



96 x 96mm

## Features :

- 3 $\emptyset$  True RMS (Voltage, Current)
- 3 $\emptyset$  Power (Active, Reactive, Apparent), Energy (Active, Reactive, Apparent)
- Plug-n-Wire, RJ45 Connector Current Input
- Programmable CT Primary, PT Primary / Secondary
- Modbus RTU Communication (RS485)
- Pulse Output
- Max / Min Demand of Power
- % THD upto 31<sup>st</sup> level for Voltage and Current

Certification : **CE**

### Display Specifications

Display	4 rows, LCD with Backlight
Digits	4 (Lowest 8 digits for energy display)
Bargraph	For Current Representation

### Input Specifications

Electrical Connection	3 $\emptyset$ - 4 wire, 1 $\emptyset$ - 2 wire
Input Voltage Range	100 to 240V AC (L - N) 173 to 415V AC (L - L)
Frequency	45 to 65Hz
Display Scrolling	Automatic / Manual
Power Consumption	8VA max
Display Reset	Programmable (For energy)
Resolution	For energy : 0.1k, 1k (depending upon CT rating) For Power, Voltage, Current : Auto Resolution For Power Factor : 0.001
Accuracy	Voltage (L - N / L - L) : $\pm 0.5\%$ of F.S. Current : $\pm 0.5\%$ of F.S. Power Factor : $\pm 0.01$ Frequency : $\pm 0.1\%$ (For V>20V L - N, V>35V L - L) Power (kW, kVA, kVA <sub>r</sub> ) : 1% Energy (Active, Reactive, Apparent) : 1%
Memory Retention	10 years (For energy)
Measuring Parameters	Voltage (L - L / L - N) (Individual / Average), Current (Individual / Average), Frequency, Power Factor (Individual / Average), Active, Reactive & Apparent Power (Individual / Total), Active, Reactive & Apparent Energy [Phase Wise (Import / Export) & Total (Import / Export)], Demand (Min / Max Active Power, Min / Max Reactive Power, Max Apparent Power), %THD individual for Voltage & Current upto 31 <sup>st</sup> level

### Output Specifications

Pulse Output	Voltage Range : External 24V DC max Current Capacity : 100mA max Pulse Width : Selectable between 0.1 to 2 sec.
Communication Interface and Protocol	RS485 and MODBUS RTU
Communication Address	1 to 255
Transmission Mode	Half duplex
Transmission Distance	500 meter maximum
Transmission Speed	300, 600, 1200, 2400, 4800, 9600, 19200 (in bps)
Parity	None, Odd, Even
Stop Bits	1 or 2
Response Time	100ms (max and independent of baud rate)

### Auxiliary Supply Specifications

Supply Voltage	60 to 300VAC, 50 / 60Hz, Self Supplied (V1, N)
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### Settable Parameters

CT Primary	5A to 10kA (Programmable for any value)
CT Secondary	330mV
PT Primary	100V to 500kV (Programmable for any value)
PT Secondary	173V to 415V AC (Programmable for any value)

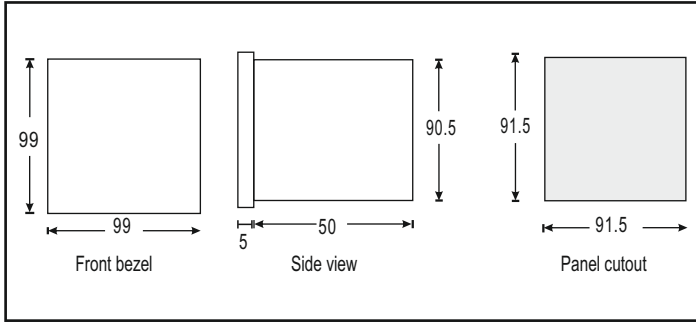
### Environmental Specifications

Temperature	Operating Temperature : 0 $^{\circ}$ to 50 $^{\circ}$ C Storage Temperature : -20 $^{\circ}$ to 75 $^{\circ}$ C
Humidity (non - condensing)	Upto 85% RH

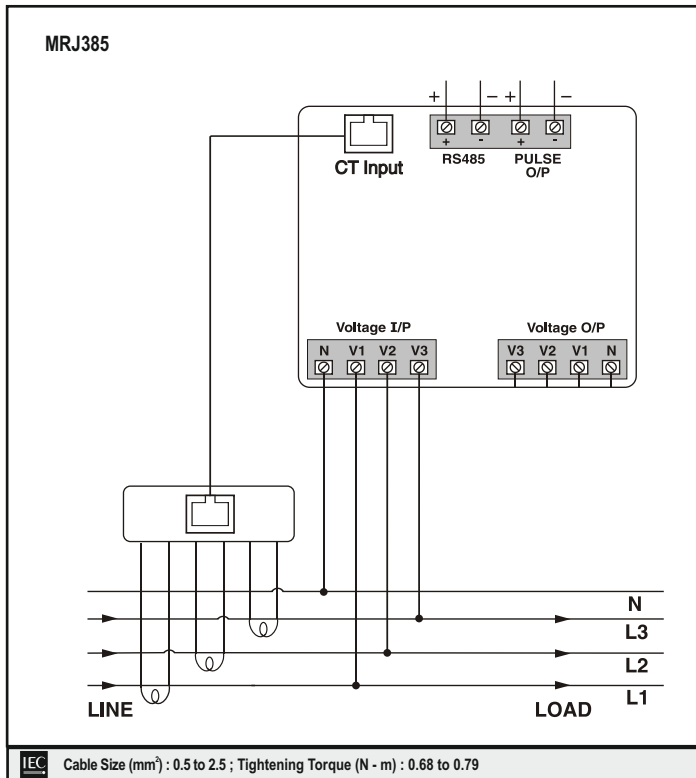
### Mechanical Specifications

Mounting	Panel
Weight	230gms

### Dimensions



### Terminal Connection



### Compliance

Applicable EMI / EMC Standards		
Product Standard : IEC 61326 - 1		
Category		Standards Compliance
ESD Immunity	IEC 61000 - 4 - 2	Level IV (Air Discharge : 15kV), (Contact Discharge : -8kV)
Surge Immunity	IEC 61000 - 4 - 5	+ / - 2kV Common Mode, (Line to Ground) + / - 1kV Differential Mode, (Line to Line)
Radiated Susceptibility	IEC 61000 - 4 - 3	Level III, 80 to 1000MHz (10V / m) Level II, 1.4GHz to 2GHz (3V / m) Level I, 2GHz to 2.7GHz (1V / m)
Conducted Susceptibility	IEC 61000 - 4 - 6	Level II (3V / m)
Voltage Dips and Interruptions	IEC 61000 - 4 - 11	<b>Dips</b> : 0% residual voltage / 1 cycle (Criteria B), 40% residual voltage / 10 cycles 50Hz / 12 cycles 60Hz (Criteria C) 70% residual voltage / 25 cycles 50Hz / 30 cycles 60Hz (Criteria C) <b>Interruptions</b> : 0% residual voltage / 250 cycles 50Hz / 300 cycles 60Hz (Criteria C)
Conducted Emission	CISPR - 11	
Radiated Emission	CISPR - 11	
Electrical Fast Transient	IEC 61000 - 4 - 4	Level III (2kV)

### Ordering Information

Product Code	Supply Voltage	Output		Certification
MRJ385-G-PNW	Self Supplied (V1, N) 60 to 300V AC	Pulse Output	Comm. (RS485)	CE