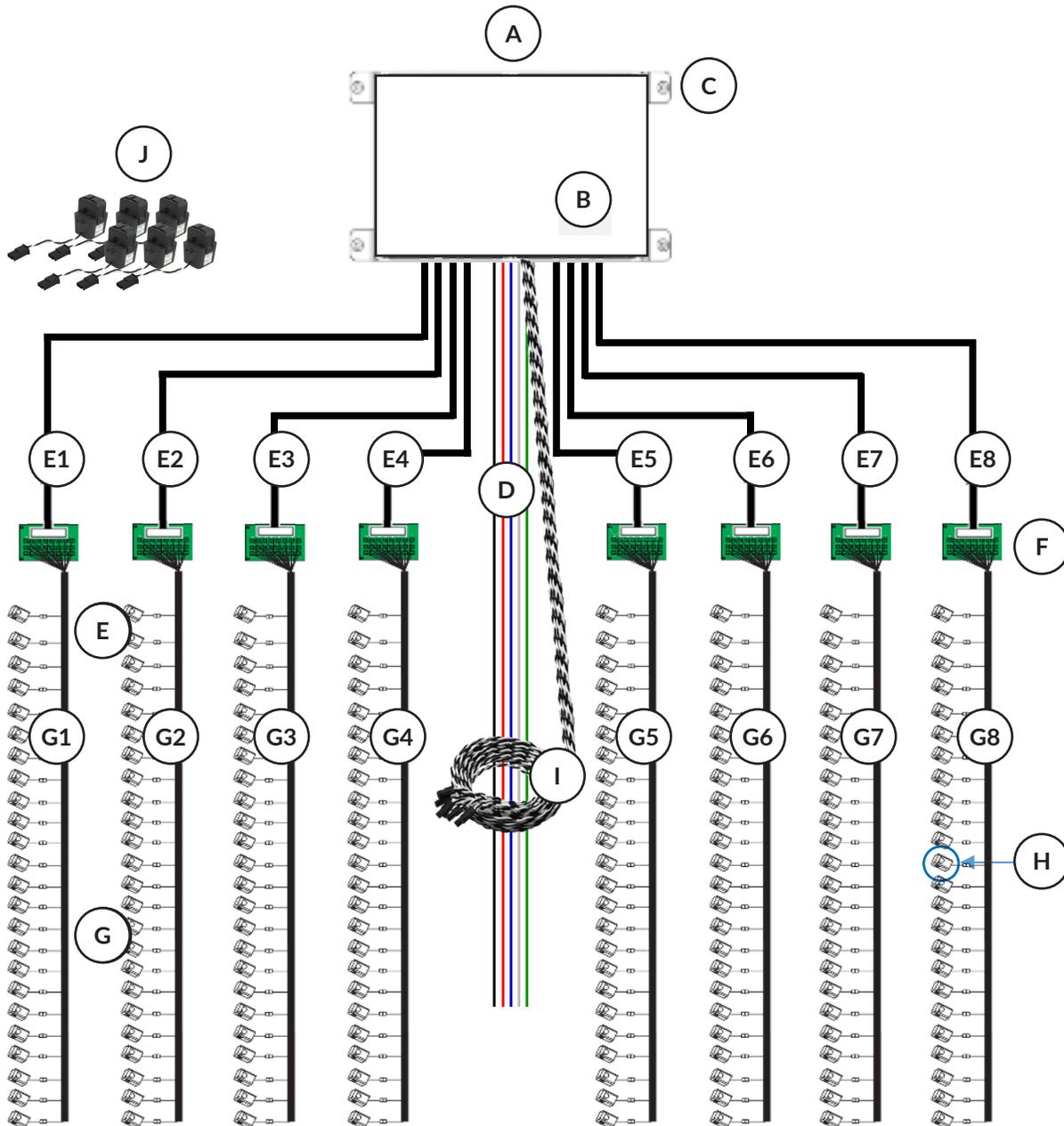


BGP198 Model Components and *Monitoring Made to Measure* Specifications



BRANCH CIRCUIT MONITOR COMPONENTS

Packet Power's BGP198 wireless branch circuit monitor arrives fully configured to each customer's needs and includes the following components.



BGP198 COMPONENTS

- (A) Device: Up to 32 wireless current monitors in a polycarbonate enclosure; 341 x 281 x 130 mm (13.4 x 11 x 5.1 in)
- (B) Power Meter: Wireless power meter supporting up to 6 full power CTs
- (C) Mounting Tabs: Four 21 x 21 mm (0.84 x 0.84 in) tabs included for mounting on wall or on device
- (D) Voltage Lead: 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 Second voltage lead optional
- (E) CT Interconnect Cables: Up to eight shielded 300V cords in any mix of 1-5m lengths; terminate in a 26-pin connector that fastens to the CT Interconnect Board
- (F) CT Interconnect Boards: Up to eight 90 x 63 x 6.3 mm (3.5 x 2.5 x 0.2 in) acrylic-backed boards with VHB adhesive tape for mounting
- (G) Branch Circuit CT: Wire Harnesses: Up to eight CT harnesses; 24 AWG 300V twisted pair wire; length varies by harness configuration (see page 4 for options)
- (H) Branch Circuit CTs: Up to 192 split core CTs
Inside diameter: 10mm
Outside dimensions: 39 x 23 x 26 mm
CT tail: 100 mm (4 in) to quick disconnect
Rated amperage: 15A, 30A or 50A
- (I) Infeed CT Leads: 24 AWG 600V twisted pair with quick disconnects; 0.5-5m length
- (J) Infeed Circuit CTs: Up to 6 split core CTs;
Rated amperage: 100A to 400A;
Inside diameter and outside dimensions vary by amperage (see page 5 for options);
CT tail: 500 mm (20 in) to quick disconnect

MODELS

 <p>BGP198-6P192C pictured</p>	Model	Maximum Full Power CTs	Maximum Current Only CTs	CT Interconnect Boards & Cables	Voltage Options
	BGP198-6P96C	6	96	4	120-240V AC 1Φ (LN) 200-230V AC 1Φ (LL) 277V AC 1Φ (LN) 200-230V AC Delta (LLL)
	BGP198-6P192C	6	192	8	208/120V AC Wye 240/120V AC Split (LLN) 415/240V AC Wye 480/277V AC Wye 50/60 Hz Frequency

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 (source power)
- Number of branch circuits (CTs) you want to monitor
- Branch circuit CT amperage
- If you want to monitor panel infeed circuits, what’s the infeed circuit amperage
- Need for inline fuses on the voltage lead
- Length of the cables to the CT interconnect board
- Placement of CT wire harnesses in relation to your panel (CT harness type)

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.

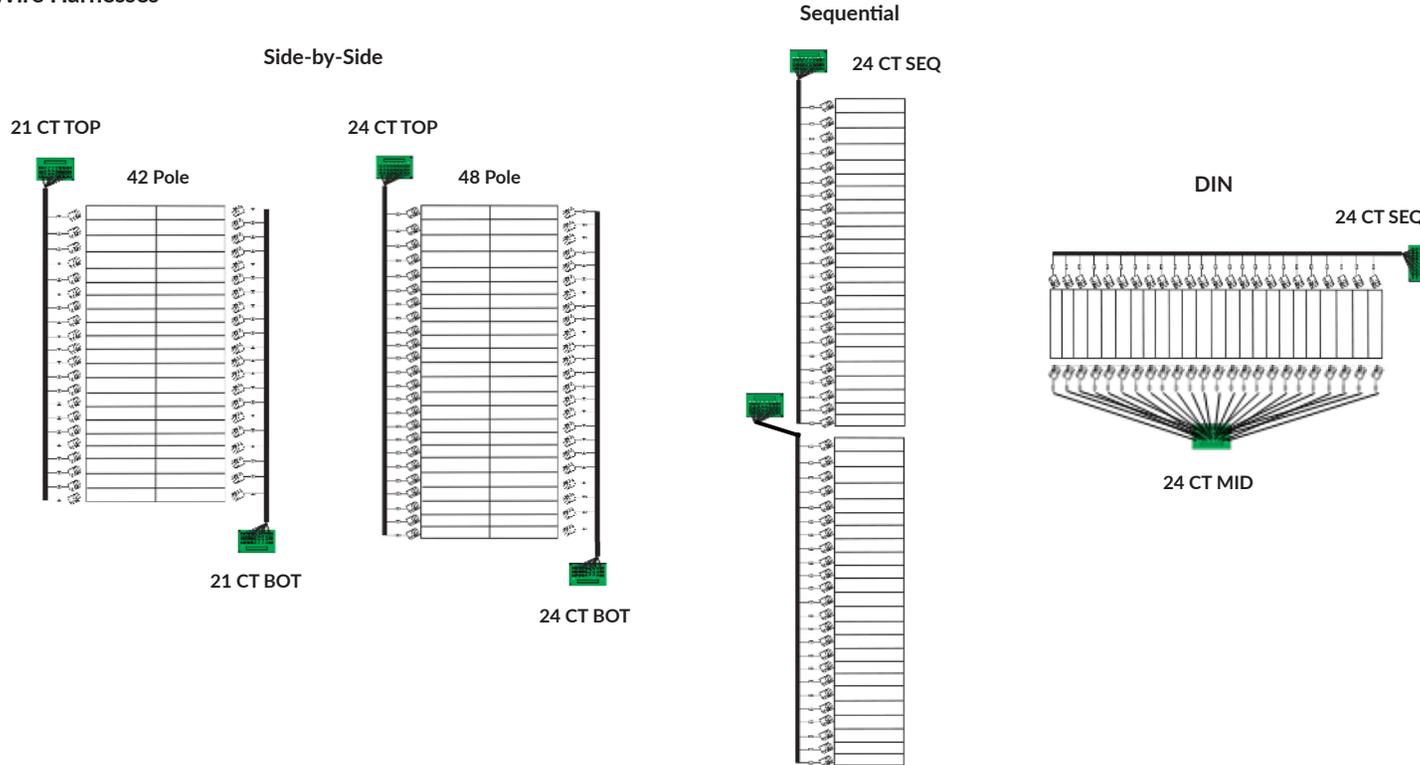
TECHNICAL SPECIFICATIONS

Measurements	Branch circuits: A, Ah (W, Wh using an arbitrary voltage) Infeed circuits: V, A, VA, W, Wh, Power Factor, Hz Accuracy: +1.0%
Fusing	Optional inline 5A fuses
Current Range	Branch circuits: 15A, 30A, 50A Infeed circuits: 100A to 400A
Frequency	50/60 Hz
Monitor Dimensions	265 x 185 x 96 mm (10.4 x 7.3 x 3.8 in)
Monitor Weight	5.1 kg (11.2 lb)
Mounting	On wall or on device; mounting tabs included
Wire Exits	Two 35 mm (1.375 in) diameter openings on device bottom
Voltage Lead Wire	18 AWG 600V colored wire; 3m or 7m length
CT Interconnect Board Cable (from BGP198 to CT lead)	Shielded 300V cord; 1-5m length
Infeed Circuit 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	5-7W
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 3 BGP198-6P192C 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

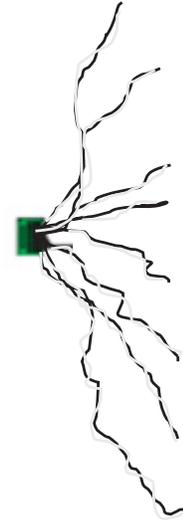
CT LEAD WIRE OPTIONS

The BGP198 supports flexible, preconfigured CT wire harnesses as well as loose CT leads at a variety of lengths. Infeed CT leads do not connect to the CT Interconnect Board.

Wire Harnesses



Loose Leads



Wire Harness Type	21 CT TOP	21 CT BOT	24 CT TOP	24 CT BOT	24 CT SEQ	24 CT MID
# CTs	21	21	24	24	24	24
Length to 1st CT	495 mm	521 mm				
1st CT number	1 / 2	41 / 42	1 / 2	47 / 48	1	1
Length to last CT	1003 mm	1003 mm	1080 mm	1080 mm	1080 mm	521 mm
Last CT number	41 / 42	1 / 2	47 / 48	1 / 2	24	24
# CT Interconnect Boards & Interconnect Cables	1	1	1	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 side-by-side, inline or DIN mount panels with 25 mm (1") center-to-center breakers

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

DESIGN YOUR BGP198 BRANCH CIRCUIT MONITOR

Customer _____

Panel _____

Qty _____

Model	
Max Current-only CTs / CT Interconnect Cables	
<input type="checkbox"/>	96 / 4 Cables
<input type="checkbox"/>	192 / 8 Cables

Voltage Source	
<input type="checkbox"/>	100-220V AC 1 Phase (2-wire LN + E)
<input type="checkbox"/>	230-240V AC 1 Phase (2-wire LL + E)
<input type="checkbox"/>	277V AC 1 Phase (2-wire LN + E)
<input type="checkbox"/>	200-240V 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)

Voltage Lead	
Voltage 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

CT Interconnect Cable Length (BGP198 to CT Interconnect Board)										CT Harness Type (See page 4 for options)							
1 (E1)	<input type="checkbox"/> 1m	<input type="checkbox"/> 1.5m	<input type="checkbox"/> 2m	<input type="checkbox"/> 3m	<input type="checkbox"/> 5m	<input type="checkbox"/> _____m	5 (E5)	<input type="checkbox"/> 1m	<input type="checkbox"/> 1.5m	<input type="checkbox"/> 2m	<input type="checkbox"/> 3m	<input type="checkbox"/> 5m	<input type="checkbox"/> _____m	1 (G1)	_____	5 (G5)	_____
2 (E2)	<input type="checkbox"/> 1m	<input type="checkbox"/> 1.5m	<input type="checkbox"/> 2m	<input type="checkbox"/> 3m	<input type="checkbox"/> 5m	<input type="checkbox"/> _____m	6 (E6)	<input type="checkbox"/> 1m	<input type="checkbox"/> 1.5m	<input type="checkbox"/> 2m	<input type="checkbox"/> 3m	<input type="checkbox"/> 5m	<input type="checkbox"/> _____m	2 (G2)	_____	6 (G6)	_____
3 (E3)	<input type="checkbox"/> 1m	<input type="checkbox"/> 1.5m	<input type="checkbox"/> 2m	<input type="checkbox"/> 3m	<input type="checkbox"/> 5m	<input type="checkbox"/> _____m	7 (E7)	<input type="checkbox"/> 1m	<input type="checkbox"/> 1.5m	<input type="checkbox"/> 2m	<input type="checkbox"/> 3m	<input type="checkbox"/> 5m	<input type="checkbox"/> _____m	3 (G3)	_____	7 (G7)	_____
4 (E4)	<input type="checkbox"/> 1m	<input type="checkbox"/> 1.5m	<input type="checkbox"/> 2m	<input type="checkbox"/> 3m	<input type="checkbox"/> 5m	<input type="checkbox"/> _____m	8 (E8)	<input type="checkbox"/> 1m	<input type="checkbox"/> 1.5m	<input type="checkbox"/> 2m	<input type="checkbox"/> 3m	<input type="checkbox"/> 5m	<input type="checkbox"/> _____m	4 (G4)	_____	8 (G8)	_____
Reference E1 - E8 on page 2										Reference G1 - G8 on page 2							

Branch Circuit Split Core CTs				
Qty	Rated / Max Amperage	Inside Diameter	External Dimensions (H x W x D)	CT Tail
	<input type="checkbox"/> 15A / 18A	10 mm	39 x 23 x 26 mm	100 mm
	<input type="checkbox"/> 30A / 36A			
	<input type="checkbox"/> 50A / 63A			

Infeed Circuit Split Core CTs <input type="checkbox"/> Not Applicable					
Qty	Rated / Max Amperage	Inside Diameter	External Dimensions (H x W x D)	CT Tail	CT Lead Length (CT Interconnect Board to circuit)
	100A / 120A	<input type="checkbox"/> 16 mm	44 x 31 x 33 mm	500 mm	<input type="checkbox"/> 0.5 meter <input type="checkbox"/> 1 meter <input type="checkbox"/> 1.5 meters <input type="checkbox"/> 2 meters <input type="checkbox"/> 3 meters <input type="checkbox"/> 5 meters <input type="checkbox"/> _____ meters
		<input type="checkbox"/> 24 mm	65 x 46 x 35 mm		
	200A / 240A	<input type="checkbox"/> 24 mm	65 x 46 x 35 mm		
		<input type="checkbox"/> 36 mm	85 x 37 x 42 mm		
	400A / 480A	<input type="checkbox"/> 36 mm	85 x 37 x 42 mm		
		<input type="checkbox"/> 50 x 50 mm	125 x 120 x 30 mm		
	<input type="checkbox"/> _____ A	_____ mm			



BGP198 BRANCH CIRCUIT MONITOR MODEL CONFIGURATION INFORMATION

Packet Power's BGP198 wireless branch 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: Four 42-pole, 120-240V single phase power service, one 3m fused lead, 6x200A 24MM CT infeed circuits with 3M leads, 168x50A CTs, 8 top don odd/even harnesses and 3M Interconnect Cables

Product Number: BGP1986P192C-S0-3F-C168-E136-A1A1A1A1A1A1A1A1-33333333

Model	Voltage Source	V Lead	Branch Circuit CTs	CT Qty	Infeed Circuit CTs	Infeed CT Lead	CT Qty	CT Harness 1	CT Harness 2	CT Harness 3	CT Harness 4	CT Harness 5	CT Harness 6	CT Harness 7	CT Harness 8
BGP1986P96C BGP1986P192C	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) D0 = 200-230V AC Delta T0 = 240-120V AC Split (3-wire LLN + 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)	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 = 15A 10MM B = 30A 10MM C = 50A 10MM	1-192	00 = None D1 = 100A D2 = 100A 24MM E1 = 200A 24MM E2 = 200A 36MM F1 = 400A 36MM F2 = 400A 50x50MM CX = Custom	Omit = None H = 0.5M 1 = 1M B = 1.5M 2 = 2M 3 = 3M 5 = 5M C = Custom	Omit = None 1-6	A1 = 21 CT TOP A2 = 21 CT BOT A3 = 24 CT TOP A4 = 24 CT BOT A5 = 16 CT SEQ A6 = 8 CT SEQ A7 = 16 CT MID CX = Custom	00 = None A1 = 21 CT TOP A2 = 21 CT BOT A3 = 24 CT TOP A4 = 24 CT BOT A5 = 16 CT SEQ A6 = 8 CT SEQ A7 = 16 CT MID CX = Custom	00 = None A1 = 21 CT TOP A2 = 21 CT BOT A3 = 24 CT TOP A4 = 24 CT BOT A5 = 16 CT SEQ A6 = 8 CT SEQ A7 = 16 CT MID CX = Custom	00 = None A1 = 21 CT TOP A2 = 21 CT BOT A3 = 24 CT TOP A4 = 24 CT BOT A5 = 16 CT SEQ A6 = 8 CT SEQ A7 = 16 CT MID CX = Custom	00 = None A1 = 21 CT TOP A2 = 21 CT BOT A3 = 24 CT TOP A4 = 24 CT BOT A5 = 16 CT SEQ A6 = 8 CT SEQ A7 = 16 CT MID CX = Custom	00 = None A1 = 21 CT TOP A2 = 21 CT BOT A3 = 24 CT TOP A4 = 24 CT BOT A5 = 16 CT SEQ A6 = 8 CT SEQ A7 = 16 CT MID CX = Custom	00 = None A1 = 21 CT TOP A2 = 21 CT BOT A3 = 24 CT TOP A4 = 24 CT BOT A5 = 16 CT SEQ A6 = 8 CT SEQ A7 = 16 CT MID CX = Custom	00 = None A1 = 21 CT TOP A2 = 21 CT BOT A3 = 24 CT TOP A4 = 24 CT BOT A5 = 16 CT SEQ A6 = 8 CT SEQ A7 = 16 CT MID CX = Custom

CT Interconnect Cable 1	CT Interconnect Cable 2	CT Interconnect Cable 3	CT Interconnect Cable 4	CT Interconnect Cable 5	CT Interconnect Cable 6	CT Interconnect Cable 7	CT Interconnect Cable 8
1 = 1M B = 1.5M	00 = None 1 = 1M						
2 = 2M	B = 1.5M						
3 = 3M	2 = 2M						
5 = 5M	3 = 3M						
C = Custom	5 = 5M C = Custom	5 = 5M C = Custom	5 = 5M C = Custom	5 = 5M C = Custom	5 = 5M C = Custom	5 = 5M C = Custom	5 = 5M C = Custom