

# WISE-M501

# WISE-M502

Multifunction Panel Mount Smart Power Meter

Multi-Loop DIN Rail Smart Power Meter



WISE-M501



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## Introduction

WISE-M500 series power meters are easy to use, cost effective smart meters, that provide high accuracy measurement, display and communication (Modbus RTU). Characterized by their compact size, and flexible connection mode. WISE-M500 series meters are ideal for power monitoring operations and equipment preventative maintenance.

## Specifications

### Input

- **Measurement Type** True RMS measurement
- **Phase & Wiring** 1P2W/ 1P3W/ 3P3W (2 3CT)/ 3P4W; Balanced/ Unbalance Programmable by front buttons(Actual wiring must be same)
- **Input range** Voltage: 40 ~ 400 VLN ; 60 ~ 600VLL  
PT Primary range: 100 ~ 50000V  
PT Secondary range: 100 ~ 600V  
Current: 0 ~ 5A  
CT Primary range: 5 ~ 9999A  
Frequency: 45 ~ 65Hz
- **Max. Input over** Voltage: 2 X rated continuous: 2500V, 1 sec  
Current: 2 X rated continuous: 20 X rated 1 sec
- **Input burden** Voltage: < 0.2VA, Current: < 0.1VA
- **Accuracy & Resolution**

Parameter	Accuracy	Resolution	Parameter	Accuracy	Resolution
Voltage	0.25%	0.1 V	Power Factor	0.5%	0.001
Current	0.25%	0.001 A	Frequency	0.2%	0.01 Hz
Natural Current	1.0%	0.001 A	Active Energy	0.5%	0.1 kWh
Active Power	0.5%	1 W	Reactive Energy	0.5%	0.1 kVarh
Reactive Power	0.5%	1 Var	THD	1.0%	0.1%
Apparent Power	0.5%	1 VA			

### Communication

- **RS485 port** Up to 38400 bauds, Modbus RTU

### Environmental

- **Operating Temp.** 0 ~ 60°C
- **Operating Hum(%RH)** 5 ~ 95%RH, non-condensing
- **Storage Temperature** -10 ~ 70°C

### General

- **Certification** EN 61326:2006, EN 61010-1:2010
- **Dimension(W x D x H)** 96 mm x 96 mm x 63 mm
- **Power Requirements** AC 85 ~ 264V / DC 100 ~ 300V
- **Power consumption** AC: ≤ 10W / DC: ≤ 3W @ 230V

### Mechanical

- **Panel cutout** 90 mm(W) x 90 mm(H)
- **Case material** Black PC (non-flammable)
- **Enclosure** Front panel: IEC 529 (IP50) Housing: IP20
- **Mounting** Panel mounting
- **Weight** ≤ 400 g

## Specifications

### Input

- **Measurement Type** True RMS measurement
- **Phase & Wiring** 1P2W/ 1P3W/ 3P3W/ 3P4W; Voltage: 50 ~ 500V
- **Input range** PT Primary range: 50 ~ 99.9kV  
IPT Secondary range: 50 ~ 500V  
Current: Depends on external CT  
CT Primary range: 1 ~ 9999A  
Frequency: 45 ~ 65Hz  
Voltage 1.2 X rated continuous(600V max)  
Current: Clamp CT Specification 1.2X Rate  
Voltage: < 0.2VA, Current: < 0.1VA
- **Max. Input over**
- **Input burden**
- **Accuracy & Resolution**

Parameter	Accuracy	Resolution	Parameter	Accuracy	Resolution
Voltage	0.25%	0.1 V	Apparent Power	0.5%	1 VA
Current	0.25%	0.001 A	Power Factor	0.5%	0.001
Natural Current	1.0%	0.001 A	Frequency	0.2%	0.01 Hz
Active Power	0.5%	1 W	Active Energy	0.5%	0.1 kWh
Reactive Power	0.5%	1 Var	Reactive Energy	0.5%	0.1 kVarh

### Communication

- **RS485 port** Up to 38400 bauds, Modbus RTU

### Environmental

- **Operating Temp.** 0 ~ 60°C
- **Operating Hum(%RH)** 0 ~ 80 RH, non-condensing
- **Storage Temperature** -20 ~ 70°C

### General

- **Certification** EN 61326:2006, EN 61010-1:2010
- **Dimension(W x D x H)** 54 mm x 65.5 mm x 81 mm
- **Power Requirements** AC 85 ~ 346V / DC 100 ~ 300V (50 / 60Hz)
- **Power Consumption** AC: ≤ 10W / DC: ≤ 4W

### Mechanical

- **Case Material** PC fireproof
- **Mounting** DIN rail
- **Weight** 185 g

## Ordering Information

- **WISE-M502-125C060E** 5-Loop Single Phase DIN-Rail Power Meter
- **WISE-M502-332C060E** 2-Loop Three Phase DIN-Rail Power Meter
- **WISE-M501-A5V6E** Multi-function Panel Mount Power Meter