



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.



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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.

Battery Tray

Fan and Vent

USB Adapter

- 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 (Only with 9:1 and 13:1 configurations)	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 pigtails
		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

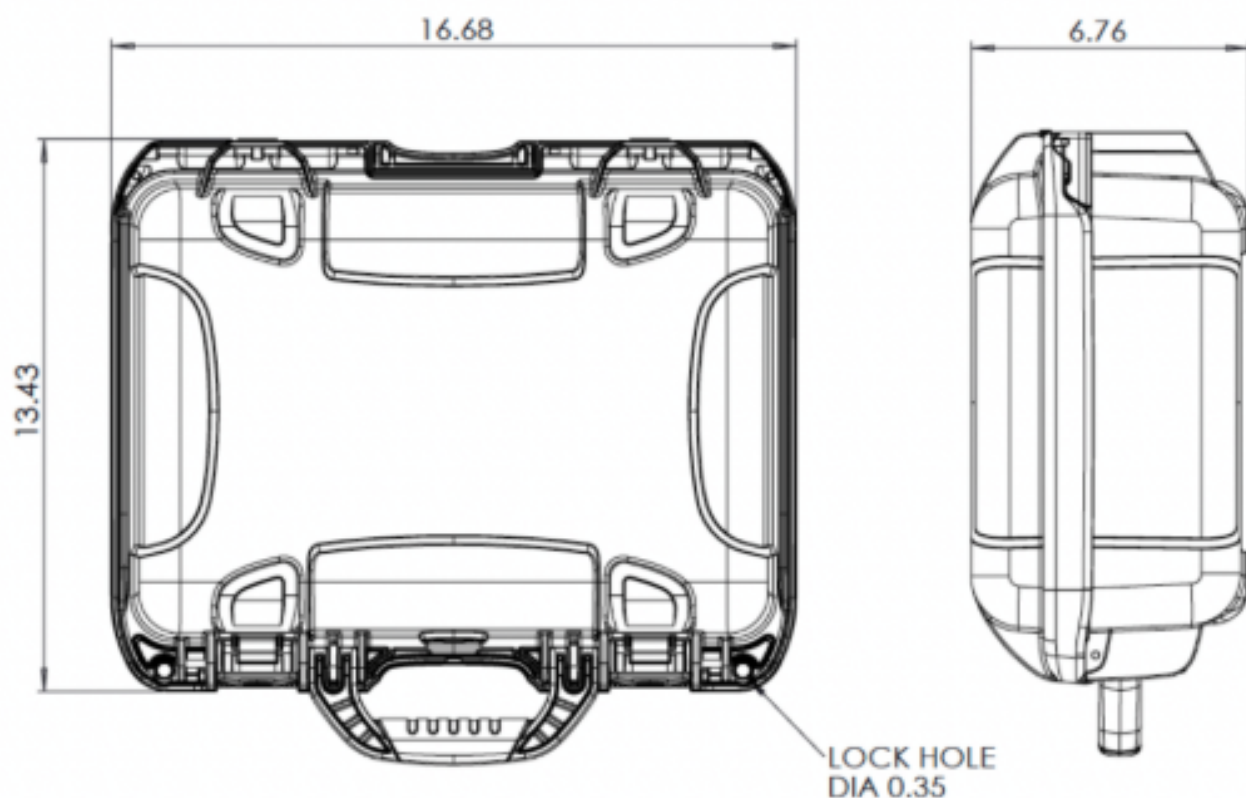


Figure 1: Bernese Mountain Dog Blueprint

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	7
	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	10
	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
- 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

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-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-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>-G2B Version</i>
Antenna	Yes	Yes	Yes	Yes
Fan and Vent	No	No	Yes	Yes
AC Adapter (IEC C14)	No	Yes	Yes	No
Barrel Connector	No	No	Yes	No
USB-C Connector	No	No	No	Yes
USB-A Connector	No	No	Yes	No
4x RJ-45 Connectors	No	No	Yes	Yes
Router Mount Plate	No	No	Yes	Yes
Top Cover	No	No	Yes	Yes
20C+ Battery Tray	No	No	No	Yes
OmniCharge 20C + Custom Battery	No	No	No	Yes
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.				

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