

BPM SERIES STANDARD DIGITAL PANEL METER

DIGITAL PANEL METER



Introduction

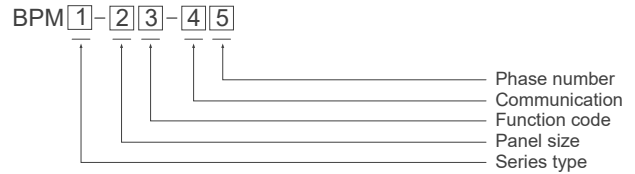
BPM series standard digital panel meter especially developed for indication and supervision of the three-phase circuit, replaces an analogical display meter, reducing installation procedure and optimizing utilization of panel space.

It's ideal for protection of single phase or three- phase networks, it is monitored and usually have superior and subordinate alarms. Protection of the parameters of programming by password.

Main Features

- Measurement functions include: current, voltage, three-phase total power, power factor, frequency.
- 0.5 class (BPM basic series) / 0.5s class (BPM3 economic series) high-precision measurement.
- Large HD LED screen display.
- Password protected programming parameters.
- Protection for single-phase and three-phase networks.
- ITF technology: input and output current insulation protection.
- RS-485 communication, optional expandable I/O modules.
- Various installation sizes, excellent panel space utilization.
- Universal series power supply (85-265VAC/DC), 20-60VDC optional.

Ordering Information



Num.	Code	Description
1	2	Basic type
	3	Economic type
2	96	96(W)x96(H)x71(D)mm
	72	72(W)x72(H)x71(D)mm
	80	80(W)x80(H)x71(D)mm
3	U	Voltage meter
	I	Current meter
	P	Active power meter
	Q	Reactive power meter
	H	Power factor meter
	F	Frequency meter
	UI	Voltage & current combine meter
	UIF	Voltage & current& frequency combine meter
	PQH	Power & power factor combine meter
	E	Economic multifunction meter
4	Blank	Without this function
	R	With RS485 interface, Modbus-RTU
5	1	Single-phase
	3	Three-phases

Note: BPM2 series only can select from num.2-4.

Measurement Function

Model	BPM2/3-96U	BPM2/3-96I	BPM2/3-96P	BPM2/3-96Q	BPM2/3-96H	BPM2/3-96F	BPM3-96UI	BPM3-96UIF	BPM3-96PQH	BPM3-96E
Parameter										
Voltage	●	-	-	-	-	-	●	●	-	●
Current	-	●	-	-	-	-	●	●	-	●
Active power	-	-	●	-	-	-	-	-	●	●
Reactive power	-	-	-	●	-	-	-	-	●	●
Power factor	-	-	-	-	●	-	-	-	-	●
Frequency	-	-	-	-	-	●	-	●	●	●
Active energy	-	-	-	-	-	-	-	-	-	●
Reactive energy	-	-	-	-	-	-	-	-	-	●
Expansion module										
Analogue output	-	-	-	-	-	○	○	○	○	○
Digital output	-	-	-	-	-	○	○	○	○	○
Energy pulse output	-	-	-	-	-	○	○	○	○	●

●With this function ○Optional function -Without this function

Technical Characteristics

Model	BPM2	BPM3
Current measurement (TRMS)		
CT secondary	1 or 5 A True RMS	
Measurement range	0 ... 11 kA	
Input consumption	<0.1 VA	
Voltage measurement (TRMS)		
Measurement range	18 ... 400 VAC True RMS	
PT secondary	100VAC or 400VAC	
Frequency	50 / 60 Hz	
Input consumption	<0.1 VA	
Frequency measurement		
Measurement range	45 ... 65 Hz	
Accuracy	±0.02Hz	
Measurement accuracy		
Voltage, current	0.50%	0.20%
Active power, reactive power	0.50%	0.50%
Active energy	Class 1.0 (IEC 62053-21)	
Reactive energy	Class 2.0 (IEC 62053-23)	
Power supply		
AC voltage	220VAC	AC/DC 90~240 ± 10 %, Optional DC20-60V
Consumption	< 10 VA	
I/O ports		
Pulse outputs (PO)	NONE	Equipped on meter with energy metering
Quantities of port	/	1 or 2
Pulse constant	/	5000imp/kWh 20000imp/kVarh
Optocoupler isolation capability	/	2kVac r.m.s
Relay outputs (DO)	/	Optional
Load capacity	/	5A@250Vac or 5A@30Vdc
Digital inputs (DI)	/	Optional
Quantities of port	/	96mm size meter max 6*DI 80mm and 72mm size meter max 4* DI
Load capacity	/	Ri<500Ω ON, Ri>100kΩ OFF
Analog output (AO)	/	1* 4~20mA, load <390Ω, or 0~10V, load >100KΩ
Quantities of port	/	96mm size meter max 3*AO 80mm and 72mm size meter max 1* AO
Communication		
Protocol	/	Modbus RTU
MODBUS speed	/	4800 / 9600 / 19200 bauds
Others		
Calibration environment	27°C ± 5°C	
Operation environment	0 to 50°C, RH < 70%	
Storage environment	-10 to 60°C, RH < 70%	
Weight	Appx.300-400g	Appx.300g
Dielectric strength (AUX terminal)	2 kV at 50Hz for 1 min	