

Revolutionizing multi-circuit monitoring

Packet Power provides a simple, cost-effective way to monitor single- and three-phase circuits up to 600V and 10,000A. The complete pre-configured monitoring units transmit data from 1 to 72 current sensors using a self-configuring wireless network. All units are built to spec to make installation fast and easy.

Monitoring Made to Measure

Cuts installation time in half



BGS16-16P

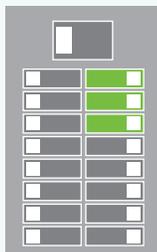
Comes pre-configured for:

- Voltage service - 100V to 600V AC
- Voltage source quantity
- Voltage lead color and length
- CT type - split core, solid core, or Rogowski coil
- CT ratings - 15A to 10,000A
- CT quantity - varies by model from 1 to 72
- CT lead length
- Distance from monitor to circuits
- Wire exit location and mounting option
- Over-current protection
- Mix of full power and current only monitoring
- Predefined panel circuit maps

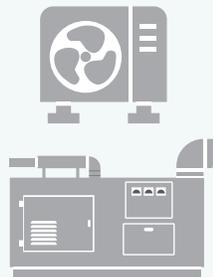
Monitoring applications



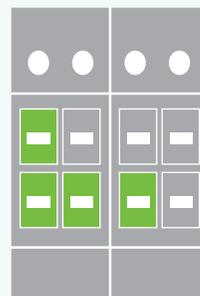
Panelboard input feeds



Select panelboard circuits



HVAC, Generators and high energy loads



Existing switchgear



Tenant submetering



Data Center PUE

Multi-Circuit Monitors



- Use full power monitoring to track power and energy
- Use current-only monitoring to lower costs
- Cut installation costs
 - "Plug and Play" wireless data network
 - No configuration needed on site
 - Minimizes number of CT wires to run
 - Choose prewired CT harnesses or loose CT leads
- Optional fusing
- Highly compact
- Wireless firmware updates
- Easy panel mapping tool

Access data instantly from the EMX Energy Monitor cloud service or from existing monitoring applications using SNMP, Modbus TCP/IP, Ethernet/IP, BACnet/IP, MTConnect, or MQTT



Current Transformers

Split Core CTs

Inside Diameter	Rated Amperage
10 mm	15, 30, 50
16 mm	100
24 mm	100, 200, 300
36 mm	200, 300, 400, 600
50 x 50 mm	400, 600, 800
75x125 mm	300, 600, 800
150x150 mm	800, 1000, 1200, 1600, 2000, 3000, 4000

Additional current ratings available

Rogowski Coil CTs

Inside Diameter	Coil Length	Typical Amperage
68 mm	250 mm	100A to 1000A
147 mm	500 mm	400A to 3000A
211 mm	700 mm	1000A to 5000A
306 mm	1000 mm	2000A to 10,000A

Solid Core CTs

Inside Diameter	Rated Amperage
9 mm	35
15 mm	60

Why Packet Power



Installs easily

- Arrives fully configured
- No communication cables
- Access date remotely with no programming



Cost effective

- Match type and amount of metering exactly to your needs
- Lower installation costs
- Fully self-optimizing wireless network lowers ongoing support costs



Open

- Compatible with any existing hardware
- Send data to any DCIM or BMS using SNMP, Modbus TCP/IP, Ethernet/IP, BACnet/IP, MTConnect, or MQTT



Secure

- Unique purpose-built wireless protocol can only be used for monitoring
- Full separation of wireless monitoring and wired data network
- Proven in data centers worldwide

Packet Power Monitor Configurations

100 - 480/277V AC Input Voltage

480V, 600/347V AC Input Voltage

Model	Max Full Power CTs	Max Current Only CTs	CT Interconnect Boards	Model	Max Full Power CTs	Max Current Only CTs
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BGS16

BGS16-12C	-	12	1
BGS16-16P	16	-	1



160 x 160 x 92 mm
(6.3 x 6.3 x 3.6 in)

BGS9H

BGS9H-3P6C	3	6
BGS9H-6P	6	-

BGS32

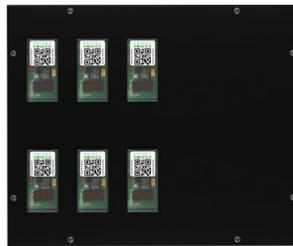
BGS32-16P12C	16	12	2
BGS32-24P	24	-	2
BGS32-32P	32	-	2



241 x 160 x 96 mm
(9.5 x 6.3 x 3.8 in)

BGS15H

BGS15H-3P12C	3	12
BGS15H-6P6C	6	6
BGS15H-9P	9	-



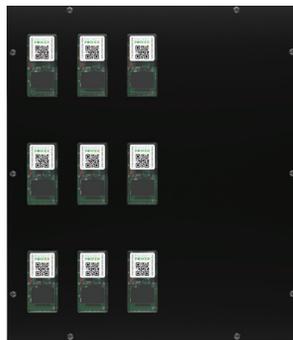
254 x 305 x 64 mm
(10 x 12 x 2.5 in)

BGS18H

BGS18H-12P	12	-
BGS18H-15P	15	-
BGS18H-18P	18	-

BGS72

BGS72-40P	40	-	3
BGS72-48P	48	-	3
BGS72-56P	56	-	4
BGS72-64P	64	-	4
BGS72-72P	72	-	5



356 x 305 x 64 mm
(14 x 12 x 2.5 in)

BGS27H

BGS27H-21P	21	-
BGS27H-24P	24	-
BGS27H-27P	27	-

For branch circuit monitoring solutions requiring 30 to 198 CTs, go to www.packetpower.com/panel-board

Technical Specifications

Measurement

Measurements	Full Power: V, A, Ah VA, W Wh, Power Factor, Hz, THDi, THDv Current Only: A, Ah
Accuracy	± 1.0% (CT dependent); ± 0.5% available
Input voltage	100-480/277V AC; 480V or 600/347V AC
Input voltage configuration	LLLN+E, LLL+E, LLN+E, LN+E, LL+E
Current range	15A to 10,000A
Frequency	50/60 Hz

Communications

Operating frequency	860 to 930 MHz and 2.4 GHz (frequencies vary by region)
Wireless network protocol	Frequency hopping self-configuring load-balancing mesh
Wired network protocols	HTTPS to Packet Power EMX running locally or as cloud service; SNMP V1/V2c/V3; Modbus TCP/IP; Ethernet/IP; MTConnect; BACnet/IP; MQTT
Firmware updates	Wireless
Typical transmission range	10 to 30 meters indoors between any two devices in mesh network
Antenna	Fully enclosed, fixed configuration
Monitoring unit to gateway ratio	10 to 50 BGS units per gateway (depending on model) with unlimited gateways per site
Multi-site support	Yes
Encryption	HTTPS, optional 128-bit wireless
Local display	Volts, Amps, Wh and communications status (varies by model)

Environmental & Mechanical

Operating environment	0° to 75°C (32° to 167°F); 5% to 95% non-condensing
Water and dust resistance	NEMA 1/IP20 (indoor use); NEMA 4 available on some products
Power usage	1-7W depending on the product
Certifications	UL 508A and CE, FCC and other communication standards

For detailed product specifications, go to: www.packetpower.com/multi-circuit-monitoring

Secure Wireless Technology

Proven in critical facilities worldwide

Packet Power's wireless protocol was designed specifically for critical facilities. The unique protocol is different than WiFi or Zigbee and can only be used for monitoring. It allows for a complete separation of the wireless monitoring network from the wired data network. It is proven to work in data centers and other critical facilities run by major financial services firms, government agencies, educational institutions, telcos and colos worldwide.

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