

MCM SERIES NEW GENERATION MULTI-CHANNEL ENERGY METER



Introduction

The BLUEJAY New Generation MULTI-CHANNEL ENERGY METER is engineered for precise energy monitoring in both residential and industrial settings. It offers flexible channel configurations from 1 to 24, supporting both single-phase and three-phase measurements for diverse applications.

Designed with rigorous safety standards, the meter meets CATII-300V requirements and can withstand voltages up to 4KV. It also provides versatile communication options, including RS485 and Ethernet, with optional modules such as DI, DO, PO, and AO for enhanced system integration.

Main Features

- 0.5s High accuracy energy measurement;
- Single-phase and three-phase measurements;
- Supports 1 to 24 channels multi-channel configuration;
- Residential and industrial energy monitoring applications;
- CATII-300V voltage safety standards;
- Up to 4KV withstand capability;
- Communication: RS485, Modbus-RTU; Ethernet, TCP/IP optional;
- Expandable modules: DI, DO, PO, AI and AO optional;

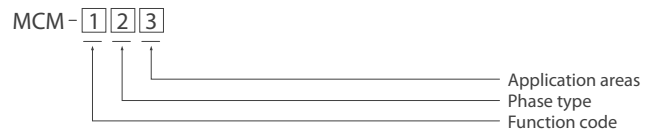
Measurement Function

Model	MCM211D	MCM223T	MCM243d	MCM263T	MCM283D	MCM283R
Metering features						
Basic parameters	●	●	●	●	●	●
Volt. harmonic distortion	●	●	●	●	●	●
Curr. harmonic distortion	●	●	●	●	●	●
Individual harmonic	●	●	●	●	●	●
Time of use (TOU)	●	●	●	●	●	●
Curr. / Volt. unbalance	●	●	●	●	●	●
SOE record	●	●	●	●	●	●
Measurement signal access						
1A & 5A	○	●	○	●	○	○
100mA	●	○	●	○	●	●
333mV	●	○	●	○	○	○
L-N 300V,three phases	●	●	●	●	●	●
L-L 480V,single phase	-	●	●	●	●	●
Communications and i/o port						
RS-485/ Modbus RTU	●	●	●	●	●	●
Ethernet 10/100MB	○	○	○	○	○	○
Wi-Fi/4G/Bluetooth	○	○	○	○	○	○
Digital input/ output	○	○	○	○	○	○
Analog input/ output	○	○	○	○	○	○
Pulse output	○	○	○	○	○	○

●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



Num.	Code	Description
1	1	1 Metering ICs built-in: for 3*single phase measurement only
	2	2 Metering ICs built-in: for 6*single phase/2*three phases
	4	4 Metering ICs built-in: for 12*single phase /4*three phases
	6	6 Metering ICs built-in: for 18*single phase/6*three phases
	8	8 Metering ICs built-in: for 24*single phase /8*three phases
2	1	Single phase
	3	Three phases
3	T	T: CT access, Default 5A CT, 100mA CT optional, for industrial use t: CT access, 333 mV/100mA CT optional, for residential billing
	D	D: Direct access, for industrial use d: Direct access, for residential billing
	R	R: RJ45 current terminal, for industrial use r: RJ45 current terminal, for residential billing

Technical Characteristics

Model	MCM211D	MCM223T	MCM243d	MCM263T	MCM283D	MCM283R
Current measurement (TRMS)						
Power supply	DC/AC 85~265 ± 10 %, 50 / 60 Hz					
Consumption	< 10 VA					
Measurement channels	3*1P	2*3P/ 6*1P	4*3P/ 12*1P	6*3P/ 18*1P	8*3P/ 24*1P	8*3P/ 24*1P
Current measurement (TRMS)						
PT secondary	100mA,333mV optional	Standard 1A/5A	100mA, 333mV optional	Standard 1A/5A	100mA,333mV optional	100mA,333mV optional
Frequency	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 / 400VAC					
Overload	1.2 times rated continuous; 5 seconds for 10 times the rated					
Input consumption	<0.2 VA					
Safety						
Voltage level	CATIII-300V		/		CATIII-300V	
Withstand voltage	4KV		2.5KV		4KV	
Communication						
Interface	RS485/Ethernet optional					
Protocol	Modbus RTU/TCP,IP					
Wireless module	Wi-Fi/4G/Bluetooth optional					