



# DPM 380 380B

## Features

LCD display with back lighting with Modbus-RTU communication

### MEASUREMENT PARAMETERS:

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

## Technical Data

### DISPLAY TYPE

LCD display

### MEASUREMENTS

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

### CURRENT MEASUREMENT (TRMS)

CT primary : 5 ~ 9995 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%

### 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

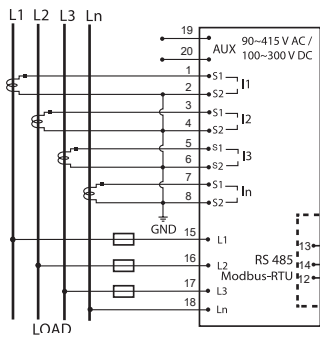
Temperature : -10°C to 55°C  
Humidity : 5% to 95%, non-condensing

### MECHANICAL

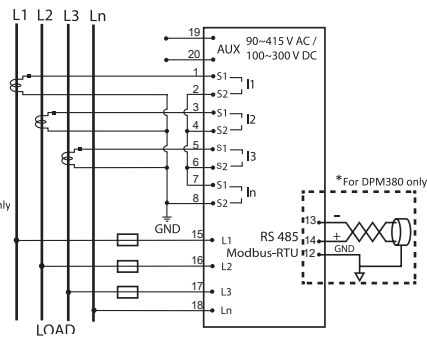
Mounting : Panel mounting  
Dimension (mm) : 96(w) x 96(h) x 87.5(d)  
Approximate weight : 0.48kg  
Enclosure protection : IP54 at the panel  
IP20 at the body

### Typical Application Diagram

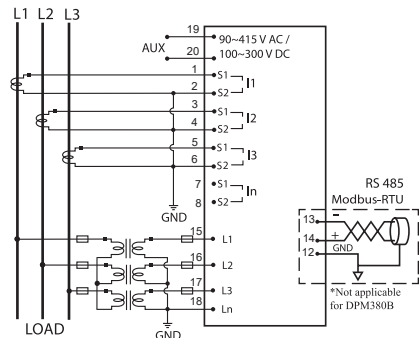
3-PHASE 4-WIRE SYSTEM:4CTs, direct V input.



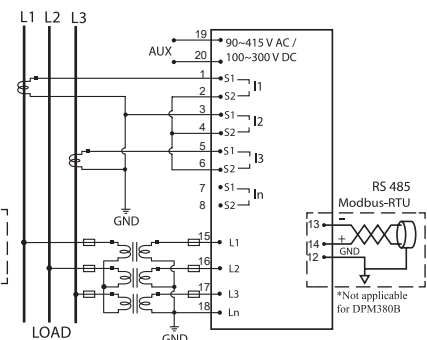
3-PHASE 4-WIRE SYSTEM:3CTs, direct V input.



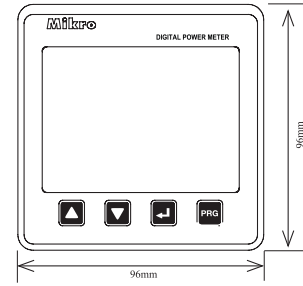
3-PHASE 3-WIRE SYSTEM:3CTs, 3VTs



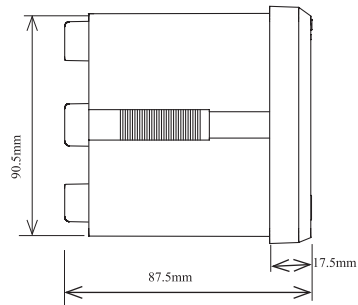
3-PHASE 3-WIRE SYSTEM:2CTs, 3VTs



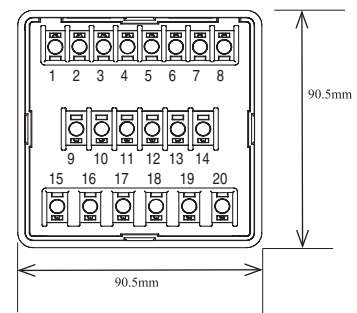
### Case Dimensions



Front



Rear



Back

### 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

### Cut-Out Recommendations

