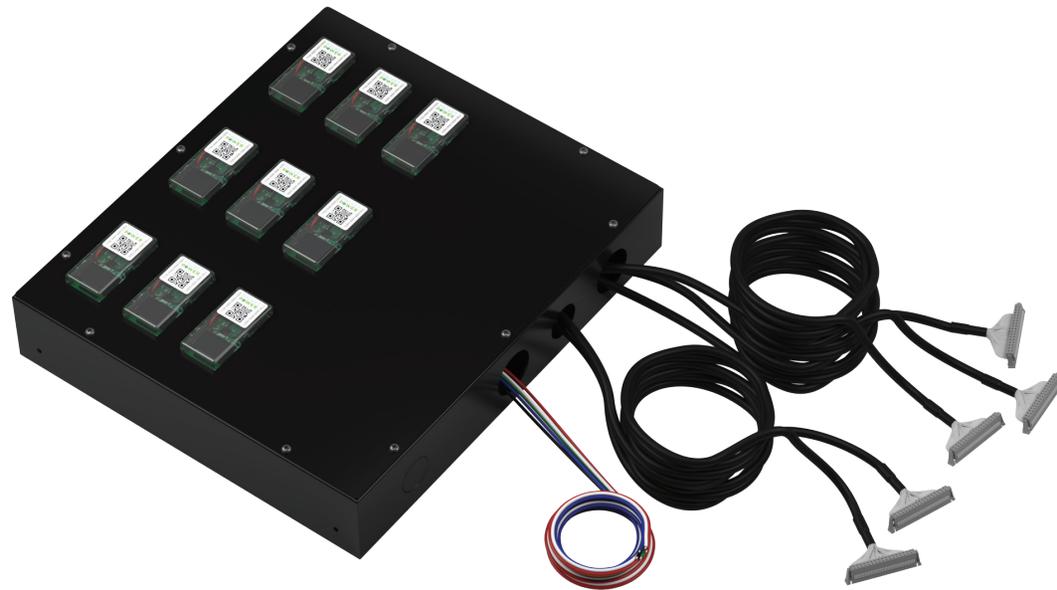
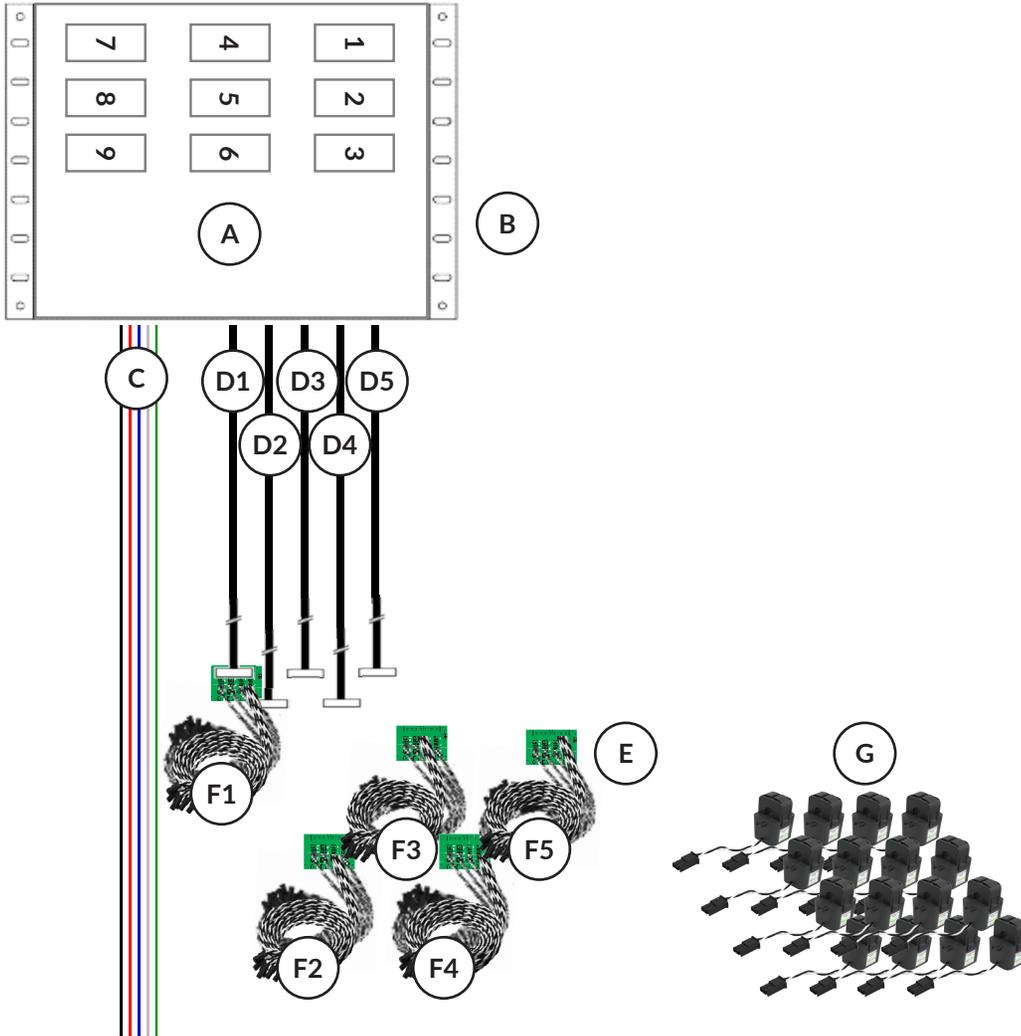


BGS72 Model Components and *Monitoring Made to Measure* Specifications



MULTI-CIRCUIT MONITOR COMPONENTS

Packet Power's BGS72 wireless multi-circuit monitor arrives fully configured to each customer's needs.



BGS72 COMPONENTS	
(A) Device:	Up to 9 wireless power monitors in an 18 GA steel enclosure 356 x 305 x 64 mm (14 x 12 x 2.5 in)
(B) Mounting Brackets:	Two optional 18 GA steel brackets 305 x 25 mm (12 x 1 in) 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; 5x20 mm 5A inline fuses on L1, L2, L3 Optional additional voltage leads
(D) CT Interconnect Cable:	Up to five shielded 300V cords; 1-5m length; terminate in a 34-pin connector that fastens to the CT Interconnect Board
(E) CT Interconnect Boards:	Up to five 72 x 53 x 6.3 mm (2.8 x 2.1 x 0.2 in) acrylic boards with VHB adhesive tape for mounting
(F) CT Leads:	24 AWG 600V twisted pair with quick disconnects; 0.5-5m length Optional CT wire harness available (see page 5 for wire harness options)
(G) Current Sensors	Up to 72 current sensors of varied amperage and size (see page 4 for options)
Split Core:	Rated amperage 15A to 4000A; Dimensions vary by amperage
Rogowski Coil: (Not shown)	Rated amperage 100A to 10,000A; Available in 4 different lengths

MODELS

 <p>BGS72-72P pictured</p>	Model	Maximum Full Power CTs	CT Interconnect Boards & Cables	Voltage Options
	BGS72-40P	40	3	120-240V AC 1Φ (LN) 200-230V AC 1Φ (LL)
	BGS72-48P	48	3	277V AC 1Φ (LN) 200-230V AC Delta (LLL)
	BGS72-56P	56	4	208/120V AC Wye 240/120V AC Split (LLN)
	BGS72-64P	64	4	415/240V AC Wye 480/277V AC Wye
	BGS72-72P	72	5	50/60 Hz Frequency

TECHNICAL SPECIFICATIONS

Measurements	V, A, VA, W, Wh, Power Factor, Hz, THDi, THDv Accuracy: +1.0% (CT dependent) +0.5% available
Fusing	Optional inline 5A fuses
Current Range	Up to 10,000A
Frequency	50/60 Hz
Monitor Dimensions	356 x 305 x 64 mm (14 x 12 x 2.5 in) without mounting bracket
Monitor Weight	4.6 - 4.7 kg (10.1 - 10.4 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 lengths
CT Interconnect Board Cable (from BGS72 to CT lead)	Shielded 300V cord; 1-5m 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	1-7W
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 11 BGS72-72P 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

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)
- CT amperage(s)
- Desired wire exit location
- Need for inline fuses on the voltage lead(s)
- Length of the cable to the CT interconnect board
- Type of wiring from the interconnect board to the CTs (loose leads or wire harnesses)

Use the Configuration worksheet on page 6 to capture your needs.

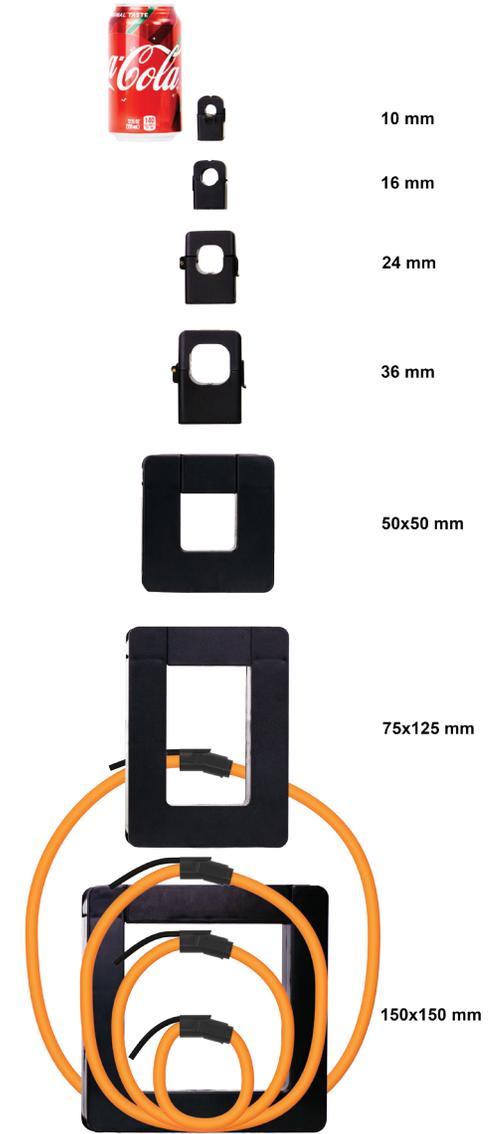
Contact sales@packetpower.com with questions or if you need a different option than outlined in the rest of this document.

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 Wire harness (See page 5 for details)
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	

ROGOWSKI COILS

Max Conductor Diameter	Coil Length	Amperage	Coil Lead
68 mm (2.66")	250 mm	100A to 10,000A	2 meters
147 mm (5.87")	500 mm		
211 mm (8")	700 mm		
306 mm (12.6")	1000 mm		



CTs sold separately

CT LEAD WIRE OPTIONS

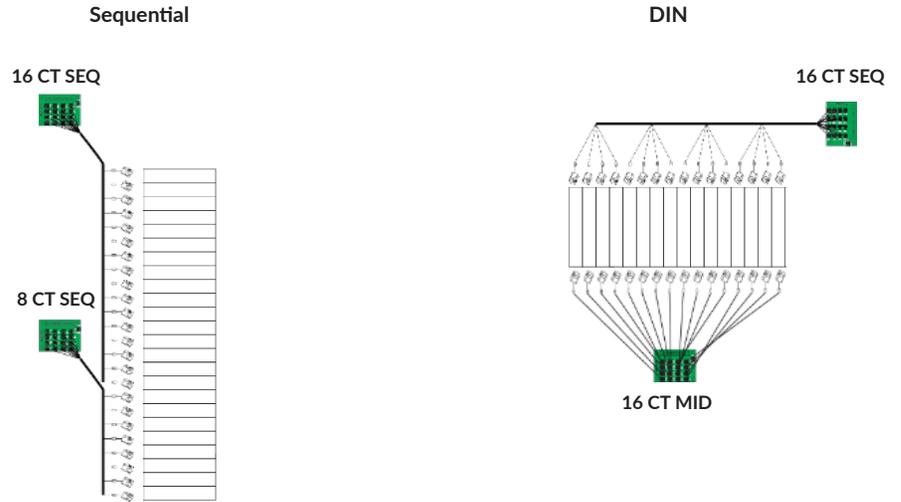
The BGS72 supports loose CT leads at a variety of lengths as well as CT wire harnesses. Loose leads are best suited to equipment such as switchgear that has widely- or unevenly-spaced circuits. Wire harnesses are best installed with evenly-spaced breakers.

Loose Leads



Lead Wire Specifications
24 AWG 600V twisted pair wire with quick disconnects
0.5m, 1m, 1.5m, 2m, 3m or 5m lengths available

Wire Harnesses



Wire Harness Type	16 CT SEQ	8 CT SEQ	16 CT MID
# CTs	16	8	16
Length to 1st CT	495 mm	495 mm	521 mm
1st CT number	1	1	1
Length to last CT	876 mm	673 mm	521 mm
Last CT number	16	8	16
# CT Interconnect Boards	1	1	1

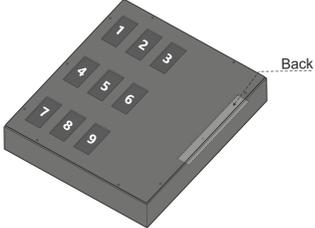
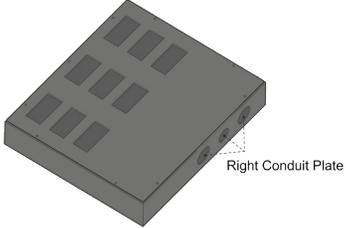
Wire Harness Specifications	24 AWG 300V twisted pair wire with quick disconnects
	Wire lengths and lead labels vary by harness type
	Accommodates inline or DIN mount panels with 25 mm (1") center-to-center breakers

DESIGN YOUR BGS72 MULTI-CIRCUIT MONITOR

Customer _____

Panel _____

Qty _____

Maximum Full Power CTs	Wire Exit	
<input type="checkbox"/> 40 <input type="checkbox"/> 48 <input type="checkbox"/> 56 <input type="checkbox"/> 64 <input type="checkbox"/> 72	 <input type="checkbox"/> Back Opening 1.0 x 7.0" [25 x 178 mm] opening	 <input type="checkbox"/> Right Side Conduit Plate 2 x 1.38" [35 mm] knockouts 1 x 1.10" [28 mm] knockout

Voltage Source 1	Voltage Source 2	Voltage Source 3	CT Interconnect Cable Length
<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"/> 200-230V AC Delta (3-wire LLL + E) <input type="checkbox"/> 240/120V AC Split (3-wire LLL + E) <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) V1 Lead Length: <input type="checkbox"/> 3m <input type="checkbox"/> 7m <input type="checkbox"/> _____m <input type="checkbox"/> None Fusing: <input type="checkbox"/> Fused <input type="checkbox"/> Not Fused Meters Powered <input type="checkbox"/> All Meters: _____	<input type="checkbox"/> None <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"/> 200-230V AC Delta (3-wire LLN + E) <input type="checkbox"/> 240/120V AC Split (3-wire LLN + E) <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) V1 Lead Length: <input type="checkbox"/> 3m <input type="checkbox"/> 7m <input type="checkbox"/> _____m <input type="checkbox"/> None Fusing: <input type="checkbox"/> Fused <input type="checkbox"/> Not Fused Meters Powered Meters: _____	<input type="checkbox"/> None <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"/> 200-230V AC Delta (3-wire LLN + E) <input type="checkbox"/> 240/120V AC Split (3-wire LLN + E) <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) V3 Lead Length: <input type="checkbox"/> 3m <input type="checkbox"/> 7m <input type="checkbox"/> _____m <input type="checkbox"/> None Fusing: <input type="checkbox"/> Fused <input type="checkbox"/> Not Fused Meters Powered Meters: _____	Indicate 1m, 1.5m, 2m, 3m, 5m or custom length for each 1 (D1) _____ 2 (D2) _____ 3 (D3) _____ 4 (D4) _____ 5 (D5) _____ See page 3 for number of cables per BGS72 model

Meter Type	1	2	3	4	5	6	7	8	9
See page 4 for CT type (split core, solid core or Rogowski coil) and amperages; if using split core CTs, see page 5 for split core CT lead options (loose or wire harness)									
CT Type	_____	_____	_____	_____	_____	_____	_____	_____	_____
CT Amperage:	_____ A	_____ A	_____ A	_____ A	_____ A	_____ A	_____ A	_____ A	_____ A
CT Quantity:	_____	_____	_____	_____	_____	_____	_____	_____	_____
Split Core Loose Leads:	_____ M	_____ M	_____ M	_____ M	_____ M	_____ M	_____ M	_____ M	_____ M
Split Core Wire Harness:	_____	_____	_____	_____	_____	_____	_____	_____	_____
Applies to meter #s:	<input type="checkbox"/> All Meter #s _____	Meter #s _____							

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

