



# DPM 380 380B

## Features

LCD display with back lighting  
Modbus-RTU communication  
(for DPM380 only)

### MEASUREMENT PARAMETERS:

- Phase Voltage (L-N)
- Line Voltage (L-L)
- Phase Current and Neutral Current
- Bidirectional kW (per phase & total)
- Bidirectional kVAR (per phase & total)
- Bidirectional kVA (per phase & total)
- Frequency
- Power Factor (per phase & total)
- Energy (+ and -) for kWh, kVARh and kVAh
- THD Phase Voltage (L-N)
- THD Phase Current
- Active Power (kW) Demand
- Maximum Active Power (kW) Demand

## Technical Data

### DISPLAY TYPE

LCD display

### MEASUREMENTS

3-phase 4-wire system  
3-phase 3-wire system

### CURRENT MEASUREMENT (TRMS)

CT primary : 5 ~ 8000 A  
CT secondary : 5 A  
Minimum measurement : 5 mA  
Accuracy : 0.5% from 1A to  
6 A (secondary)  
Burden : < 0.05 VA at 5 A  
Sustained overload : 6 A

### VOLTAGE MEASUREMENT (TRMS)

Nominal phase voltage : 20 ~ 300 V AC  
Minimum measurement : 10 V  
Accuracy : 0.5% at full scale  
Phase voltage via VT : 60 ~ 33,000 V

### POWER MEASUREMENT

Real power, apparent power, reactive power  
measurement  
Measuring updating period : 1 s  
Accuracy : 1.0%

### ACTIVE POWER DEMAND

Interval : 1 ~ 30 mins

### POWER FACTOR MEASUREMENT

Total and displacement power factor  
Accuracy : 1.0%

### FREQUENCY MEASUREMENT

Measurement range : 45 ~ 65 Hz  
Measurement updating period : 1s  
Accuracy : 0.5%

### ENERGY ACCURACY

Active (according to IEC 62053-21) : class 1  
Reactive (according to IEC 62053-23) : class 2

### AUXILIARY POWER SUPPLY

AC voltage : 90 ~ 415 V AC  
Frequency : 50 / 60 Hz  
DC voltage : 100 ~ 300 V DC  
Power consumption : <3 VA

### COMMUNICATION

Hardware interface : Isolated RS485  
Protocol : Modbus-RTU  
Baud rate : 2400, 4800, 9600,  
19200, 38400

### ENVIRONMENTAL CONDITIONS

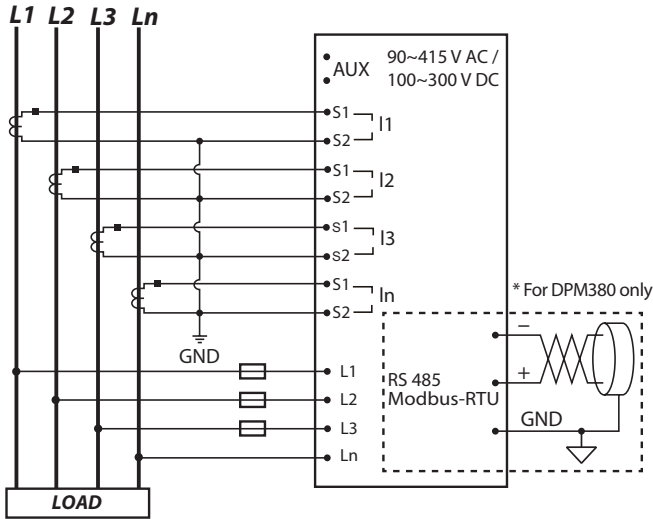
Operating temperature : -10°C ~ +55°C  
Storage temperature : -20°C ~ +70°C  
Humidity : 0 - 95%,  
non condensing

### MECHANICAL

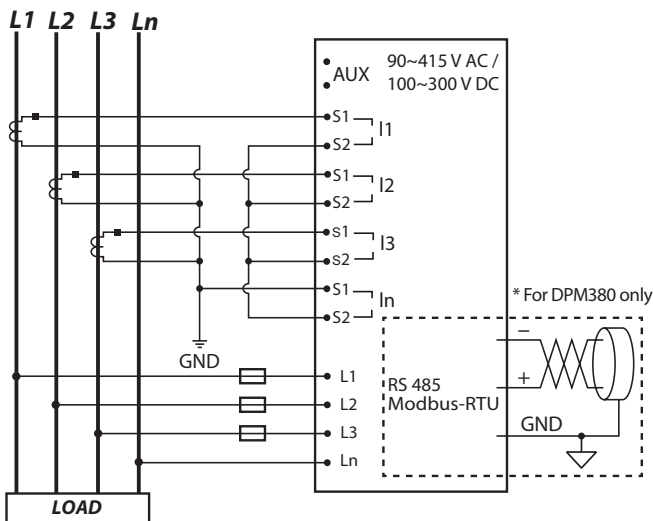
Mounting : Panel mounting  
Dimension (mm) : 96(w) x 96(h) x 100(d)  
Approximate weight : 0.5 kg

## Typical Application Diagram

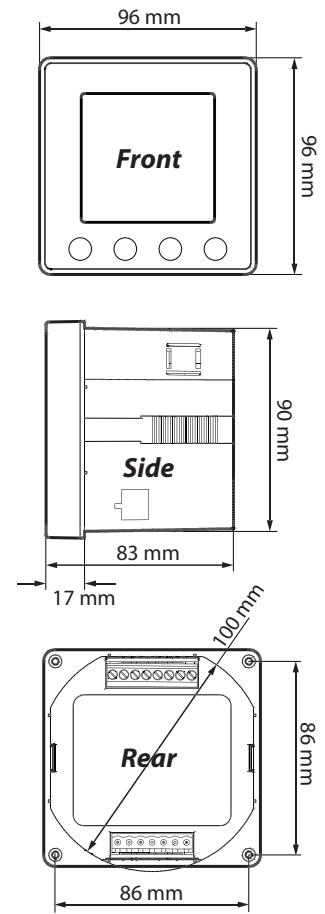
### 3-PHASE 4-WIRE SYSTEM WITH 4 CTs CONNECTION



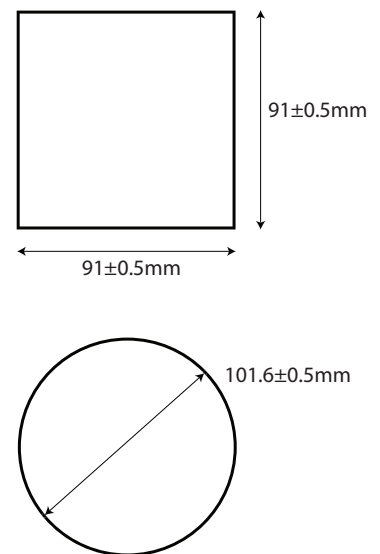
### 3-PHASE 4-WIRE SYSTEM WITH 3 CTs CONNECTION



## Case Dimensions



## Cut-Out Recommendations



## Electromagnetic Compatibility (EMC)

### Part 6-2: Generic Standards IEC61000-6-2

Immunity for industrial environments.

### Part 6-4: Generic Standards IEC61000-6-4

Emission standard for industrial environments.

## Ordering Information

MODEL	DESCRIPTION
DPM 380-415AD	Auxiliary Voltage 90 ~ 415 V AC or 100 ~ 300 V DC, with RS 485
DPM 380B-415AD	Auxiliary Voltage 90 ~ 415 V AC or 100 ~ 300 V DC