAGE & CURRENT MODELS



**Precise measurement of on-site
Current and Voltage - 96 x 96 mm**

RELEVANT STANDARDS AND TEST REPORTS

- EC 61326-1: 2005
- IEC 61010-1-2001
- CE
- UKCA

KEY FEATURES

- Fast & Easy Installation
- True RMS measurements
- Programmable CT/PT Primary
- Programmable CT/PT Secondary
- Single phase, 3ph3wire or 3ph4wire Network
- Two auxillary power options
- 4 Digits ultra bright LED display
- Incase of power failure last screen is stored
- IP50 for front face (IP54 option)
- Low back depth

TE Connectivity's (TE) Crompton Instruments DGU Digital Panel Meters have been designed for industrial applications, where precise measurement of the on-site Current and Voltage is necessary. The meter can be used in a variety of applications including industrial automation and for laboratory uses.

The DGU Digital Panel Meter has a class accuracy of 0.5 and measures Voltage or Current in 3 phase 4 Wire, 3 phase 3 Wire and single phase networks replacing the need for multiple analogue panel meters.

Using two function keys it is possible to display various parameters in Current and Voltage DPM. These function keys are also used for Network selection, CT/PT Primary values and CT/PT Secondary values. The user can easily set the display in auto scrolling mode or fixed screen mode using front panel keys.

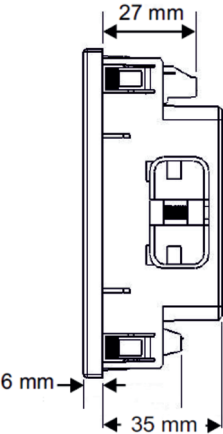
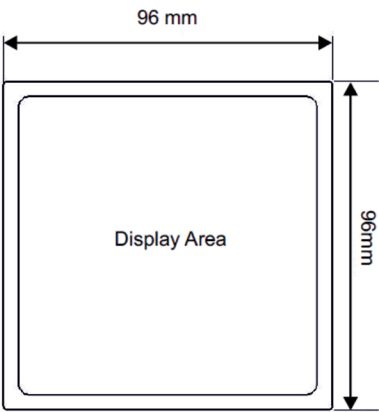
In case of power failure, the instrument memorizes the last screen stored. For every 1 min. the instrument stores the screen no. in the non-volatile memory.

The DGU Digital Panel Meter conforms to IP50 (for front face) & IP20 (for back), with an option for IP54 front. The 96x96mm instrument has very low back depth (behind the panel) of less than 40mm.

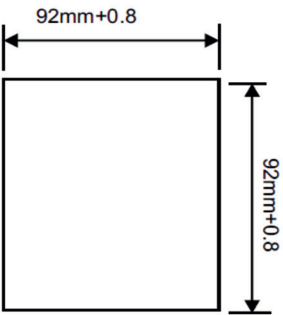
TECHNICAL SPECIFICATIONS

Operating Measuring Ranges:	
Voltage Range	10V ... 519V
Current Range	For 1A(15mA -1.2A) & For 5A(55mA- 6A)
Frequency	45...65 Hz
Input Voltage: (for VOLT DPM)	
Full Scale Input voltage (AC RMS)(FS)	480 VLN.
Max continuous input voltage	519 VLN. (OL >1.083 X PT Primary).
Input voltage burden	<0.3 VA approx at 230V
Input Current: (for AMMETER)	
Input current	1A or 5A
Max continuous input current	120% of CT Primary.(OL >1.21 X CT Primary)
Input current burden	<0.3 VA approx
Auxiliary Supply:	
Higher AC-DC ExternalAuxiliary Supply	60-300V AC-DC 45-65V AC / 20-60V DC
Frequency range	45 to 65 Hz
VA burden	5 VA Approx
Overload Withstand:	
Voltage	600VLN for 1 second, repeated 10 times at 10 second intervals
Current	2x 5A for 1 second, repeated 5 times at 5 min intervals
Reference conditions for Accuracy:	
Reference temperature	23°C +/- 2°C
Input waveform	Sinusoidal (distortion factor 0.005)
Auxiliary supply voltage	Rated Value ±1%
Auxiliary supply frequency	Rated Value ±1%
Display update rate:	
Response time to step input	Less than 1 second
Accuracy:	
Voltage	±1.0% of FS (Optional ±0.5% Available)
Current	±1.0% of 5A (Optional ±0.5% Available)
Influence of Variations:	
Temperature coefficient (for range of use (0°C to 55°C))	0.03 % /°C for Voltage
	0.05 % /°C for Current
Applicable Standards:	
EMC	IEC 61326-1 (Table-2)
Safety	IEC 61010-1-2018, Permanently connected use
IP for water & dust	IEC 60529
Environmental:	
Operating temperature	0 to +55 °C
Storage temperature	-25 °C to +70 °C
Relative humidity	0...90% non condensing
Shock	Half sine wave, Peak acceleration 30gn (300 m/s ²)
Vibration	10...55Hz, 0.15mm amplitude
Enclosure	
Front	IP 50 (IP 54 on request)
Back	IP 20
Dimensions:	
Housing dimensions	96 x 96 x 40 mm
Panel cut-out	92.8 x 92.8 mm
Safety:	
Pollution degree	2
Installation category	III
High Voltage Test	2 kV AC, 50Hz for 1 minute between

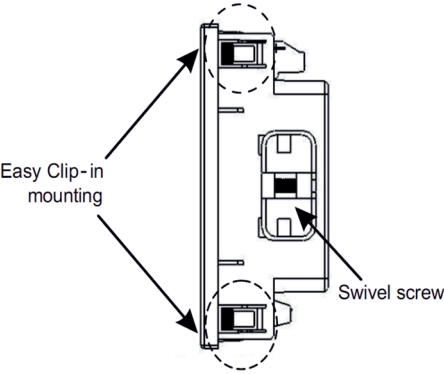
DIMENSIONAL INFORMATION



DIMENSIONS	
Bezel size (DIN 43 718)	96 mm x 96 mm.
Panel cut-out	92 +0.8 mm x 92 + 0.8 mm
Overall depth	40 mm
Weight	310 gm Approx



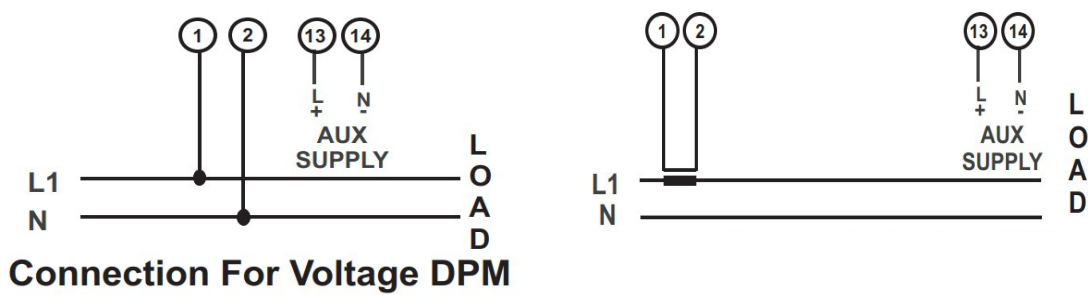
Panel Cutout



PARAMETERS - DGU-3V	
Network type	Parameter
3 Phase 4 wire	a. Phase - Neutral Voltage VL1
	b. Phase - Neutral Voltage VL2
	c. Phase - Neutral Voltage VL3
	d. Line - Line Voltage VL1L2
	e. Line - Line Voltage VL2L3
	f. Line - Line Voltage VL3L1
	g. System Voltage
3 Phase 3 wire	a. Line - Line Voltage VL1L2
	b. Line - Line Voltage VL2L3
	c. Line - Line Voltage VL3L1
	d. System Voltage

PARAMETERS - DGU - 3A	
Network type	Parameter
3 Phase 4 wire & 3 Phase 3 wire	a. Phase current IL1
	b. Phase current IL2
	c. Phase current IL3
	d. System current

WIRING DIAGRAMS



ORDERING INFORMATION

Part Number	System	Type	Input	Power Supply	Accuracy Class	IP Protection	Options
244-DGU-1-A-8D-U	1 Phase	AC Ammeter	1/5A	60V-300V AC/DC	0.5	IP54	-
244-DGU-1-V-8E-U	1 Phase	AC Voltmeter	57.5-480VLN (Onsite programmable)	60V-300V AC/DC	0.5	IP54	-
244-DGU-3-A-8D-U	3 Phase	AC Ammeter	1/5A	60-300V AC/DC	0.5	IP54	-
244-DGU-3-V-8F-U	3 Phase	AC Voltmeter	100-500VLL (Onsite programmable)	60-300V AC/DC	0.5	IP54	-
244-DGU-3-V-8F-U-RM	3 Phase	AC Voltmeter	100-500VLL (Onsite programmable)	60-300V AC/DC	0.5	IP54	Relay Output and Modbus

Learn more: [TE.com/energy](https://www.te.com/energy)

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