## PACKETP()WER

## BGP192 Model Components

and Monitoring Made to Measure Specifications


## BRANCH CIRCUIT MONITOR COMPONENTS

Packet Power's BGP192 wireless branch circuit monitor arrives fully configured to each customer's needs and includes the following components.


| BGP192 COMPONENTS |  |
| :---: | :---: |
| (A) 0 |  |
| (8) Mounting Bracets |  |
| (c) Voltage leass: | 18 AWG 600 V colored wire connected to a 6 -position terminal block, 3 m or 7 m length; 6-position terminal block, 3 m or 7 m lengt $5 \times 20 \mathrm{~mm} 5 \mathrm{~A}$ inline fuses on $\mathrm{L} 1, \mathrm{~L} 2$, L3 Optional 2 nd volage elead tor dual tee |
| (0) CT neteromeet Cables: | p to sixteen shielded 300 V cords in any mix 1-5m lengths; terminate in a 34 -pin Board |
| (E) CTinter |  |
|  | Up to sixteen CT harnesses; 24 AWG 300 V twisted pair wire; length varies by harness configuration (see page 4 for options) |
| (6) Banch ciruuit CTs | $\begin{aligned} & \text { Up to } 192 \text { split core CTs } \\ & \text { Inside diameter: } 10 \mathrm{~mm} \\ & \text { Outside dimensions: } 39 \times 23 \times 26 \mathrm{~mm} \\ & \text { CT tail: } 100 \mathrm{~mm}(4 \mathrm{in}) \text { to quick disconnect } \\ & \text { Rated amperage: } 15 \mathrm{~A}, 30 \mathrm{~A} \text { or } 50 \mathrm{~A} \end{aligned}$ |
|  |  |

## MODELS



## 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
- Desired wire exit location
- 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 | 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 | $50 / 60 \mathrm{~Hz}$ |
| Monitor Dimensions | $445 \times 302 \times 115 \mathrm{~mm}$ ( $17.5 \times 11.9 \times 4.5 \mathrm{in}$ ) |
| Monitor Weight | 8.6 kg (19 lb) |
| Mounting | On wall or on device; mounting brackets included |
| Available Wire Exits | Side, Bottom or Back openings |
| Voltage Lead Wire | 18 AWG 600V colored wire; 3 m or 7 m length |
| CT Interconnect Board Cable (from BGP192 to Interconnect Board) | Shielded 300V cord; 1-5m length |
| Infeed Circuit CT Leads | 24 AWG 600V twisted pair; quick disconnect; 0.5-5m length |
| Operating Environment | $0^{\circ}$ to $75^{\circ} \mathrm{C}$ ( $32^{\circ}$ to $167^{\circ} \mathrm{F}$ ); $5 \%$ to $95 \%$ non-condensing |
| Water and Dust Resistance | NEMA 1/IP20 (indoor use) |
| Power Usage | 14-20W |
| 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 4 BGP192-192 devices per Ethernet Gateway with unlimited Gateways per site |
| Local Display | Presence of power only, details available via Gateway console |
| Made in USA | Yes |
| Product Warranty | 1 year |
| Certifications | UL 508A and CE, FCC and other country communications standards |

## CT LEAD WIRE OPTIONS

The BGP192 supports flexible, preconfigured CT wire harnesses as well as loose CT leads at a variety of lengths. Any infeed CT leads attach to Interconnect Boards.
21 CT TOP
(16+5)

## Loose Leads



## Lead Wire Specifications

24 AWG 600 V twisted pair wire with quick disconnects
$0.5 \mathrm{~m}, 1 \mathrm{~m}, 1.5 \mathrm{~m}, 2 \mathrm{~m}, 3 \mathrm{~m}$ or 5 m lengths available


## Branch Circuit Split Core CTs

| Qty | Rated / Max Amperage | Inside Diameter | External Dimensions <br> $(\mathrm{H} \times \mathrm{W} \times \mathrm{D})$ | CT Tail |
| :---: | :---: | :---: | :---: | :---: |
|  | $\square 15 \mathrm{~A} / 18 \mathrm{~A}$ |  |  |  |
|  | $\square 30 \mathrm{~A} / 36 \mathrm{~A}$ | 10 mm | $39 \times 23 \times 26 \mathrm{~mm}$ | 100 mm |
|  | $\square 50 \mathrm{~A} / 63 \mathrm{~A}$ |  |  |  |

## BGP192 BRANCH CIRCUIT MONITOR MODEL CONFIGURATION INFORMATION

 Please contact sales@packetpower.com with questions or if you have any additional customization needs not shown here.

| Example: | Four 42-pole panels, 208/120V Wye power service with 1 voltage source, 3 m fused lead, wires exiting from back opening, no infeed circuits, 16850 A CTs, Top down wire harness and 3 m Interconnect Cable leads for all |
| :---: | :---: |
| Product Number: | BGP192192-X-Y0-3FA-C168-00-A1A1A1A1A1A1A1A1A1A1A1A1A1A1A1A1-333333333333333 |




| $\begin{gathered} \text { CT } \\ \text { Harness } 1 \end{gathered}$ | $\begin{gathered} \text { CT } \\ \text { Harness 2* } \end{gathered}$ |
| :---: | :---: |
| A1 = | $00=$ None |
| 21 CT TOP | A1 = |
| A2 $=21$ | 21 CT TOP |
| CT BOT | A2 $=21$ |
| A3 $=24$ | CT BOT |
| CT TOP | A3 $=24$ |
| A4 $=24$ | CTTOP |
| CT BOT | A4 $=24$ |
| A5 $=16$ | CT BOT |
| CT SEQ | A5 $=16$ |
| $\mathrm{A} 6=8 \mathrm{CT}$ | CT SEQ |
| SEQ | $\mathrm{A} 6=8 \mathrm{CT}$ |
| A7 $=16$ | SEQ |
| CT MID | A7 $=16$ |
| CX = | CT MID |
| Custom | $C X=$ <br> Custom |

* Use CT Harness 2 options for Harnesses 3-16 ** Use CT Interconnect Cable 2 options for Cables 3-16

| CT <br> Interconnect <br> Cable 1 | CT <br> Interconnect <br> Cable 2** |
| :---: | :---: |
| $1=1 \mathrm{M}$ | $00=$ None |
| $\mathrm{B}=1.5 \mathrm{M}$ | $1=1 \mathrm{M}$ |
| $2=2 \mathrm{M}$ | $\mathrm{B}=1.5 \mathrm{M}$ |
| $3=3 \mathrm{M}$ | $2=2 \mathrm{M}$ |
| $5=5 \mathrm{M}$ | $3=3 \mathrm{M}$ |
| $\mathrm{C}=$ |  |
| Custom | $5=5 \mathrm{M}$ |
| $\mathrm{C}=$ |  |
| Custom |  |

