



M20plus

(Multifunction Meter/Power Analyzer)

(HSN CODE-9028)



Features:

- LCD display with backlight
- Site Programmable CT and PT ratio
- True RMS measurement
- Password protection
- Bargraph for percentage current
- Optional features
 - RS485modbus/TCP modbus/Ethernet modbus computer interface
- Maximum demand with relay contact
- RS485 computer interface
- Harmonic measurement (total & individual)
- Autoranging
- Universal auxiliary supply
- Real Time Clock (RTC)
- Time Of Use energy (TOU)

Advantages:

- To caution on the extra energy consumption
- To identify inefficiency of machine/man
- Reduce panel space, wiring, installation time

Applications:

- Control panel
- Distribution system
- Generator sets
- Motor control
- Test bench
- Energy management
- Process control & SCADA

Measuring Parameters

- V_{L-L} (individual/average)
- V_{L-N} (individual/average)
- Current (individual/average/neutral current)
- Power factor/crest factor (individual/average)
- Phase angle/ phase rotation
- Frequency with deviation
- Power: (active, reactive and apparent)
- Maximum demand: (kW, kVA)
- Peak maximum demand: (kW, kVA)
- Energy (active, reactive inductive, reactive capacitive, apparent)
- Run hour (import, export and total)
- Total Harmonic Distortion (63 level, phase wise): voltage and current
- Voltage and current disturbance (sag and swells) detection and configurable waveform capture

Supply Voltage

Auxiliary supply	90-270 V AC/DC ($\pm 15\%$)
Frequency	50/60 Hz

Display

Display	4 rows, 4 digits 1 row of 8 digits (bargraph for % load current) LCD display
Display scrolling	Automatic/manual

Settable Parameters

C.T. primary	1/5A to 10000A (programmable)
C.T. secondary	1/5A (programmable)
P.T. ratio	Programmable upto 132 kV
Display reset	Energy

Output Specifications

Communication	RS485 (Optional)
Relay Output	4 C/O relay for max demand with TOD

Input Specifications

Electrical connection	3 \emptyset -4 wire/1 \emptyset -2 wire/4 \emptyset -4 wire
Input voltage range	0-500V AC (L-L)/0-300V (L-N)
Input current range	0.015A-6A AC Direct 60A(opt.)
Frequency	45-65 Hz
Resolution	Energy 0.1 kWh Power factor: 0.001 Frequency: 0.01 Hz Voltage: Autoranging Current: Autoranging Power: Autoranging

Accuracy	Voltage $\pm 0.5\%$ of F.S. Current $\pm 0.5\%$ of F.S. Power Factor $\pm 0.5\%$ of F.S. Frequency $\pm 0.1\%$ of F.S. Power (active, reactive and apparent): 1% Energy (active, reactive and apparent): Class 1
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Burden	Voltage: 0.2 VA max. per input Current: 0.2 VA max. per input Aux. supply: 3 VA max
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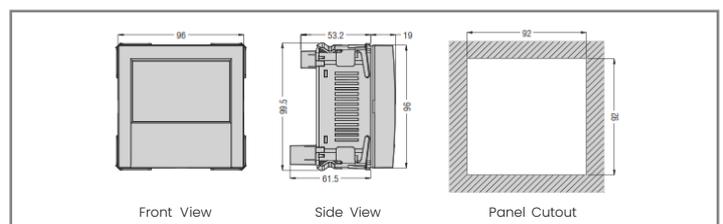
Environmental Specifications

Temperature	Operating : -10° to 55°C Storage : -20° to 75°C
Humidity	< 95% RH

Mechanical Specifications

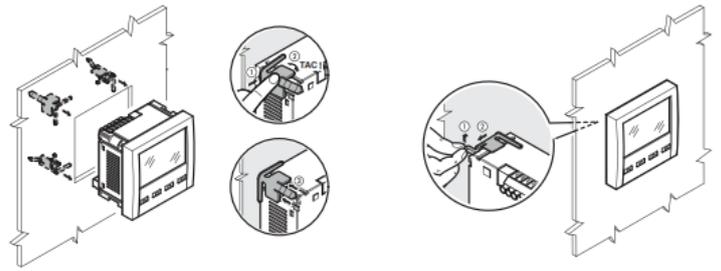
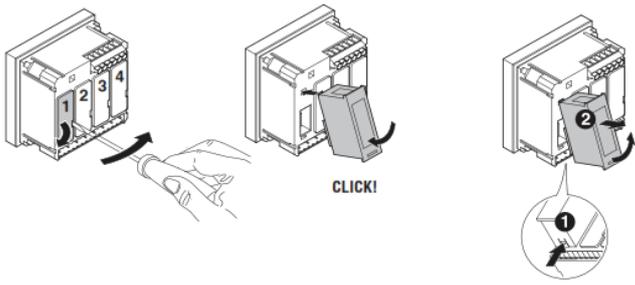
Mounting	Flush mounting with side clamps
Weight	280 g
Enclosure material	ABS Thermoplastic

Dimension



All dimensions are in mm, specifications are subjected to change without prior notice.

Expandability

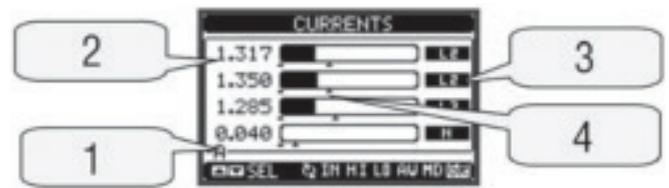


Example of display page with numeric indication.



1. Unit of measure
2. Measurement
3. Title bar
4. Phase indication
5. Sub-page indication

Example of display page with bar-graphs



1. Unit of measure
2. Measurement
3. Phase indication
4. HI-LO marks

Code	Type of Module	Function
EXT CUI	Communication	USB
EXT CRI	Communication	RS232
EXT CR2	Communication	RS485
EXT CL1	Communication	Ethernet
EXT CL2	Communication	Wifi
EXT D01	Digital I/O	Digital Input
EXT D02	Digital I/O	Digital Output
EXT A01	Analog I/O	Analog Input
EXT A02	Analog I/O	Analog Output
EXT M0I-4MB	Memory	Memory
EXT M0L-8MB	Memory	Memory

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