Stand-Alone Energy Meter (Motor Control Center, Switchgear, OEM)

EMU4 Energy Measuring Unit*

This Energy Measuring Unit can measure various types of electric quantity such as voltage, current, electric power and electric energy.

Key Features:

- The measurement data can also be transmitted to superior monitoring systems through MODBUS® RTU communication.
- In addition to the provision for measuring the quantity of electricity, the unit has two external input ports supporting both pulse input and contact input by way of switching (EMU4-HD1-MB).
- With pulse input set, you can measure the production volume or the utility other than electricity, such as water, gas and air.
- With contact input set, you can monitor status or alarm and measure the operating time of facility or the operating power.

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Model Number			EMU4-BD1-MB		EMU4-HD1-MB	
Stocked Item			-		-	
Phase-Wire System			1-phase, 2-wire / 1-phase, 3-wire / 3-phase, 3-wire		1-phase, 2-wire / 1-phase, 3-wire / 3-phase, 3-wire / 3-phase, 4-wire	
Measurement Item			Electric energy (consumption, regeneration), current, current demand, voltage, electric power, electric power demand, reactive power, power factor, frequency, reactive energy, operating time		Electric energy (consumption, regeneration), current, current demand, voltage, electric power, electric power demand, reactive power, apparent power, power factor, frequency, harmonic current, harmonic voltage, reactive energy, periodic electric energy, pulse count value, operating time, equivalent CO_2	
Rating	Voltage Circuit	1-Phase, 2-Wire, 1-Phase, 3-Wire	110V, 220 VAC		110V, 220V, 440 VAC	
		3-Phase, 3-Wire	AC110V (b/w 1- and 2-side, 2- and 3-side), AC220V (b/w 1- and 3-side)		AC110V (b/w 1- and 2-side, 2- and 3-side), AC220V (b/w 1- and 3-side)	
		3-Phase, 4-Wire	Non-compliant		Min: AC63.5V/110V, Max: AC277V/480V	
	Current Circuit		50A, 100A, 250A, 400A, 600A AC (The dedicated split type current sensor is used. Each value refers to the current at the primary side of the current sensor) 5A AC (The dedicated split type current sensor is used. 5A current sensor is used together with the current transformer (CT), and the primary-side current is configurable up to 6000A.)			
	Frequency		50Hz-60Hz			
Auxiliary Power Supply Rating			100-240VAC (+10%, -15%), 50Hz-60Hz			
Measurable Circuit Count			1 circuit			
External Input	Input Signal Type		None		No voltage a-contact 1 input	
	Rated Input Voltage/Current				5 VDC 7mA	
External Output	Output Signal Type		None		No voltage a-contact 1 output	
	Rated Open/Close Voltage/Current				35 VDC 75mA or 24V AC 75mA (Power factor = 1)	
Operating Temperature			-5 - +55°C (Under the conditions indicated in section 3.1)			
Operating Humidity			30 - 85%RH (No condensation)			
Storage Temperature			10 - +60°C			
Operating Altitude			1000m or below			
Standard			EMC: EN61326-1: 2006; LVD: EN-61010-1: 2010			
Possible Combination Current Sensor			EMU-CT50/100/250, EMU2-CT5-4W		EMU-CT50/100/250, EMU2-CT5	
Possible Combination Optional Unit			EMU4-CM-C (*1)	EMU4-LM (*1)	EMU4-CM-C	EMU4-LM (*2)
Product Life Expectancy			10 years (Under the conditions indicated in User Manual)			

Notes:
1. EMU4-CM-C enables the transfer of measured data to programmable controllers for data aquisition via CC-Link communication.
2. EMU4-LM enables the memorization of the data of various quantities related to electricity for a certain period.