

BPM SERIES STANDARD DIGITAL PANEL METER

DIGITAL PANEL METER



Introduction

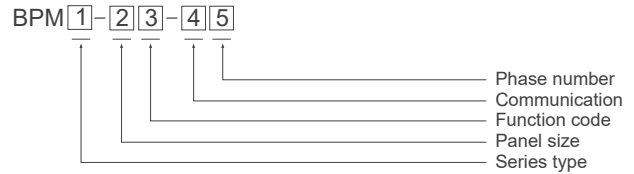
BPM series standard digital panel meter especially developed for indication and supervision of the three-phase circuit, replaces an analogical display meter, reducing installation procedure and optimizing utilization of panel space.

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% 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.
- Wide range power supply (85-265VAC/DC)

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										
Analog 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	<0.4 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% (IEC 61557-12)		
Active power, reactive power	0.50% (IEC 62053-21)		
Active energy	Class 1.0 (IEC 62053-22)		
Reactive energy	Class 2.0 (IEC 62053-23)		
Power supply			
AC voltage	220VAC	85-265V AC/DC ± 10 %,Optional 20-60VDC	
Consumption	≤4VA		
I/O Module			
Pulse outputs (PO)	NONE	Equipped on meter with energy meter function	
Quantities	/	Optional 1 - 2 channel	
Pulse constant	/	5000imp/kWh 20000imp/kVarh	
Optocoupler isolation capability	/	2kVac r.m.s	
Relay outputs (DO)	/	Optional 1 - 4 channel	
Load capacity	/	5A@250Vac or 5A@30Vdc	
Digital inputs (DI)	/	Optional 1 - 6 channel	
Quantities of port	/	96mm size meter max 6*DI 80mm and 72mm size meter max 4* DI	
Load capacity	/	Ri<500Ω turn on, Ri>100kΩ turn off	
Analog output (AO)	/	Optional 1 - 3 channel, current 4~20mA,	
Load capacity		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		