

## **Authorized Dealer**





## **OVERVIEW**

gMeter® is an energy management platform which measures electricity, water and gas providing a single platform to manage all of a building's measurement needs. gMeter® also interfaces with HVAC systems, thermostats, lighting, refrigeration, renewables and building management systems with sophisticated benchmarking and A.I. to optimize your building energy use and maintain optimal and sustained building performance.

## **APPLICATIONS**

- Sub-Meter
- Measurement
- Cost Accounting
- Automation
- Building Benchmarking
- Building Optimization
- Tenant Utility Billing
- Sustainability Tracking

#### **DESCRIPTION**

The gMeter® platform works by installing gMeters® locally at the building or facility. The gMeter® stores data and also securely sends data up to our Energy Cloud®. This enables management to view and manage their building portfolio from any computer, tablet or smart phone. All gMeters® measure power, and additionally can measure up to 4 water, gas, BTU or steam meters per gMeter® including other environmental variables.

#### **MEASUREMENTS**

- Electricity
- Steam
- Air Quality

- Water
- Temperature

Power Factor

Pressure

- Gas BTU
- Humidity
- Light

gMeter® measures energy in real-time, sampling in 3-15 second increments directly at the internal panel level on a per circuit basis. This granular measurement capability gives a true picture of building systems operations.

**HVAC** 



gMeter® Power Meters

gMeter® CT's collect

**Water Meters** 

Sensors

**ENERGY CLOUD** 

**Gas Meters** 

Data viewable online

gMeter® securely sends data to **Energy Cloud®** 





## **Power Meters**

We have Power meters to meet every need including revenue-grade and non-revenue grade meters for both commercial and residential applications.



## Water Meters

We have smart water meters to meet any size need. This includes wireless and wired meters, and inline meters as well as ultra-sonic clamp-on meters.



## Gas Meters

gMeter® measures natural and propane gas. Whether you are measuring your kitchen, laundry, pools or tiki torches on your property, we have a gas meter to fit your need.



#### WiFi Enabled IOT

Our system works with standard WiFi networks along with ethernet and wired networks.



### 🖺 Alerts

gMeter® has the ability to send text or email alerts based on benchmarked thresholds, system issues or outages. Your smart enabled building is now on watch 24/7.



## IOT Sensors

gMeter® can sense and measure all kinds of environmental elements such as temperature, humidity, light and more.



#### Cloud Enabled

gMeter® is fully cloud enabled making your data accessible to all of your devices.



#### → Real-Time Data

gMeter® provides real-time data collection giving you immediate actionable data.



## 🔀 Building Al

gMeter® provides AI to your building enabling advanced understanding of your building performance through EM&V.



## Historical Tracking

gMeter® was built to track and keep all of your usage data so that you can properly manage your building, while understanding sustained operation over time.



## 👬 Building Benchmarking

gMeter® can benchmark your building, helping you understand and measure building and retro-fit performance.



## •)( Plays Nice with Others

gMeter® plays nice with other systems including sharing data over standard protocols such as BACNET or buliding API bridges to communicate.

## COMMUNICATIONS

Every environment is different which is why gMeter® can communicate in a variety of ways with both wireless and wired options. All main network transport is done via standard TCP/IP protocols. gMeter has an additional 900 MHz wireless band network capability for gMeter® water meters.

## **Networking**

- Wi-Fi
- Ethernet
- Cellular
- 900 MHz wireless
- Zigbee

## **Protocols** TCP/IP

BACNET / IP

## **Product Data Sheet**







	Residential				Commercial									
gMeter Models & Features	H12	H18	H24	H32	C12	C18	C24	C32	CR3	CR12	CR18	CR24	CRHD12	CRHD48
Electrical Ports	12	18	24	32	12	18	24	32	3	12	18	24	12	48
Gas / Water/BTU Pulse Input Ports	4	4	4	4	4	4	4	4		2	2	2	4	2
Temperature Measurement Channels (x8)	1	1	1	1	1	1	1	1						
True RMS Power Measurement	1	1	1	1	1	1	1	1	1	1	1	√	1	1
Line Frequency 50Hz / 60 Hz	1	1	1	1	1	1	1	J	1	J	1	1	1	1
kW, kWh, Volts, Amps	1	1	1	1	1	1	1	J	1	J	1	1	1	1
Single Phase Power	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Three Phase Power (4 Wire WYE / 3 Wire Delta)					1	J	1	J	1	J	1	J	1	J
Three Phase 120V / 208V					1	1	1	J	1	1	1	1	1	1
Three Phase 408Y/277 Vac & 600Vac									1	J	1	1	1	1
kVAR, kVARh, kVA, kVAh									1	1	1	√	1	<b>√</b>
Power Factor aPF (Apparent)									1	J	1	1	1	1
Power Factor dPF (Displacement)									1	1	1	1	1	1
Energy Cloud & greenNet enabled	1	1	1	1	1	J	1	J	1	J	1	1	1	1
Ethernet / Wifi	1	1	1	1	1	1	1	J	1	1	1	1	1	1
Zigbee Option					1	1	1	1	1	1	1	1	1	1
Built in Data Server					1	1	1	1	1	J	1	1	1	1
BACNET Compatible									1	J	1	1	1	1
Revenue Grade (ANSI C12.20-2010 Class 0.5)									1	1	1	1		
Revenue Grade (ANSI C12.20-2010 Class 0.2)									1				1	1
Multiple Voltage Sources Sensing (2)														1
Warranty (Years)	2	2	2	2	3	3	3	3	5	5	5	5	5	5

## **CR3 & CR24 Specifications**

Technical					
SERVICE TYPE	Single Phase, 3 Phase - 4 Wire (WYE), 3 Phase - 3 Wire (Delta)				
POWER	From L1 Phase to L2 Phase. 80-600VAC CAT III 50/60Hz, 70mA Max. Non-				
	user replaceable .5 Amp internal fuse protection				
POWER COMM BOARD	110v				
POWER OUT	CR3: Unregulated 5VDC output, 140 mA Max, resetting fuse				
FOWER OUT	CR24: Unregulated 5VDC output, 500 mA Max				
VOLTAGE CHANNELS*	80-346 Volts AC Line-to-Neutral, 600V Phase-to-Phase, CAT III				
CURRENT CHANNELS	CR3: 3 channels, 0.52 VAC max, 333 mV CTs, 0-4,000A				
	CR24: 3 24 channels, 0.67 VAC max, 333 mV CTs, 0-5,000A				
MAXIMUM CURRENT INPUT	CR3: 158% of current transducer rating (mV CTs) to maintain accuracy.				
	Measure up to 4000A with RoCoil CTs				
	CR24: 200% of current transducer rating (mV CTs)				
	Measure up to 5000A with RoCoil CTs				
MEASUREMENT TYPE	True RMS using high-speed digital signal processing (DSP)				
LINE FREQUENCY	50/60 Hz				
WAVEFORM SAMPLING	200 samples/60Hz waveform, 240 samples/50Hz waveform				
WAVEFORM SAMPLING	CR3: 2 waveforms/second, CR24: 1 waveform/second				
PARAMETER UPDATE RATE	1 second				
MEASUREMENTS	Volts, Amps, kW, kWh, kVAR, kVARh, kVA, kVAh, aPF, dPF.				
ACCURACY	CR3: 0.2% (<0.1% typical) ANSI C12.20-2010 Class 0.2				
	CR24: 0.5% ANSI C12.20-2010 Class 0.5 for V, A, kW, kVAR, kVA, PF.				
RESOLUTION	0.01 Amp, 0.1 Volt, 0.01 watt, 0.01 VAR, 0.01 VA, 0.01 Power Factor depending				
	on scalar setting				
LED INDICATORS	Bi-color LEDs (red and green): 1 LED to indicate communication, 3 LEDs for				
	correct CT-to-phase installation (per meter element).				
DUI OF OUTDUT	CR3: Open Collector, 5mA max current, 30V max open voltage				
PULSE OUTPUT	CR24: Open Collector, 75mA max current, 40V max open voltage				

Communications				
WIRELESS	Wifi Dual Band 2.4 GHz & 5 GHz b/g/n/ac			
DIRECT	User selectable Modbus/BACnet Master Slave Token Passing protocol (MS/TP) or (optional) BACnet IP/Modbus TCP over Ethernet.			
ETHERNET MAX DISTANCE	300 ft / 91 meters			
MODBUS MAX DISTANCE	1200 meters with Data Range of 100K bits/second or less			
BAUD RATE	9600 (Modbus default), 19200, 38400, 57600, 76800 (BACnet default), 115200			
DATA BITS	8			
PARITY	None, Even, Odd			
STOP BIT	2, 1			
DATA FORMATS	gMeter, BACnet or Modbus			
Mechanical				
OPERATING TEMPERATURE	-20° to 60°C (-4° to 140°F)			
HUMIDITY	5% to 95% non-condensing			
ENCLOSURE	CR3: ABS Plastic, 94-V0 flammability rating, External enclosure polycarbonate CR24 Polycarbonate (optional): PC UL 94 5V			
DIMENSIONS	CR3: Without Enclosure 24.2 x 8.5 x 4.0 cm (9.5" x 3.3" x 1.6") With Enclosure: 300mm x 300mm x 132mm (11" x 11" x 5.16") CR24 With Enclosure: 300mm x 300mm x 132mm (11" x 11" x 5.16")			

# **Product Data Sheet**