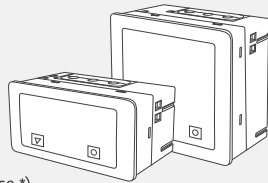


Digital panel meter series

Three phase LED and LCD meter range

Quick installation guide



Box contents

- 1 panel meter
- 2 mounting clamps
- 1 operating manual
- 1 parking terminal (Optional use *)

*Refer detailed user manual for more info

Environmental

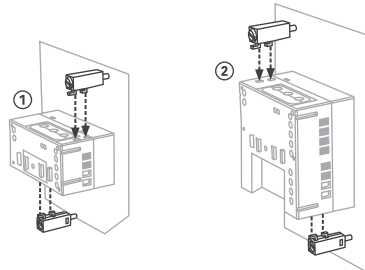
Protection Degree	Front fascia: IP 54 default, Terminal IP 20
Pollution degree	2
Insulation	Double, CAT III, 4 kV RMS 50 Hz for 1 minute
Impulse withstand	6.5 kV between all terminals & earth
Temperature	-10°C to +60°C (operating), -25°C to +80°C (storage)
Altitude (in meter)	≤ 2000
Measurement/ Over voltage category	CAT III
Humidity	95% non-condensing
Impact energy level	1J (IK06)

Compliance

Safety and other standards	CE, EN / IEC 61010-1; EN / IEC 61010-2-030, IEC 61326-1 Energy variant only: IEC / EN 62053-21
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Mounting the meter with clamps

S.no	Meter size (mm)	Dimensions with mounting clamps W X H X D (mm)
1	48 x 96	65.3 x 96 x 52
2	96 x 96	112.7 x 96 x 52



a Secure brand

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sales_europe@securemeters.com
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BGX701-205

BGX701-205-R06

Safety precautions

- HAZARD OF ELECTRICAL SHOCK OR EXPLOSION
- Use appropriate personal protective equipment (PPE) and follow safe electrical practices.
- DPM meters should only be installed indoors by suitably trained persons.
- Failure to observe precautions can result in serious or even fatal injury and equipment damage.

Meter variants

AC three phase LED meter range	
Single-line, 4 digit	Voltmeter, Ammeter
Single-line, 6 digit	Energy meter(E)
Multi-line (3 line), 4 digit	Voltmeter(V), Ammeter(I), Active(P)/ Reactive Power(Q) meter, Power factor meter(PF), Volt-Amp-Freq (VAF) meter
AC three phase LCD meter range	
Multi-line (4 line), 5 digits	Voltmeter, Ammeter, Active/ Reactive Power meter, Power factor meter, VAF meter

Display

Particular	Single-line LED	3-line LED	4-line LCD
Number of digits	4 (6 for energy meter)	4	5
Character size (mm)	14.2 (H)x 8.1 (W)	14.2 (H)x 8.1 (W)	10.2 (H)x 6.3 (W)

Mechanical

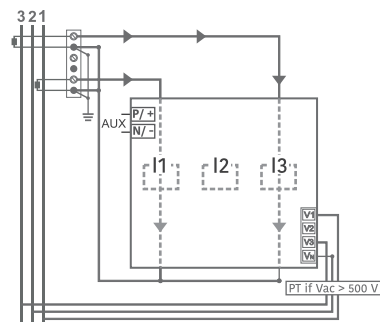
Weight	V, I, E		P, Q, PF, VAF
	96 x 96	200g±30g	250g±30g
Torque (tightening screw)	48 x 96		NA
	140g±30g		
Material	Flame retardant polycarbonate		

Communication (Energy variant only)

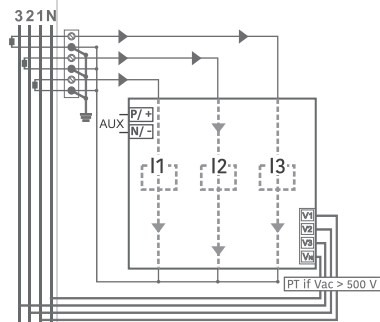
Rs485	Modbus, half-duplex, floating point, refresh rate: 500 ms at 9600 baud rate
Baud rate	1200 to 19200 bps, (default 9600 bps)
Parity bit	None, even, odd.
Stop bit	1, 2
Mod ID	1 to 247

Note: All dimensions are in mm.

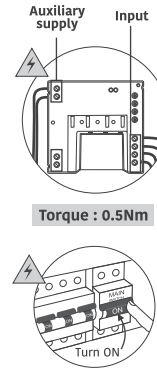
Making connections



3 Phase 3 Wire connection



3 Phase 4 Wire connection



Touch key functions - 2 key variant (V, I)

Key	In Setup mode	
	Long press (5s)	Short press
▼	No function	To navigate Scroll through the parameter list
●	No function	To edit Increment the value Confirm or save the entered digit or value Move to the next digit/ value

Key	In Display mode	
	Long press (5s)	Short press
▼	No function	Scroll through the parameter list and values
●	Reset Min (Lo) or Max (Hi) values	Scroll through max (Hi) and min (Lo) values

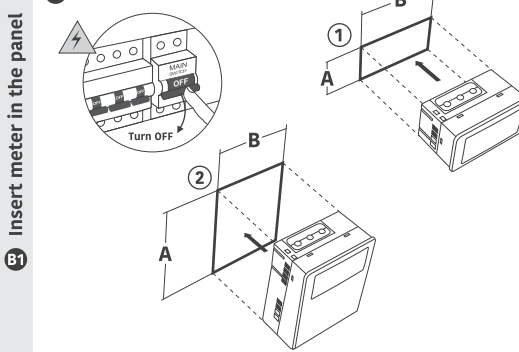
Note: Press ▼ and ● keys simultaneously for 5 secs to enter in setup mode. Press ▼ and ● keys simultaneously for 5 secs to freeze the display.

Technical specifications

Electrical

Wiring configuration		3 Phase 3 Wire / 3 Phase 4 Wire	
Voltage	Current		
Measuring voltage range	20 V to 500 V AC (P to P) and 20 V to 300 V AC (P to N)	Measuring current range	50 mA to 6 A
Nominal voltage	57.5 V to 240 V (P to N), 100 V to 415 V (P to P) (50 / 60 Hz)	Nominal current range (I _n)	1 A or 5 A
Over voltage	150% U _n continuous	Over load	150% I _n continuous
Short time over current	24 A for 1 sec for 1 A, 120 A for 1 sec for 5 A		
Power factor	0.1 lag-Unity-0.1 lead (for I _n and U _n)		
Frequency range	45 to 65 Hz		
Active power/ Reactive power/ VAF	Measuring voltage: 35 V to 500 V (P to P) Voltage (U _n): 57.5 V to 240 V (P to N) 100 V to 415 V (P to P) Measuring current range: 50 mA to 6 A Current (I _n): 1 A or 5 A		

Installation

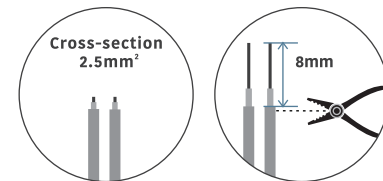


B1

Energy (6-Digit)		Measuring voltage: 40 V to 300 V (P to N) Voltage (U _n): 57.5 V to 240 V (P to N) 100 V to 415 V (P to P) Measuring current range: 50 mA to 6 A Current (I _n): 1 A or 5 A
Auxiliary supply range		40 to 300 V AC (50 / 60 Hz)/ DC
Burden		
Voltage circuit	<0.2 VA / phase	
Current circuit	1 A : <0.1 VA / phase ; 5 A : <0.4 VA / phase	
Auxiliary supply		<2 VA (For Voltmeter/Ammeter) <3.5 VA (VAF/Power/PF/Energy)
Accuracy Class		
Voltage, Current	±0.5% Full scale	
Frequency	±0.1 Hz	
Power	± 0.5 % Full scale (at unity PF)	
Power factor	± 0.005	
Energy	Class 1.0 (acc. to IEC 62053-21)	

S.no	Meter size (mm)	Cut-out dimensions (mm)		Meter dimensions WxHxD (mm)	
		A	B	Without parking terminal	With parking terminal
1	48 x 96	45 (+0.3)	92 (+0.5)	48 x 96 x 52	48 x 96 x 72
2	96 x 96	92 (+0.5)	92 (+0.5)	96 x 96 x 52	96 x 96 x 72

Wire trimming information



Display info

Voltmeter /Ammeter		Indicators	
:8888:		k Unit is in kilo	V Unit is in Volt
:8888:		M Unit is in Mega	A Unit is in Ampere
:8888:		G Unit is in Giga	Hz Unit is in Hertz
:8888:		- Lead PF/Export Power	INT Energy integration
Voltmeter	Ammeter	Power meter	Multiline LCD display
1. :8888: 2. :8888: 3. :8888:	1. :8888: 2. :8888: 3. :8888:	1. :8888: 2. :8888: 3. :8888:	1. :8888: 2. :8888: 3. :8888: 4. :8888: 5. :8888: 6. :8888:
Power factor meter	VAF meter	Energy meter	Note: Multiline LCD display is common for the AC three phase LCD meter range.
1. :8888: 2. :8888: 3. :8888:	1. :8888: 2. :8888: 3. :8888:	1. :888888: 2. :888888: 3. :888888:	

Touch key functions - 4 key variant (P, Q, PF, VAF, Energy)

Keys	In Setup Mode	
	Long press (5s)	Short press
◀	No function	To Navigate Go back to the previous option
▶	No function	To edit Increment the value
▼	No function	Scroll through the menu list Decrement the value
●	No function	Select/ enter the current option Confirm/ save the entered digit/ value To move to the next digit/ value

Keys	In Display Mode	
	Short press	Keys Short press
◀	Alert acknowledgement P, Q, PF, VAF (RPM value in VAF)	▼ Scroll through the parameter list and value
▶	Scroll through the parameter list and value (Run hr value in VAF)	● Scroll through max(Hi) min(Lo) values

Note: Min Max values can be reset by pressing ● button (Long press).

Setup menu

For LED meter range

S.No	Configurable parameters	Description	Variants					
			V	I	P	Q	PF	VAF
1.	TYPE	Meter type	✓	✓	✓	✓	✓	✓
2.	PT	PT(VT) ratio config.	✓	X	✓	✓	X	✓
	CT	CT ratio config.	X	✓	✓	✓	X	✓
3.	Pd	Power demand	X	X	✓	✓	X	X
	Ad	Current demand	X	✓	X	X	X	✓
4.	drSt	Demand value reset	X	✓	✓	✓	X	✓
5.	POLE	Motor pole config.	X	X	X	X	X	✓
6.	SLIP	Motor slip config.	X	X	X	X	X	✓

