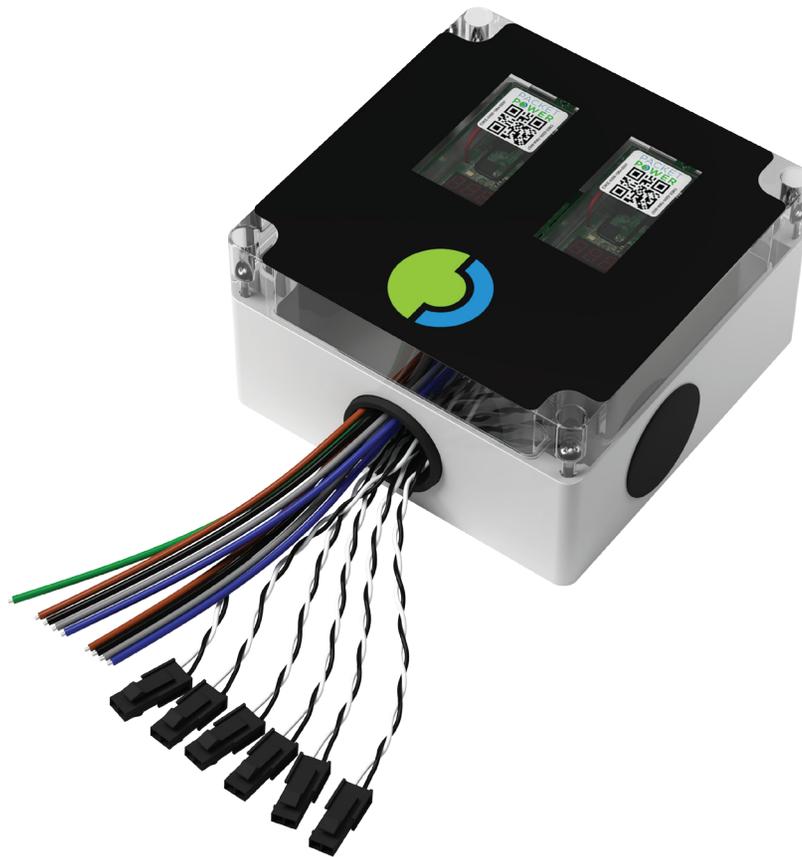




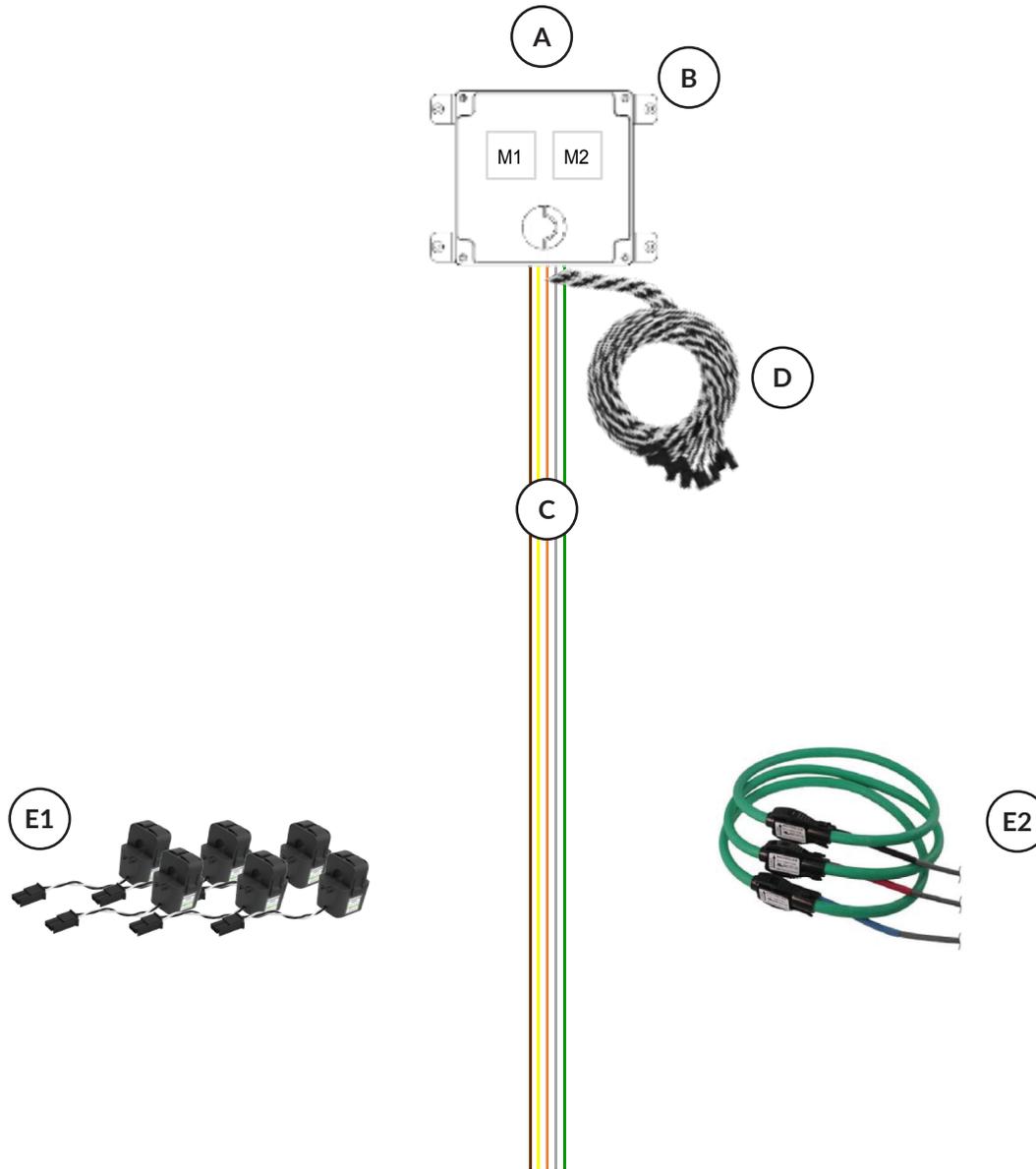
480V MULTI-CIRCUIT MONITORING

BGS9H Model Components  
and *Monitoring Made to Measure* Specifications



480V MULTI-CIRCUIT MONITOR COMPONENTS

Packet Power's BGS9H 480V wireless multi-circuit monitor arrives fully configured to each customer's needs.



BGS9H COMPONENTS	
(A) Device:	Two wireless monitors in a polycarbonate enclosure (NEMA 4 available) 160 x 160 x 92 mm (6.3 x 6.3 x 3.6 in)
(B) Mounting Brackets:	Four 21 x 21 mm (0.84 x 0.84 in) tabs included for mounting on a wall or on device
(C) Voltage Lead(s):	18 AWG 600V colored wire connected to a 6-position terminal block, 3m or 7m length; Optional 500 mA 1000V ceramic inline fuse in clamshell holder on L1, L2, L3; Ground wire (E) run separately
(D) Split Core CT Leads:	24 AWG 600V twisted pair with quick disconnects; 0.5-5m length
(E) Current Sensors:	Up to 6 current sensors of varied amperage and size (see page 4 for options)
(E1) Split Core:	Rated amperage 15A to 4000A; Dimensions vary by amperage
(E2) Rogowski Coil:	Rated amperage 250A to 3000A; Integrator required

MODELS

	Model	Maximum Full Power CTs	Maximum Current Only CTs	Voltage Inputs	Voltage Options
	BGS9H-6P	6	None	1 or 2	480V AC Delta (LLL) 600/347V AC Wye  50/60 Hz Frequency
	BGS9H-3P6C	3	6	2	Full power: 480V AC Delta (LLL) 600/347V AC Wye  Current only: 100-240V AC 1 Phase

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)
- Full power or mix of full power and current only meters
- Number of current transformers (CTs) and 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.

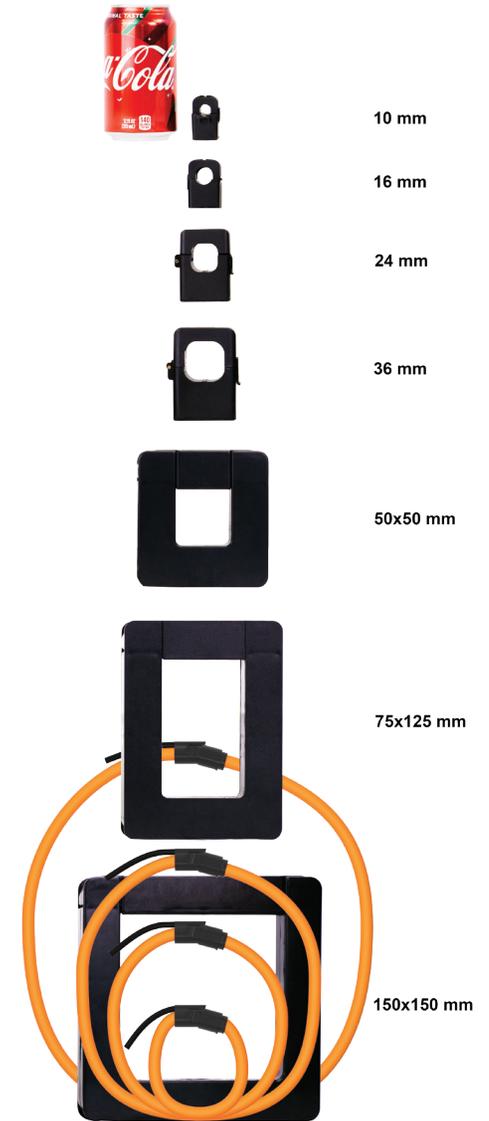
Contact sales@packetpower.com with questions or if you need a different option than outlined in the rest of this document.

TECHNICAL SPECIFICATIONS

Measurements	Full power: V, A, VA, W, Wh, Power Factor, Hz, THDi, THDv Current only: A, Ah (W, Wh using an arbitrary voltage) 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	160 x 160 x 92 mm (6.3 x 6.3 x 3.6 in) without mounting ears
Monitor Weight	0.68 - 0.73 kg (1.5 - 1.6 lb)
Mounting	On wall or on device; mounting tabs included
Available Wire Exits	Left, right, bottom or back 1" NPT (1.375" / 35 mm dia) hole
Voltage Lead Wire	18 AWG 600V; 3m or 7m lengths
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	Polycarbonate enclosure; NEMA 4 if specified
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 50 monitoring units 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 1 meter 1.5 meters 2 meters 3 meters 5 meters
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	



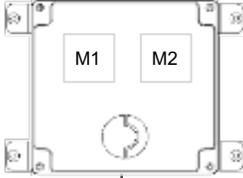
CTs sold separately

**ROGOWSKI COILS (require Integrator)**

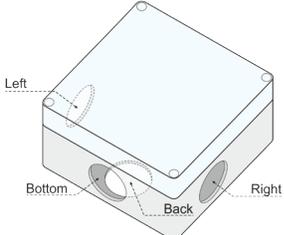
Max Conductor Diameter	Coil Length	Amperage	Coil Lead
48 mm (1.9")	150 mm	250A to 3000A	2.4 meters
81 mm (3.2")	300 mm		
127 mm (5.2")	450 mm		
178 mm (7.5")	600 mm		
279 mm (11.5")	900 mm		

DESIGN YOUR BGS9H 480V MULTI-CIRCUIT MONITOR

Customer \_\_\_\_\_ Panel \_\_\_\_\_ Qty \_\_\_\_\_

Meter Configuration			
<p><b>Meter 1</b></p> <p><input type="checkbox"/> Full Power</p> <p>CT Type: <input type="checkbox"/> Split Core <input type="checkbox"/> Rogowski Coil</p> <p>CT Amperage: _____ (see page 4 for options)</p> <p>CT Qty: _____</p> <p>CT Lead Length: _____</p>		<p><b>Meter 2</b></p> <p><input type="checkbox"/> Current Only</p> <p><input type="checkbox"/> Full Power</p> <p>CT Type: <input type="checkbox"/> Split Core <input type="checkbox"/> Rogowski Coil</p> <p>CT Amperage: _____ (see page 4 for options)</p> <p>CT Qty: _____</p> <p>CT Lead Length: _____</p>	

Voltage Source 1	Voltage Source 2	Optional Meter Power
<p><input type="checkbox"/> 480V AC Delta (3-wire LLL + E)</p> <p><input type="checkbox"/> 600/347V AC Wye (4-wire + E)</p> <p>V1 Lead Length: <input type="checkbox"/> 3m <input type="checkbox"/> 7m <input type="checkbox"/> _____m <input type="checkbox"/> None</p> <p>Fusing: <input type="checkbox"/> Fused <input type="checkbox"/> Not Fused</p> <p>Meters Powered <input type="checkbox"/> All Meters: _____</p>	<p><input type="checkbox"/> None</p> <p><input type="checkbox"/> 120-240V AC 1 Phase (2-wire LN + E)</p> <p><input type="checkbox"/> 200-230V AC 1 Phase (2-wire LL + E)</p> <p><input type="checkbox"/> 480V AC Delta (3-wire LLL + E)</p> <p><input type="checkbox"/> 600/347V AC Wye (4-wire + E)</p> <p>V2 Lead Length: <input type="checkbox"/> 3m <input type="checkbox"/> 7m <input type="checkbox"/> _____m <input type="checkbox"/> None</p> <p>Fusing: <input type="checkbox"/> Fused <input type="checkbox"/> Not Fused</p> <p>Meters Powered _____ Meters: _____</p>	<p><input type="checkbox"/> None (power from reference voltage)</p> <p><input type="checkbox"/> 120-240V AC 1 Phase (2-wire LN + E)</p> <p><input type="checkbox"/> 200-230V AC 1 Phase (2-wire LL + E)</p> <p><input type="checkbox"/> 277V AC 1 Phase (2-wire LN + E)</p> <p><input type="checkbox"/> 347V AC 1 Phase (2-wire LN + E)</p> <p><input type="checkbox"/> 480V AC 1 Phase (2-wire LL + E)</p> <p>Lead Length: <input type="checkbox"/> 3m <input type="checkbox"/> 7m <input type="checkbox"/> _____m <input type="checkbox"/> None</p> <p>Fusing: <input type="checkbox"/> Fused <input type="checkbox"/> Not Fused</p>

Wire Exit				
	<p><input type="checkbox"/> Bottom Opening</p> <p>1" NPT (1.375" / 35 mm dia) hole</p>	<p><input type="checkbox"/> Back Opening</p> <p>1" NPT (1.375" / 35 mm dia) hole</p>	<p><input type="checkbox"/> Left Side Opening</p> <p>1" NPT (1.375" / 35 mm dia) hole</p>	<p><input type="checkbox"/> Right Side Opening</p> <p>1" NPT (1.375" / 35 mm dia) hole</p>

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

**BGS9H 480V MULTI-CIRCUIT MONITOR MODEL CONFIGURATION INFORMATION**

Packet Power's BGS9H 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 with questions or if you have any additional customization needs not shown here.

Example: 2 power meters, 1 480V Delta power source, 7M fused voltage lead, 6-200A CTs, 5M leads, bottom wire exit  
 Product Number: BGS9H6P-B-D17FA-P320053RA

Model	Wire Exit	Voltage Source 1	V Lead 1	Meters	Voltage Source 2	V Lead 2	Meters	Optional Meter Power	V Lead 3
BGS9H6P BGS9H3P6C	B = Bottom L = Left R = Right X = Back	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 S0 = 120-240V AC 1 Phase (2-wire LN + E) S1 = 200-230V AC 1 Phase (2-wire LL + E) 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	Indicate meter #s	Omit = None (power from reference voltage) 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 1 Config	Amperage	CT Lead	CT Qty	Meters	Meter 2 Config	Amperage	CT Lead	CT Qty
P3 = Full Power 1-3 CTs PG = Full Power 1-3 Rogo	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	RA = All meters or Indicate meter #s	C6 = Current only 1-6 CTs P3 = Full Power 1-3 CTs PG = Full Power 1-3 Rogo	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	1-6