



02 Front view

03 Side view

04 Rear view

**Table 1: Meter accuracy by measured parameters**

Meter accuracy by measured parameters		
Parameters	Accuracy %	Accuracy input range
Voltage L-N	0.2% of reading <sup>2</sup>	(69 to 480) V
Voltage L-L	0.4% of reading	(120 to 600) V
Current phase	0.2% of reading <sup>1</sup>	(0.15 to 5) A
Current neutral (calculated)	2.0% of full scale <sup>1</sup>	(0.15 to 5) A @ (45 to 65) Hz
Total watts	0.5% of reading <sup>1,2</sup>	(0.15 to 5) A @ (69 to 480) V @ ± (0.5 to 1) lag/lead PF
Total Wh	0.5% of reading <sup>1,2</sup>	(0.15 to 5) A @ (69 to 480) V @ ± (0.5 to 1) lag/lead PF
Total VAR	1.0% of reading <sup>1,2</sup>	(0.15 to 5) A @ (69 to 480) V @ ± (0 to 0.8) lag/lead PF
Total VARh	1.0% of reading <sup>1,2</sup>	(0.15 to 5) A @ (69 to 480) V @ ± (0 to 0.8) lag/lead PF
Total	1.0% of reading <sup>1,2</sup>	(0.15 to 5) A @ (69 to 480) V @ ± (0.5 to 1) lag/lead PF
Total VAh	1.0% of reading <sup>1,2</sup>	(0.15 to 5) A @ (69 to 480) V @ ± (0.5 to 1) lag/lead PF
Power factor	1.0% of reading <sup>1,2</sup>	(0.15 to 5) A @ (69 to 480) V @ ± (0.5 to 1) lag/lead PF
Frequency	± 0.01 Hz	(45 to 65) Hz
Load bar	± 1 segment <sup>1</sup>	(0.005 to 6) A

<sup>1</sup>For 2.5 element programmed units, degrade accuracy by an additional 0.5% of reading.

<sup>2</sup>For unbalanced voltage inputs where at least one crosses the 150 V auto-scale threshold, degrade accuracy by additional 0.4%.

### Communication and pulse output

- Optional RS485 port offers Modbus communication and baud rates from 9,600 to 57,600 (485P option)
- RS485 option includes a fixed energy pulse mapped to positive energy

### Easy to install and use

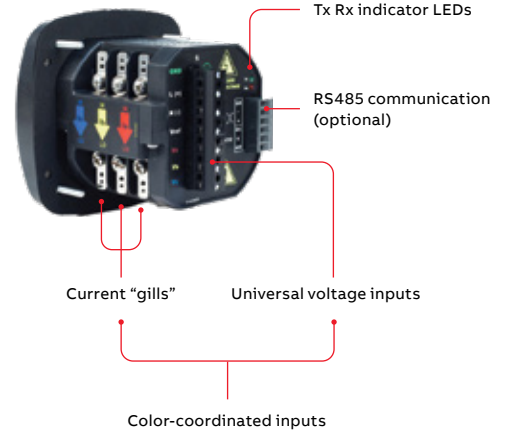
- Simple faceplate programming
- Set up through PC
- Phasor diagram showing wiring status
- Auto scroll of meter readings (programmable)
- Analog style % of load bar
- Shallow panel depth
- Color coordinated voltage and current inputs



02



03



04



## Specifications

### Voltage inputs:

- (20–416) volts line to neutral, (20–721) volts line to line
- Universal voltage input
- Input withstand capability — meets IEEE C37.90.1 (surge withstand capability)
- Programmable voltage range to any PT ratio
- Supports: 3-element wye, 2.5-element wye, 2-element delta, 4-wire delta systems
- Burden:
  - 0.014 VA/phase at 120 volts
  - 0.36 VA/phase at 600 volts
- Input wire gauge max. (12 AWG/2.5 mm<sup>2</sup>)

### Current inputs:

- Class 10: (0.005 to 10) A, 5 A CT nominal secondary, 10 A maximum
- Fault current withstand (for 23 °C, 3-phase balanced wye or delta load): 100 A for 10 seconds, 300 A for 3 seconds, 500 A for 1 second
- Programmable current to any CT ratio
- Burden 0.005 VA per phase max at 11 A
- 0.1% of nominal
- Pass-through wire gauge dimension: 0.177"/4.5 mm
- Continuous current withstand: 20 A for screw-terminated or pass-through current connections

### Isolation:

- All inputs and outputs are galvanically isolated to 2500 volts AC

### Environmental rating:

- Storage: (-20 to +70) °C
- Operating: (-20 to +70) °C
- Humidity: to 95% RH non-condensing
- Faceplate rating: NEMA 12 (water resistant) gasket included
- Protection: IP30 — meter front/back

### Sensing method:

- RMS
- Sampling at 400+ samples per cycle on all channels measuring readings simultaneously
- All parameters up to 1 second

### Power supply:

- (90 to 265) volts AC

### Communication format (optional):

- RS485 port (through back plate)
- Com port baud rate: (9,600 to 57,600)
- Com port address: 0–247
- 8-bit, no parity
- Modbus RTU, ASCII

### KYZ pulse:

- Type form A
- On resistance: (23–35) ohm
- Peak voltage: 350 V DC
- Continuous load current: 120 mA
- Peak load current: 350 mA (10 ms)
- Off-state leakage current @ 350 V DC: 1 mA

### Dimensions and shipping:

- Weight: 2 lbs
- Basic unit: (H4.85 x W4.85 x L4.25) in.
- Mounts in either 96 mm square DIN or ANSI C39.1 4" round cutouts
- Shipping container dimensions: 6" cube

### Meter accuracy:

- See page 2

### Compliance:

- ANSI C12.20-2010 Accuracy, Class 0.5 CL
- IEC 62053-22 Accuracy, Class 0.5S\*
- IEC 62053-23 Edition 1 Class 2
- CE (IEC 61000-6-2 & IEC 61000-6-4 & IEC 61326-1)\*
  - IEC 61000-4-2 (Electrostatic Discharge)\*
  - IEC 61000-4-3 (Radiated EM Immunity)\*
  - IEC 61000-4-4 (EFT)\*
  - IEC 61000-4-5 (Surge Immunity)\*
  - IEC 61000-4-6 (Conducted Immunity)\*
  - IEC 61000-4-8 (Magnetic Immunity)
  - IEC 61000-4-11 (Voltage Variations Immunity)\*
  - IEC/CISPR 11, Class A (Conducted, Radiated Emissions)\*
- IEEE C37.90.1 (Surge Withstand)
- IEEE C62.41 (Surge Immunity)
- EU Directive 2011/65/EU (RoHS 2 Directive)
- REACH Compliant
- Certified to UL 61010-1 and CSA C22.2 No. 61010-1, UL File: E250818

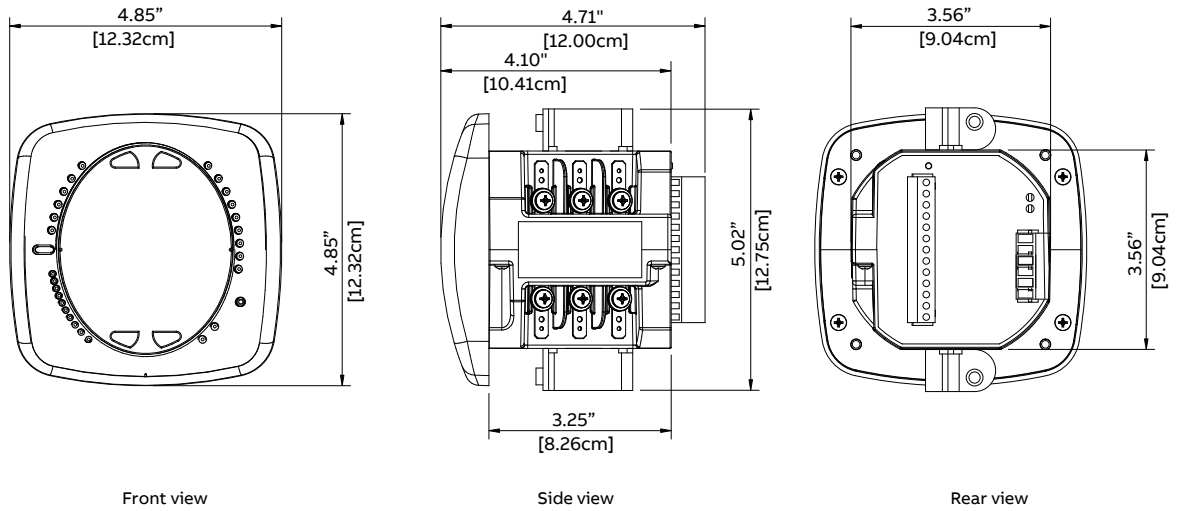
\*Third-party lab tested

**Table 2: Ordering Information (all fields must be filled in to create a valid part number)**

RGM2200	*	*	Description
Metering options	A1		Volts and amps meter
	B1		Volts, amps, power and frequency
	C1		Volts, amps, power, frequency and energy counters
	BN		BACnet volts, amps, power, frequency and energy counters meter
Communications		X	None
		S	RS485 + Pulse
		B	BACnet MS/TP Serial and Modbus TCP/IP Ethernet

Note: If metering option "BN: BACnet volts, amps, power, frequency and energy counters meter" is chosen, only the communications "B" option is available.

**Dimensional drawings**



**Wiring diagrams**

