



Bernese Mountain Dog Pro Series

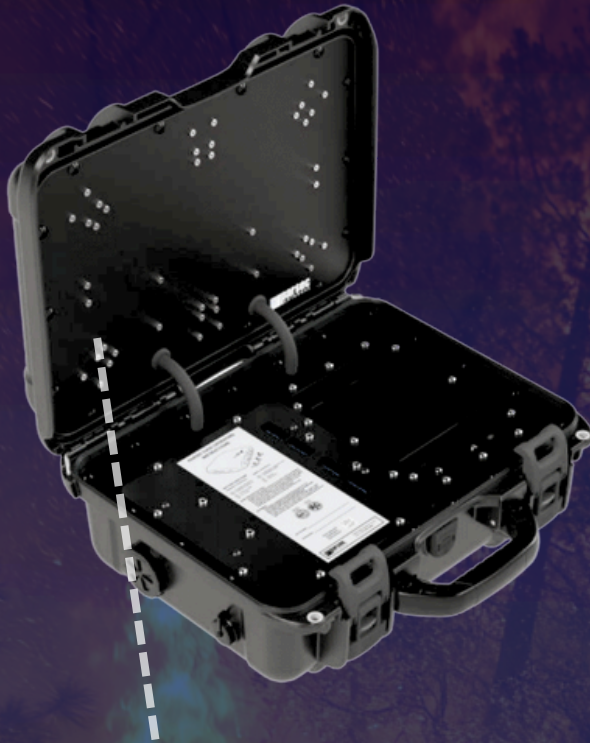
Rugged, Portable, High Performance Case
for Primary or Failover



Bernese Mountain Dog Pro Series



High-performance network access beyond infrastructure.



Antenna built seamlessly into
Case Lid

The Bernese Mountain Dog PRO Series is engineered to deliver dependable, high-speed wireless connectivity in challenging environments. Designed as a **5G** emergency mobile hotspot, it supports **multiple** wireless technologies and network redundancy features to keep users connected when traditional infrastructure is unavailable or compromised.

- Up to 6x6 MIMO Cellular
- Up to 4X4 MIMO Wi-Fi
- Omni-Directional
- Optional GPS & Bluetooth

Reliable Communications Wherever You Go Advanced Connectivity

With a streamlined design, this device is a high-performing mobile network solution for any type of failover with **dual SIM capability** to maintain connectivity by switching between network providers when needed.

Built as a durable, shock-resistant case, it contains **high isolation and built-in ground plane** to improve signal quality and **reduce interference** between antennas elements.



Bernese Mountain Dog Pro Series

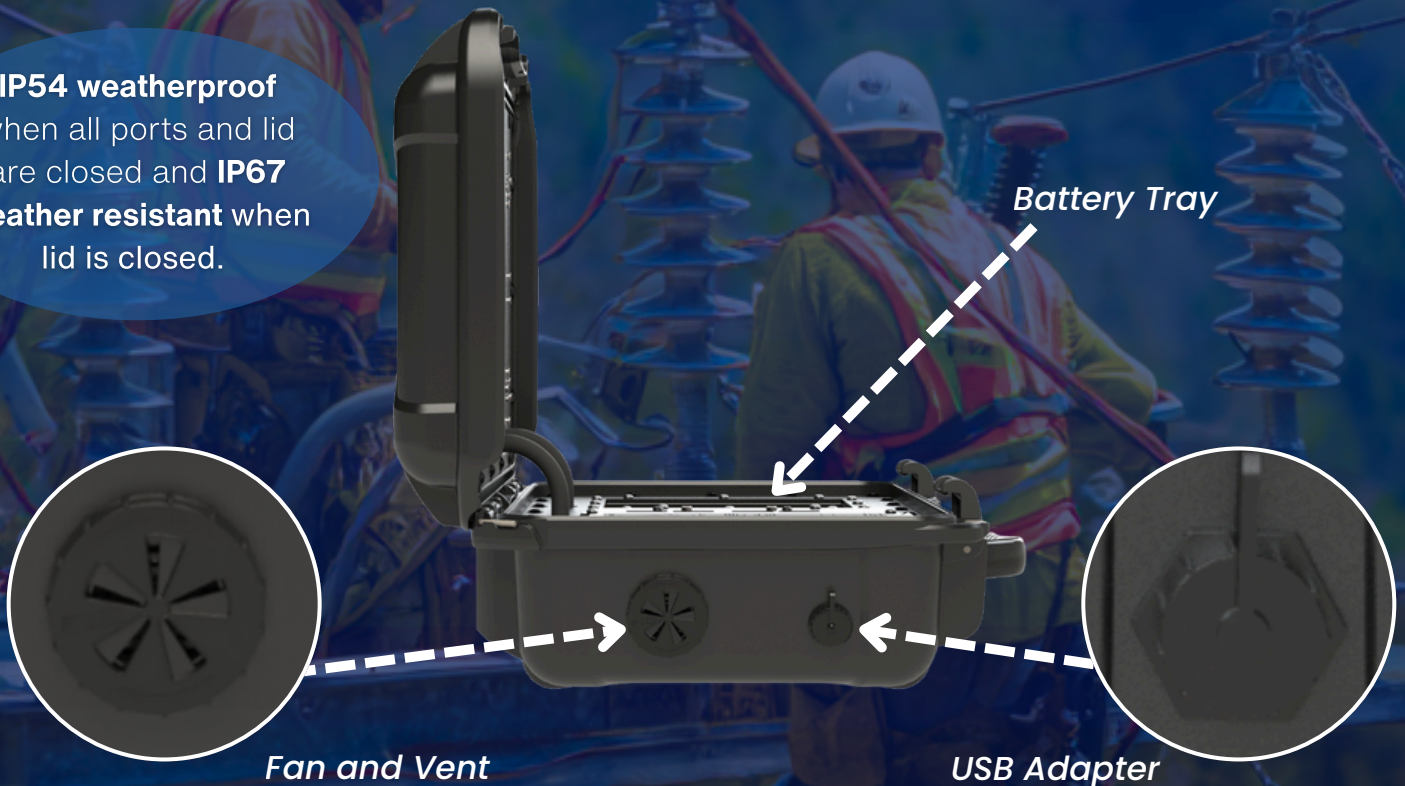


High-performance network access beyond infrastructure.

Reliable Communications Without Compromise Extending Connectivity Further

Designed for extended mobile operations, the case includes integrated cooling with a **built-in fan and vent system**, up to **four RJ45 panel mounts** for flexible connectivity, and a **long-lasting battery** that provides up to **6–8 hours of operation**.

IP54 weatherproof when all ports and lid are closed and **IP67 weather resistant** when lid is closed.



- 6-8 Hours Battery Life
- 600 MHz to 6000 MHz
- Antenna Seamlessly Integrated into the Case Lid

High-performance network access beyond infrastructure.

Built for Durability, Mobility, and Steady Operation Performance Beyond the Network Edge

Built for demanding field operations, this case antenna combines rugged durability with reliable wireless performance. Its **shock-resistant** case is constructed from **impact-resistant resin** and **shock-absorbing** materials to help **protect critical equipment** in harsh environments, while its **field-serviceable** design allows for easy maintenance and support during **remote** deployments.



- Rugged High-Efficiency, High-Gain Antenna
- Rural, Suburban, and Long-Distance Communication
- On-The-Go Network Solution
- Low - to Mid-Band Frequencies

Built For Real-World Operations

Applications



Critical Responders



Transportation / Fleet



Education Buildings



Government Buildings



Remote Surveillance



Primary & Failover Network

Why Choose the Bernese Mountain Dog

- Rugged High-Efficiency, High-Gain Antenna
- 6-8 Hours Battery Life
- On-The-Go Network Solution
- Mission Ready



Specification Overview

| PRO Bernese Mountain Dog Series | | |
|------------------------------------|--|-----------|
| Applications: | Emergency Communication, Backup Mobile Command Center | |
| Configurations: | 9:1 – 6 CELL, 2 Wi-Fi, L1/L5 Dual Band GPS 9:1 – 4 CELL, 4 Wi-Fi, L1/L5 Dual Band GPS | |
| Categories: | Enterprise, Mobile, Public Safety, 5G | |
| Antennas Included: | Cellular, Wi-Fi, Bluetooth and GPS | |
| Type: | Case/Enclosure | |
| Antenna Pattern: | Omni-Directional | |
| Available Colors: | Black | |
| Cable Type: | Cellular | RG-316 |
| | Wi-Fi | RG-316 |
| | GPS | LSR100 |
| Standard Cable Length: | 18 IN Pigtails | |
| Standard Connector options: | Cellular | SMA(M) |
| | Wi-Fi | RP-SMA(M) |
| | GPS | SMA(M) |

Specifications

| Frequencies | | | |
|-------------------------------|--|---|---|
| 4G/5G Cellular | 617-894 MHz 1710-2700 MHz 3300-4000 MHz 5150-5925 MHz | Wi-Fi | 2400-2483.5 MHz 4900-5900 MHz |
| | | L1 GPS | 1575.42 MHz |
| | | L1/L5 Dual Band GPS | 1563 – 1587 MHz 1164 – 1189 MHz |
| 4G/5G Bands | | | |
| North America | | B2, B4, B5, B7, B12, B13, B14, B17, B25, B26, B29, B30, B41, B46, B48, B66, B71, n2, n5, n12, n25, n26, n41, n48, n66, n71, n77 | |
| EMEA | | B1, B3, B7, B20, B28, B42, B43, B46, n1, n3, n28, n77, n78 | |
| Mechanical | | Environmental | |
| Dimensions | 16.68 inch x 13.43 inch x 6.76 inch | Operating Temperature | -30 °C to 85°C OR -22 °F to 180°F |
| Power | 110-120 Volt AC (60 Hz) | Ingress Protection | -A Version: IP67* -L Version: IP54* -G2 Version: IP54* -G2B Version: IP54* |
| Battery (not included) | OmniCharge 20C+ OP2CPA01 Custom Battery (-G2 Version) | | |
| Battery (included) | OmniCharge 20C+ OP2CPA01 Custom Battery (-G2B Version) | | |
| Connectors | CELL: SMA (M) Wi-Fi: RP-SMA (M) GPS: SMA (M) | Radome Material | Plastic |
| Router Options | Ericsson R920 with Dock Ericsson R980 Ericsson R1900 | RF Cable Length | 18 inch pigtailed |
| | | Max Router Configuration | 6 Cellular, 2 Wi-Fi, GPS, OR 4 Cellular, 4 Wi-Fi, GPS |
| | | Max Router Dimensions | 6" X 7" X 2.5" |

- For customizations, such as Connector Type, Cable Length, Color, Configuration, and Branding, please reach out to Parsec at sales@parsec-t.com.
- For different router configurations, reach out to Parsec for more information.
- Temperature range is for antenna only. Equipment installed inside the enclosure may have a different temperature range.

*When lid and all ports are closed. Openings in the enclosure for options like fans and power cords may reduce ingress protection even with covers installed.

Technical Drawing

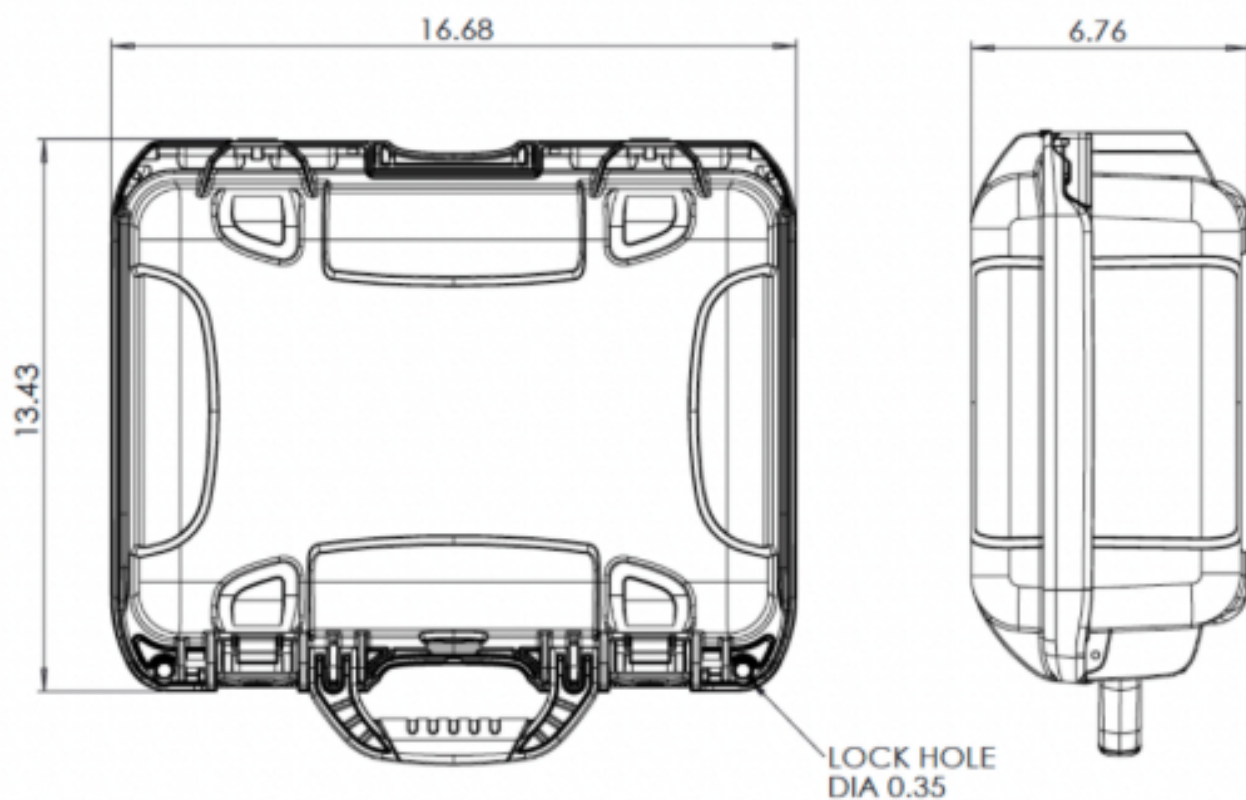


Figure 1: Bernese Mountain Dog Blueprint

Part Number Key & Ordering Guide

Part number example for an 8:1 Bernese Mountain Dog antenna: PRO8MD4L2WBD

| <i>Description</i> | <i>Abbreviation</i> | <i>Part Number</i> |
|--|---------------------|--------------------|
| All PRO Series | PRO | PRO |
| Number of Antenna in Housing/Configuration | 8:1 | PRO8 |
| Antenna Abbreviation for Bernese Mountain Dog | MD | PRO8MD |
| Number of Cellular Elements | #L | PRO8MD4L |
| Number of Wi-Fi Elements | #W | PRO8MD4L2W |
| Bluetooth | #B | PRO8MD4L2WB |
| GPS Element: G = L1 GPS, D = L1/L5 Dual Band GPS | G or D | PRO8MD4L2WBD |
| Optional G2 Version - Includes the options listed | -G2 | PRO8MD4L2WBD-G2 |
| Optional L Version - Includes the options listed | -L | PRO8MD4L2WBD-L |

For more customizations, please contact us for more information at sales@parsec-t.com.
MOQ Applicable.

Maximum Configurations

| <i>Configurations</i> | <i>Part Number</i> | <i>Description</i> |
|-----------------------|--------------------|--|
| 9:1 | PRO9MD6L2WD | 6 Cellular, 2 Wi-Fi, L1/L5 Dual Band GPS, Black Case with Antenna Build into Lid |
| | PRO9MD6L2WD-L | 6 Cellular, 2 Wi-Fi, L1/L5 Dual Band GPS, Black Case with Antenna Build into Lid with AC Adapter (see antenna options for description) |
| | PRO9MD6L2WD-G2 | 6 Cellular, 2 Wi-Fi, L1/L5 Dual Band GPS, Black Case with Antenna Build into Lid with 20K Battery Needed (see antenna options for description) |
| | PRO9MD6L2WD-G2B | 6 Cellular, 2 Wi-Fi, L1/L5 Dual Band GPS, Black Case with Antenna Build into Lid with 20K Battery (see antenna options for description) |
| | PRO9MD4L4WD-L | 4 Cellular, 4 Wi-Fi, L1/L5 Dual Band GPS, Black Case with Antenna Build into Lid with AC Adapter (see antenna options for description) |
| | PRO9MD4L4WD-G2 | 4 Cellular, 4 Wi-Fi, L1/L5 Dual Band GPS, Black Case with Antenna Build into Lid with 20K Battery Needed (see antenna options for description) |
| | PRO9MD4L4WD-G2B | 4 Cellular, 4 Wi-Fi, L1/L5 Dual Band GPS, Black Case with Antenna Build into Lid with 20K Battery (see antenna options for description) |

Bernese Mountain Dog Pro Series



| <i>Description</i> | <i>PRO8MD4L2WBG</i> | <i>-A Version</i> | <i>-L Version</i> | <i>-G2 Version</i> | <i>-G2B Version</i> |
|---|---------------------|-----------------------|-----------------------|------------------------|-------------------------|
| Antenna | Yes | Yes | Yes | Yes | Yes |
| Fan and Vent | No | No | Yes | Yes | Yes |
| AC Adapter (IEC C14) | No | Yes | Yes | No | No |
| Barrel Connector | No | No | Yes | No | No |
| USB-C Connector | No | No | No | Yes | Yes |
| USB-A Connector | No | No | Yes | No | No |
| 4x RJ-45 Connectors | No | No | Yes | Yes | Yes |
| Router Mount Plate | No | No | Yes | Yes | Yes |
| Top Cover | No | No | Yes | Yes | Yes |
| 20C+ Battery Tray | No | No | No | Yes | Yes |
| OmniCharge 20C + Custom Battery | No | No | No | No | Yes |
| <p>Battery: -G2 Version: OmniCharge 20C+ OP2CPA01 Custom Battery (Batteries are not included with the Antenna and must be purchased separately.) OmniCharge 20C+ OP2CPA01 Custom Battery and charger are included with the -G2B Version. For more information, see our installation instructions at Parsec-t.com for Bernese Mountain Dog Case Series.</p> | | | | | |

Hardware Accessories

| Accessories | Part Number |
|---|-----------------|
| RJ-45 Adapter | PTA0415 |
| USB-A Panel Mount | PTA0448 |
| USB-C Connector | PTA0633 |
| Interchangeable Accessories | |
| Bernese Mountain Dog G2 Cover Plate Upgrade Kit | PTA1055 |
| Replacement Parts | |
| Omnicharge 20C + Custom Battery (OP2CPA01) | PTA1180 |
| OmniCharge 65W Charger | PTA0746 |
| Top Cover Plate Mounting Screw Kit | PTA0858 |
| Router Mounting Screw Kit | PTA1028 |
| 40mm Fan Replacement Kit (Includes screws and nuts) | PTA0764 |
| 40mm Vent and Cap Kit | PTA0477 |
| SMA Wrench, Key Chain | PTA0194 |
| Service: Router Installation | PTA-Install-185 |

Electrical Specifications

| <i>ID</i> | <i>Port</i> | <i>Parameters</i> | <i>Typ.</i> |
|--------------------------------|------------------------------|-------------------|-------------|
| Radiated Efficiency (%) | CELL 1 thru 6 | 617-698 MHz | 70 |
| | CELL 1 thru 6 | 698-894 MHz | 80 |
| | CELL 1 thru 6 | 1710-2200 MHz | 85 |
| | CELL 1 thru 6 | 2200-2700 MHz | 70 |
| | CELL 1 thru 6 | 3300-4000 MHz | 50 |
| | CELL 1 thru 6 | 5150-5925 MHz | 50 |
| | GPS | 1575.42 MHz | 80 |
| | Wi-Fi 1 thru 2 | 2400-2483.5 MHz | 85 |
| | Wi-Fi 1 thru 2 | 4900-5900 MHz | 75 |
| | Bluetooth | 2400-2483.5 MHz | 85 |
| Peak Gain (dBi) | CELL 1 thru 6 | 617-698 MHz | 2 |
| | CELL 1 thru 6 | 698-894 MHz | 5 |
| | CELL 1 thru 6 | 1710-2200 MHz | 7 |
| | CELL 1 thru 6 | 2200-2700 MHz | 6 |
| | CELL 1 thru 6 | 3300-4000 MHz | 7.5 |
| | CELL 1 thru 6 | 5150-5925 MHz | 8.5 |
| | Wi-Fi 1 thru 2 | 2400-2483.5 MHz | 7 |
| | Wi-Fi 1 thru 2 | 4900-5900 MHz | 8.5 |
| | Bluetooth | 2400-2483.5 MHz | 7 |
| | Return Loss 50 Ω (dB) | CELL 1 thru 6 | 617-698 MHz |
| CELL 1 thru 6 | | 698-894 MHz | 9 |
| CELL 1 thru 6 | | 1710-2200 MHz | 12 |
| CELL 1 thru 6 | | 2200-2700 MHz | 7 |
| CELL 1 thru 6 | | 3300-4000 MHz | 6 |
| CELL 1 thru 6 | | 5150-5925 MHz | 6 |
| Wi-Fi 1 thru 2 | | 2400-2483.5 MHz | 12 |
| Wi-Fi 1 thru 2 | | 4900-5900 MHz | 9 |
| Bluetooth | | 2400-2483.5 MHz | 13 |
| Isolation (dB) | | CELL 1 thru 6 | 617-894 MHz |
| | CELL 1 thru 6 | 1710-2200 MHz | 18 |
| | CELL 1 thru 6 | 2200-2700 MHz | 22 |
| | CELL 1 thru 6 | 3300-4000 MHz | 27 |
| | CELL 1 thru 6 | 5150-5925 MHz | 30 |
| | Wi-Fi | 2400-2483.5 MHz | 19 |
| | Wi-Fi | 4900-5900 MHz | 30 |
| | Bluetooth | 2400-2483.5 MHz | 20 |

| | | | |
|--|---------------------------|--|---------------------|
| Polarization (dBi) | CELL, Wi-Fi Bluetooth | | Linear Linear |
| Max Input Power (Watts) | CELL, Wi-Fi, Bluetooth | | 5 |
| RF Connectors | CELL Wi-Fi, Bluetooth | | SMA(M) RP-SMA(M) |
| RF Cable Type | CELL, Wi-Fi, Bluetooth | | RG316 LSR100 |
| <ul style="list-style-type: none"> • CELL 1 thru 4 are grouped together for one modem with CELL 5 & 6 connected to the other modem. • Isolation, return loss, and peak gain does not include cable loss. • SMA connectors have a max torque of 3-5-inchlbs. • Electrical specifications based on antenna mounted in the lid of the plastic enclosure. • *Router and SIM Card are not included. Customers should contact Parsec's authorized distributors and VAR's listed on our website for a full list of routers and other options that will complete the Emergency Hot Spot. • Please see Ordering Guide regarding Battery Inclusion. | | | |

GNSS Electrical Specifications

| <i>ID & Unit</i> | <i>Port</i> | <i>Parameters</i> | <i>Typ.</i> |
|-------------------------------------|-------------|--|-------------|
| Antenna + Preamp Gain (dBic) | GPS | L1: 1563 – 1587 MHz L5: 1164 – 1189 MHz | 28 26 |
| Polarization | GPS | | RHCP |
| Filter Rejection (dB) | GPS | 1625 MHz | TBD |
| GNSS Preamp Voltage (mA) | GPS | | 3 to 5 |
| GNSS Preamp Current (mA) | GPS | | <45mA |
| RF Connector | GPS | | SMA(M) |
| RF Cable Type | GPS | | LSR100 |