



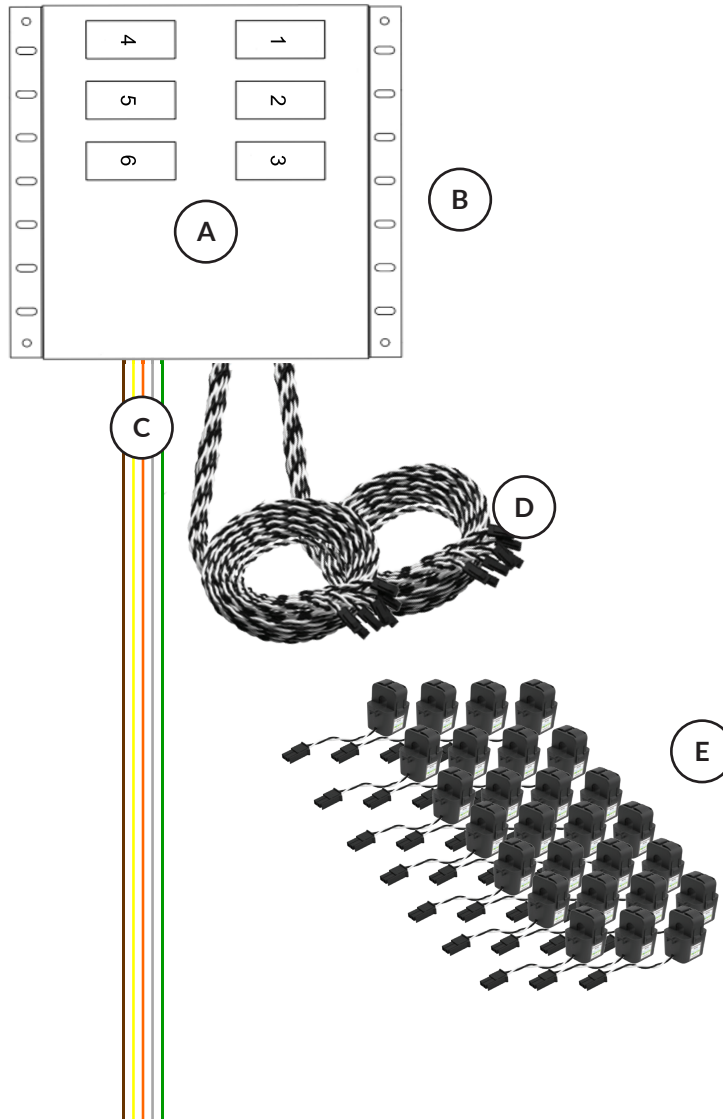
480V MULTI-CIRCUIT MONITORING

BGS18H Model Components  
and *Monitoring Made to Measure* Specifications



## 480V MULTI-CIRCUIT MONITOR COMPONENTS

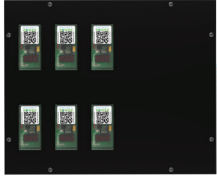
Packet Power's BGS18H 480V wireless multi-circuit monitor arrives fully configured to each customer's needs.



### BGS18H COMPONENTS

- |                        |  |
|------------------------|--|
| (A) Device:            | Up to 6 wireless power monitors in an 18 GA steel enclosure<br>254 x 305 x 64 mm (10 x 12 x 2.5 in)  |
| (B) Mounting Brackets: | Two optional 18 GA steel brackets<br>305 x 25 mm (12 x 1 in)<br>for mounting on wall or on device  |
| (C) Voltage Lead(s):   | 18 AWG 600V colored wire connected to a 6-position terminal block, 3m or 7m length;<br>Optional 500 mA 1000V ceramic inline fuse in clamshell holder on L1, L2, L3; Ground wire (E) run separately |
| (D) CT Leads:          | 24 AWG 600V twisted pair with quick disconnects; 0.5-5m length   |
| (E) Current Sensors:   | Up to 18 split core current sensors of varied amperage and size;<br>Rated amperage 15A to 4000A;<br>Dimensions vary by amperage<br>(see page 4 for options)  |

## MODELS

 BGS18H-18P pictured	Model	Maximum Full Power CTs	Voltage Inputs	Voltage Options
	BGS18H-12P	12	Multiple	480V AC Delta (LLL) 600/347V AC Wye
	BGS18H-15P	15		Source for auxiliary power to the meter (optional)
	BGS18H-18P	18		100-240V AC 1Φ (LN) 200-230V AC 1Φ (LL) 277V AC 1Φ (LN) 347V AC 1Φ (LN) 480V AC 1Φ (LL)

## MONITORING MADE TO MEASURE

"Monitoring made to measure" means we fully configure each power monitor to meet your exact needs.

Here's what we need to know to cut your installation time in half.

- Voltage input service type and quantity (source power)
- Number of circuits (CTs) you want to monitor
- CT amperage(s)
- Desired wire exit location
- Need for inline fuses on the voltage lead(s)
- CT lead length

Use the Configuration worksheet on page 5 to capture your needs.

Contact [sales@packetpower.com](mailto:sales@packetpower.com) with questions or if you need a different option than outlined in the rest of this document.

## TECHNICAL SPECIFICATIONS

Measurements	V, A, VA, W, Wh, Power Factor, Hz, THDi, THDv Accuracy: +1.0% (CT dependent) +0.5% available
Fusing	Optional 500 mA 1000V ceramic fuse in clamshell holder
Current Range	Up to 4000A
Frequency	50/60 Hz
Monitor Dimensions	254 x 305 x 64 mm (10 x 12 x 2.5 in) without mounting bracket
Monitor Weight	3.5 - 3.6 kg (7.6 - 7.9 lb)
Mounting	On wall or on device; mounting brackets included
Available Wire Exits	Back opening (25 x 178 mm) or right side knockouts (two 35mm dia and one 28mm dia)
Voltage Lead Wire	18 AWG 600V; 3m or 7m length
CT Leads	24 AWG 600V twisted pair; quick disconnect; 0.5-5m length
Operating Environment	0° to 75°C (32° to 167°F); 5% to 95% non-condensing
Water and Dust Resistance	NEMA 1/IP20 (indoor use)
Power Usage	1-5W
Wireless Network Protocol	Frequency hopping self-configuring load-balancing mesh; Operating frequency 860 to 930 MHz and 2.4 GHz (frequencies vary by region)
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
Monitor to Gateway Ratio	Up to 16 BGS18H-18P devices per Ethernet Gateway with unlimited Gateways per site
Local Display	Volts, Amps and communication status
Made in USA	Yes
Product Warranty	1 year
Certifications	UL 508A and CE, FCC and other country communications standards

**SPLIT CORE CTs**

Rated / Max Amperage	Inside Diameter	External Dimensions (H x W x D)	CT Tail	CT Lead Length
15A / 18A	10 mm	39 x 23 x 26 mm	100 mm	0.5 meter
30A / 36A	10 mm	39 x 23 x 26 mm	100 mm	
50A / 63A	10 mm	39 x 23 x 26 mm	100 mm	
100A / 120A	16 mm	44 x 31 x 33 mm	500 mm	
	24 mm	65 x 46 x 35 mm	500 mm	
200A / 240A	24 mm	65 x 46 x 35 mm	500 mm	
	36 mm	85 x 37 x 42 mm	500 mm	
300A / 360A	24 mm	65 x 46 x 35 mm	500 mm	
	36 mm	85 x 37 x 42 mm	500 mm	
	75 x 125 mm	201 x 146 x 16 mm	500 mm	
400A / 480A	36 mm	85 x 37 x 42	500 mm	
	50 x 50 mm	125 x 120 x 30 mm	500 mm	
600A / 720A	36 mm	85 x 37 x 42 mm	500 mm	
	50 x 50 mm	125 x 120 x 300 mm	500 mm	
	75 x 125 mm	201 x 146 x 16 mm	500 mm	
800A / 960A	50 x 50 mm	125 x 120 x 30 mm	500 mm	
	75 x 125 mm	201 x 146 x 16 mm	500 mm	
	150 x 150 mm	225 x 219 x 30 mm	500 mm	
1000A / 1200A	150 x 150 mm	225 x 219 x 30 mm	500 mm	
1200A / 1440A	150 x 150 mm	225 x 219 x 30 mm	500 mm	
1600A / 1920A	150 x 150 mm	225 x 219 x 30 mm	500 mm	
2000A / 2400A	150 x 150 mm	225 x 219 x 30 mm	500 mm	
3000A / 3600A	150 x 150 mm	225 x 219 x 30 mm	500 mm	
4000A / 4800A	150 x 150 mm	225 x 219 x 30 mm	500 mm	


**10 mm**

**16 mm**

**24 mm**

**36 mm**


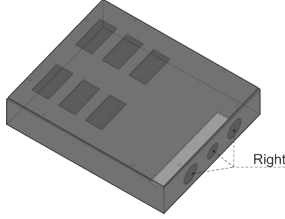
**50x50 mm**

**75x125 mm**

**150x150 mm**

CTs sold separately

**DESIGN YOUR BGS18H 480V MULTI-CIRCUIT MONITOR**
**Customer** \_\_\_\_\_ **Panel** \_\_\_\_\_ **Qty** \_\_\_\_\_

Maximum CTs	Wire Exit	
<input type="checkbox"/> 12 (4 meters) <input type="checkbox"/> 15 (5 meters) <input type="checkbox"/> 18 (6 meters)	 <div style="position: absolute; top: 255px; left: 415px; font-size: 8px;">Back</div> <div style="position: absolute; top: 240px; left: 460px;"> <input type="checkbox"/> Back Opening             1.0 x 7.0" [25 x 178 mm] opening         </div>	 <div style="position: absolute; top: 305px; left: 765px; font-size: 8px;">Right</div> <div style="position: absolute; top: 240px; left: 815px;"> <input type="checkbox"/> Right Side Conduit Plate             2 x 1.38" [35 mm] knockouts            1 x 1.10" [28 mm] knockout         </div>

Voltage Source 1	Voltage Source 2	Optional Meter Power	Voltage Lead(s)
<input type="checkbox"/> 480V AC Delta (3-wire LLL + E) <input type="checkbox"/> 600/347V AC Wye (4-wire + E)	<input type="checkbox"/> None <input type="checkbox"/> 208/120V AC Wye (4-wire + E) <input type="checkbox"/> 415/240V AC Wye (4-wire + E) <input type="checkbox"/> 480/277V AC Wye (4-wire + E) <input type="checkbox"/> 480V AC Delta (3-wire LLL + E) <input type="checkbox"/> 600/347V AC Wye (4-wire + E)	<input type="checkbox"/> None (power from reference voltage) <input type="checkbox"/> 120-240V AC 1 Phase (2-wire LN + E) <input type="checkbox"/> 200-230V AC 1 Phase (2-wire LL + E) <input type="checkbox"/> 277V AC 1 Phase (2-wire LN + E) <input type="checkbox"/> 347V AC 1 Phase (2-wire LN + E) <input type="checkbox"/> 480V AC 1 Phase (2-wire LL + E)	<u>Lead Length</u> Voltage Lead 1: <input type="checkbox"/> 3m <input type="checkbox"/> 7m <input type="checkbox"/> _____m <input type="checkbox"/> None Voltage Lead 2: <input type="checkbox"/> 3m <input type="checkbox"/> 7m <input type="checkbox"/> _____m <input type="checkbox"/> None Meter Power Lead: <input type="checkbox"/> 3m <input type="checkbox"/> 7m <input type="checkbox"/> _____m <input type="checkbox"/> None  <u>Fusing:</u> <input type="checkbox"/> Fused <input type="checkbox"/> Not Fused
Meters Powered <input type="checkbox"/> All <input type="checkbox"/> Meters: _____	Meters Powered _____ Meters: _____		

Meter Type	1	2	3	4	5	6
CT Amperage: (see page 4 for options)	_____ A	_____ A	_____ A	_____ A	_____ A	_____ A
CT Quantity:	_____	_____	_____	_____	_____	_____
CT Lead Length: 0.5M, 1M, 1.5M, 2M, 3M, 5M, or other	_____ M	_____ M	_____ M	_____ M	_____ M	_____ M
Applies to meter #s: <input type="checkbox"/> All <input type="checkbox"/> Meter #s _____	Meter #s _____	Meter #s _____	Meter #s _____	Meter #s _____	Meter #s _____	Meter #s _____

Please contact sales@packetpower.com with questions or if additional customization options are needed.

**BGS18H MULTI-CIRCUIT MONITOR MODEL CONFIGURATION INFORMATION**

Packet Power's BGS18H 480V wireless multi-circuit monitor arrives fully configured to each customer's needs. The components selected in the Configuration worksheet (page 5) result in a unique product number. Please contact [sales@packetpower.com](mailto:sales@packetpower.com) with questions or if you have any additional customization needs not shown here.

Example: 6 power meters, 1 480V Delta power source, 3M fused voltage leads, 9-100A CTs with 3M leads, 9-200A CTs with 5M leads, conduit plate wire exit

Product Number: BGS18H18P-C-D13FA-10033123-20053456

Model	Wire Exit	Voltage Source 1	V Lead 1	Meters	Voltage Source 2	V Lead 2	Meters	Optional Meter Power	V Lead 3
BGS18H12P BGS18H15P BGS18H18P	X = Back  C = Conduit Plate (right side)	D1 = 480V AC Delta (3-wire LLL + E)  Y3 = 600/3477V AC Wye (4-wire + E)	00 = None 0F = None, Fused 30 = 3M, Not Fused 3F = 3M, Fused 70 = 7M, Not Fused 7F = 7M, Fused C0 = Custom Not Fused CF = Custom Fused	A = All  Indicate meter #s	Omit = None D1 = 480V AC Delta (3-wire LLL + E) Y0 = 208/120V AC Wye (4-wire + E) Y1 = 415/240V AC Wye (4-wire + E) Y2 = 480/277V AC Wye (4-wire + E) Y3 = 600/3477V AC Wye (4-wire + E)	00 = None 0F = None, Fused 30 = 3M, Not Fused 3F = 3M, Fused 70 = 7M, Not Fused 7F = 7M, Fused C0 = Custom Not Fused CF = Custom Fused	Indicate meter #s	Omit = None (power from reference) S0 = 120-240V AC 1 Phase (2-wire LN + E) S1 = 200-230V AC 1 Phase (2-wire LL + E) S2 = 277V AC 1 Phase (2-wire LN + E) S3 = 347V AC 1 Phase (2-wire LN + E) S4 = 480V AC 1 Phase (2-wire LL + E)	00 = None 0F = None, Fused 30 = 3M, Not Fused 3F = 3M, Fused 70 = 7M, Not Fused 7F = 7M, Fused C0 = Custom Not Fused CF = Custom Fused

Meter Type 1				Meter Type 2			
Amperage	CT Lead	CT Qty	Meters	Amperage	CT Lead	CT Qty	Meters
015, 030, 050 100, 200, 300 400, 600, 800 10X = 1000 12X = 1200 16X = 1600 20X = 2000 30X = 3000	Omit = None H = 0.5M 1 = 1M B = 1.5M 2 = 2M 3 = 3M 5 = 5M C = Custom	1-3	RA = All meters or Indicate meter #s	015, 030, 050 100, 200, 300 400, 600, 800 10X = 1000 12X = 1200 16X = 1600 20X = 2000 30X = 3000 40X = 4000	Omit = None H = 0.5M 1 = 1M B = 1.5M 2 = 2M 3 = 3M 5 = 5M C = Custom	1-3	Indicate meter #s