

MCM SERIES MULTI-CHANNEL ENERGY METER

DIN-RAIL ENERGY METER



Introduction

MCM series multi-channels power meter is special designed metering device for feeder loops. Multi-function design to provide electrical parameter measurement for three-phases or single phase branch circuits, it performs a real-time metering, measures energy consumption and monitors power quality.

Advanced communications options including Modbus via RS485, optional Ethernet port; Multiple digital input ports can collect pulse signal from water meters and gas meters etc.

Main Features

- Measurement accuracy class 0.5.
- Current measuring.../5 or.../1 A.
- Multi-circuits metering.
- With harmonic analysis.
- Optional 6DI, 2DO ports.
- 1.6 inch dot matrix LCD display.
- Advanced electrical parameter measurement.
- Provide 5 virtual alarm triggers.
- With SPDT relay output for alarm output.
- With RS485 modbus RTU communications.
- Optional multi-tariffs ratio.
- Optional max 99 lists SOE record.
- Accept customization designs.

Measurement Function

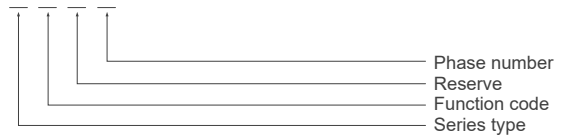
Model	MCM2603	MCM2601	MCM2403	MCM2401	MCM1000
Parameters					
Basic parameters ⁽¹⁾	●	●	●	●	●
Volt.harmonic distortion	○	○	●	●	-
Curr.harmonic distortion	○	○	●	●	-
Individual harmonic	2-31th	2-31th	2-15th	2-15th	-
Time of use (TOU)	○	○	-	-	-
Voltage imbalance	○	○	○	○	-
Current imbalance	○	○	○	○	-
Max demand	○	○	○	○	-
Voltage deviation	○	○	○	○	-
SOE record	○	○	-	-	-
Measurement signal access					
4 Channels (3P)	-	-	●	-	-
6 Channels (3P)	●	-	-	-	●
12 Channels (1P2W)	-	-	-	●	-
18 Channels (1P2W)	-	●	-	-	○
Communications and i/o port					
Ethernet port	-	-	○	○	-
Profibus	○	○	○	○	○
6*Digital inputs	○	○	-	-	○
2*Digital outputs	○	○	●	●	○

●With this function ○Optional function -Without this function

⁽¹⁾ Basic parameters: Voltage, Current, Frequency, Total power factor, Active power, Reactive power, Apparent power, Active energy, Reactive energy, Individual harmonic.

Ordering Information

MCM- 1 2 3 4



Num.	Code	Description
1	1	First generation
	2	Second generation
2	4	4 Metering ICs built-in
	6	6 Metering ICs built-in
3	0	Reserved item
4	1	Single-phase
	3	Three-phases (Only for second generation)

Technical Characteristics

Model	MCM2600	MCM2400	MCM1000
Current measurement (TRMS)			
CT secondary rated	Standard 1A/5A	100mA,333mV optional	Standard 1A/5A
Measurement range	0 ... 9999A		
Overload	"1.2 times rated continuous; 5 seconds for 10 times the rated"		
Input consumption	<0.2 VA		
Voltage measurement (TRMS)			
PT secondary	100VAC	100VAC / 400VAC	
Frequency	45 ... 65 Hz		
Overload	1 seconds for 2 times the rated		
Input consumption	<0.2 VA		
Direct measurement	18 ... 300 VAC L-N		18 ... 400 VAC L-L(18...250VAC L-N)
Power supply			
AC voltage	DC/AC 85~265 ± 10 %, 50 / 60 Hz		
Consumption	< 10 VA		
I/O port (alarms / control)			
Number of relays	2 Channel DO & 6 channel DI	1 x SPDT relay	2 Channel DO & 6 Channel DI
Type	230 VAC 5 A, passive node	230 VAC 5 A, passive node	230 VAC 5 A, passive node
Communication			
Link method	RS485 (2/3 wires half duplex)		
Protocol	Modbus RTU		
MODBUS speed	4800/9600/12800/19200bps		