

NOTES



BODi rS BD004 Series **Bandwidth-on-Demand Internet with Reliability and Survivability**

Quick Start Guide



CE This is a Class A device and is not intended for use in a residential environment.

! **Important**—The compliance information in this document is pending and subject to change.
IMPORTANT



WARNING

- Do not open the device when the power cord is connected. For systems without a power switch and without an external power adapter, line voltages are present within the device when the power cord is connected.
- For devices with an external power adapter, the power adapter shall be a listed *Limited Power Source*. The mains outlet that is utilized to power the device shall be within 10 feet (3 meters) of the device, shall be easily accessible, and protected by a circuit breaker in compliance with local regulatory requirements.
- For AC powered devices, ensure that the power cable used meets all applicable standards for the country in which it is to be installed.
- For AC powered devices which have 3 conductor power plugs (L1, L2 & GND or Hot, Neutral & Safety/Protective Ground), the wall outlet (or socket) must have an earth ground.
- For DC powered devices, ensure that the interconnecting cables are rated for proper voltage, current, anticipated temperature, flammability, and mechanical serviceability.
- WAN, LAN & PSTN ports (connections) may have hazardous voltages present regardless of whether the device is powered ON or OFF. PSTN relates to interfaces such as telephone lines, FXS, FXO, DSL, xDSL, T1, E1, ISDN, Voice, etc. These are known as "hazardous network voltages" and to avoid electric shock use caution when working near these ports. When disconnecting cables for these ports, detach the far end connection first.
- Do not work on the device or connect or disconnect cables during periods of lightning activity.



WARNING

This device contains no user serviceable parts. This device can only be repaired by qualified service personnel.



In accordance with the requirements of council directive 2002/96/EC on Waste of Electrical and Electronic Equipment (WEEE), ensure that at end-of-life you separate this product from other waste and scrap and deliver to the WEEE collection system in your country for recycling.

B.2 CE Declaration of Conformity

We certify that the apparatus identified above conforms to the requirements of Council Directive 1999/5/EC on the approximation of the laws of the member states relating to Radio and Telecommunication Terminal Equipment and the mutual recognition of their conformity; and Council Directive 2011/65/EU on the approximation of the laws of the member states relating to RoHS compliance.

The safety advice in the documentation accompanying this device shall be obeyed. The conformity to the above directive is indicated by CE mark on the device.

B.3 Authorized European Representative

D R M Green, European Compliance Services Limited.

Avalon House, Marcham Road, Abingdon,

Oxon OX14 1UD, UK

Copyright statement

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Trademarks statement

The term *BODi rS* is a trademark of Patton Electronics Company. All other trademarks presented in this document are the property of their respective owners.

Warranty, Trademark, & Compliance Information

For warranty, trademark and compliance information, refer to the user manual for your BODi rS model, available online at www.patton.com/manuals.

7.0 Configuring the BODi rS

Refer to the following manual (available online at www.patton.com/manuals) for detailed information about installing, configuring, operating, and troubleshooting the BODi rS BD004:

- *BODi rS 007 and BD004 User Manual*: www.patton.com/manuals/BD007_BD004.pdf

A.0 Customer and Technical Support

Toll-Free VoIP support: call sip:support@patton.com with a VoIP SIP client

Online support: www.patton.com

E-mail support: support@patton.com—answered within 1 business day

Telephone support:

- Standard: +1 (301) 975-1007 (USA), Monday–Friday: 8:00 am to 5:00 pm EST (1300 to 2200 UTC/GMT)
- Alternate: +41 (0)31 985 25 55 (Switzerland), Monday–Friday: 9:00 am to 5:30 pm CET (08:00 to 16:30 UTC/GMT)

Fax: +1 (301) 869-9293 (USA) or +41 (0)31 985 25 26 (Switzerland)

B.0 Compliance Information

B.1 Compliance

EMC

- EN55022, Class B
- EN55024

Low-Voltage Directive (Safety)

- CSA C22.2 No. 60950-1
- IEC/EN60950-1, 2nd edition



Electrostatic Discharge (ESD) can damage equipment and impair electrical circuitry. It occurs when electronic printed circuit cards are improperly handled and can result in complete or intermittent failures. Do the following to prevent ESD:

- Always follow ESD prevention procedures when removing and replacing cards.
- Wear an ESD-preventive wrist strap, ensuring that it makes good skin contact. Connect the clip to an unpainted surface of the chassis frame to safely channel unwanted ESD voltages to ground.
- To properly guard against ESD damage and shocks, the wrist strap and cord must operate effectively. If no wrist strap is available, ground yourself by touching the metal part of the chassis.

1.0 Before you Begin

1.1 Gathering Network Information

Before installing the BODi rS, gather the following information about your network::

- At least one Internet/WAN access account and/or Wi-Fi access information
- Network connections:
 - Ethernet WAN: A 10/100BaseT UTP cable with RJ45 connector
 - USB: A 2G/3G/4G LTE USB modem
 - Wi-Fi WAN: A Wi-Fi antenna
- A computer with TCP/IP network protocol and a web browser installed. Supported browsers include Microsoft Internet Explorer 7.0 or above, Mozilla Firefox 3.0 or above, Apple Safari 3.1.1 or above, and Google Chrome 2.0 or above.

1.2 Preparing to Install BODi rS

Installing BODi rS involves the following steps:

1. Placing or mounting the BD004.
2. Connecting a computer to the LAN port on the BD004.
3. Connecting devices to the WAN ports on the BD004.
4. Connecting the power connector on the BD004 to a power source.

5.0 Connecting the Power Supply

BODi rS comes with a terminal block for connecting to a power source. Strip the individual wires and insert into the slots of the power connection block on the rear panel of BODi rS. Be sure to leave a little slack on the wires so that they are not stressed or pulled too tightly. Also, make sure that the power cable wires are secured tightly in the terminal block. Verify the connection by checking that the Power LED is lit on the front panel.

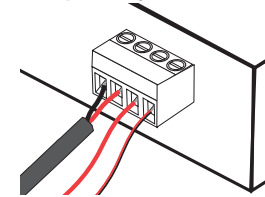


Figure 7. Connecting BODi rS terminal block power supply

6.0 Connecting to the Web Admin Interface

After physically connecting the LAN, you may use the Web Admin interface to configure the BODi rS interfaces. To login to the Web Admin Interface:

1. Start a web browser on a computer that is connected to the BODi rS through the LAN port.
2. Enter the following default LAN IP address in the address field of the web browser: <http://192.168.50.1>
3. Enter the username *admin* and password *admin* to login to the Web Admin Interface. This is the default Username and Password of the BODi rS. (You may change the Admin and Read-only User Password by clicking on System > Admin Security in the Web Admin Interface). After successfully logging in, the Dashboard of the Web Admin Interface displays:

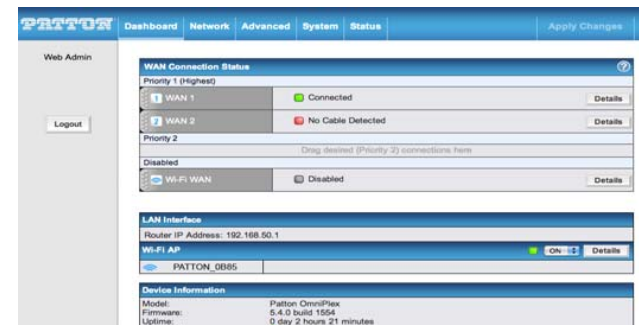


Figure 8. Web Admin Interface home page

The Web Admin Interface Dashboard shows the current WAN, LAN, Wi-Fi AP settings and statuses. The Dashboard enables you to change the priority of the WAN connections and switch the Wi-Fi AP connections off or on. For more information about configuring these connections, refer to Chapter 3 in the *BODi rS 007 and BD004 User Manual*: (www.patton.com/manuals/BD007_BD004.pdf).

4.0 Connecting the BODi rS Interfaces

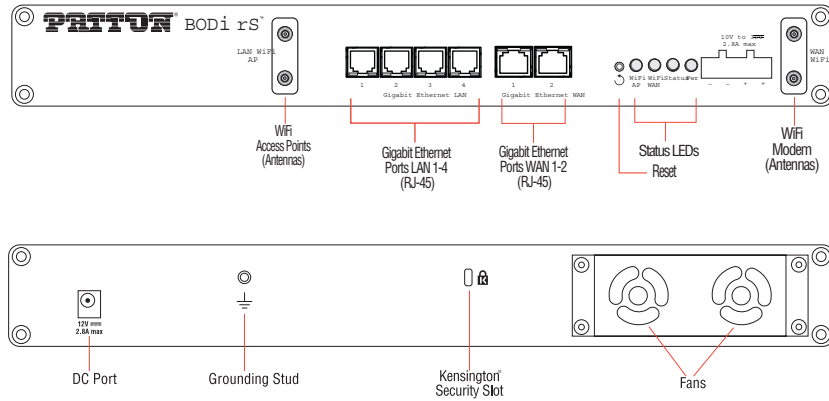


Figure 6. BODi rS interfaces

Note Refer to Chapter 3 in the BODi rS BD007 and BD004 User Manual (www.patton.com/manuals/BD007_BD004.pdf) for information about configuring WAN interfaces via the Web Admin interface.

4.1 Connecting the Ethernet Interfaces

The BODi rS includes four LAN Ethernet ports and two Gigabit Ethernet WAN ports on the rear panel. Use a straight-through or cross-over Ethernet cable to connect the Ethernet RJ-45 ports.

4.2 Connecting the Wi-Fi Interfaces

The BODi rS provides four Wi-Fi antenna connectors on the rear panel—two connectors provide interfaces to connect wireless LAN Access Points (AP LAN), and two connectors provide interfaces to connect the wireless WAN. Use a SMA cable to connect the female SMA antenna ports.

4.3 Connecting the USB Interfaces

The BODi rS provides four USB 2.0 ports on the front panel. You can use the USB ports to connect cellular modems.

2.0 Connecting the Modems

2.1 Preparing BODi rS for modem installation

Remove the top plate of the BODi rS. The area can house up to 4 modems (not included). See Figure 1.

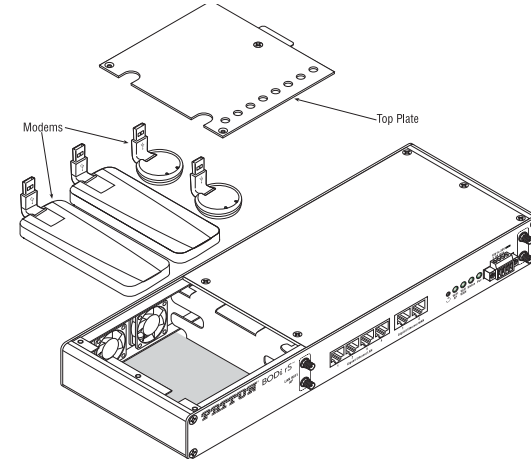


Figure 1. Preparing BODi rS for modem installation

2.2 Connecting the modems and antennas

Run the USB cables through the allotted holes into the open modem area. Connect the USB port to the modem. Connect antennas to each individual modem. (Different modems may have different antenna connections.) See Figure 2.

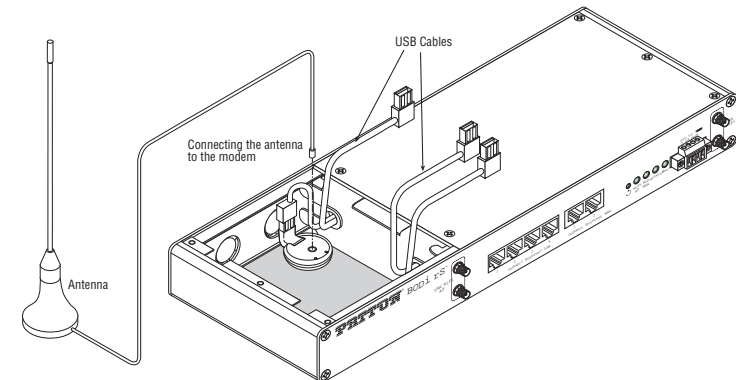


Figure 2. Connecting the modems and antennas

Note Cell modem antennas are not included. They must be sourced from your modem vendor.

2.3 Feed antenna cables

After all modems have been connected, feed the antenna cables through the space on the top plate (see Figure 3). Screw the top plate onto the BODi rS.

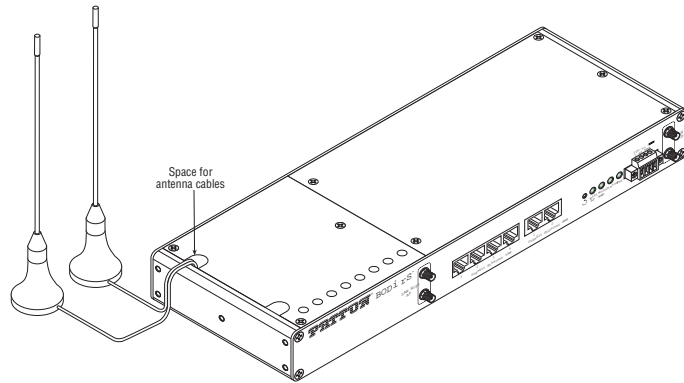


Figure 3. Feed antenna cables

Note The modem should be placed against at least one metal wall to assist cooling.

3.0 Mounting the BODi rS

3.1 Mounting BODi rS in a rack

BODi rS can be mounted in a rack using the attachable rack mount ears (see Figure 4). Align the rack mount ears with the three holes on each side of the device. Place screws through the mounting holes and secure to the device. Place the device in a rack and secure using the open slots on the rack mount ears.

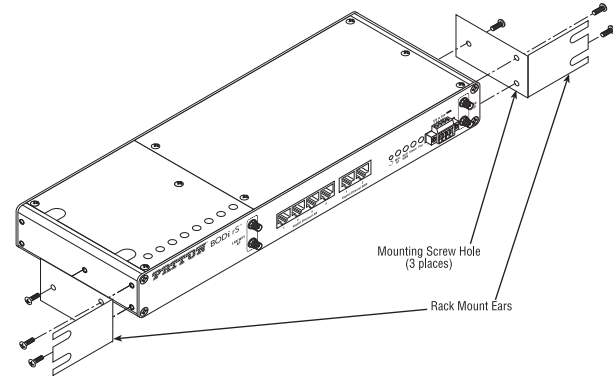


Figure 4. Mounting the BODi rS in a rack

3.2 Mounting the BODi rS in a Car

BODi rS BD004 can be mounted on a flat surface using the included car mounting plates. Place each car mount according to the label's direction, and screw it onto the device. After mounting each plate on the sides of the device, screw the plate onto the flat surface.

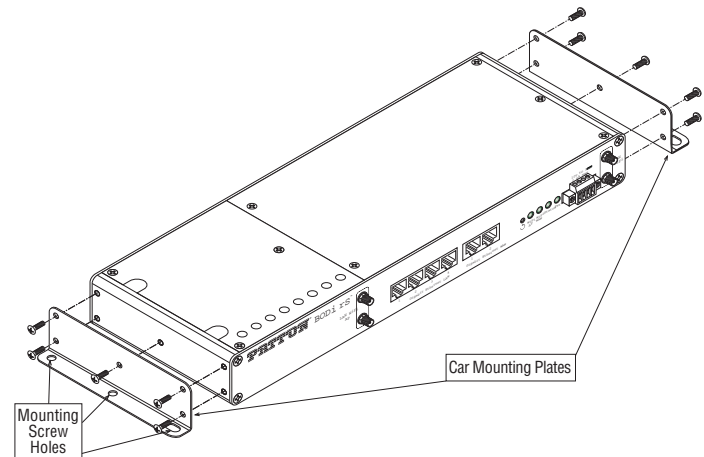


Figure 5. Mounting the BODi rS in a car