# **Product Overview** Cellular Antenna Power Connector 802.15.4e Ethernet/WAN Port Connector SIM card 1 Aux Ports LEDs • **USB Port** SIM card 2 Cellular Antenna Connector I/O Port Reset Switch **3G/LTE Routers** Power 802.15.4e Antenna Connector Ethernet/WAN Port **Power LED Aux Ports USB Port LEDs** I/O Port Reset Switch **RT Routers**

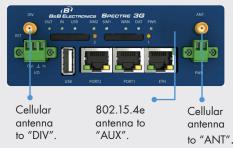


#### Attach Antennas

Your router will not work unless the antennas are attached and power is supplied. Some models also require installed, activated SIM cards

Powering the router with no antenna attached can damage the router.

Spectre 3G Routers have 2 SIM Card Readers Spectre LTE Routers have 1 SIM Card Reader



RT Routers





# **Insert SIM card**

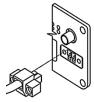
Some service providers require installed, activated SIM cards in order to establish communications. For the corresponding router models, open the SIM card holder by pressing the small button to the right of the SIM card holder.





#### Attach Power

The router has built-in protection against reverse polarity. Apply +10 to +30 V DC, or connect the included AC power adapter.





#### **Connect Ethernet**

You will use an Ethernet connection to configure the router and to communicate with it.



# **Configure the Router**

You may configure the router via a web browser or Telnet.

Default Router IP Address = **192.168.1.1**Default Username = **root**Default Password = **root** 

Detailed configuration data is included on your installation CD and also on our web site.



# Set Up Mobile Connection (Cellular Routers Only)

**3G** – Click "Mobile WAN" under "Configuration". Select your carrier under the primary SIM card drop down menu. Enter APN and credentials given from your provider. Apply changes.

Note: Sprint requires extra steps. Please see Configuration Manual section "Sprint CDMA network connection" for instructions.

#### **Common APN Examples**

Verizon: No APN required AT&T: isp.cingular or wap.cingular Sprint: No APN required

T-Mobile: epc.tmobile.com Rogers: internet.com TELUS: sp.telus.com

LTE – Click "Mobile WAN' under 'Configuration". Enter APN and Credentials given from your provider. Apply Changes.

#### **Common APN Examples**

Verizon: vzwinternet AT&T: broadband



#### **Set Up Mobile Connection (Cont.)** (Cellular Routers Only)



Note: If your SIM card or device is setup to have a Public Static IP address or you are going through a MVNO (Mobile Virtual Network Operator) a different APN and credentials may be needed. This information will need to be obtained from your provider.



#### **Check Mobile Network Connection** (Cellular Routers Only)

Click "Mobile WAN" under "Status". At the bottom you should see "Mobile Network Connection Log". If the Router is connected it will have a message underneath saying "Connection successfully established." To see the most current status you will need to refresh the page. If a Connection does not establish switch to the system log to see where the error occurs.



### **Test Internet Connectivity**

Make sure the connection to the Router is the only enabled network connection and that the Gateway and DNS Server are set to the address of the Router (default IP address: 192.168.1.1). Note: You will not have to change Gateway or DNS Server information if the network connection to the Router is setup as DHCP.

To verify internet connectivity open a Web browser and go to a known good website or ping a known good Internet IP address or Web address. You should receive valid responses. If you cannot access the internet or do not receive valid responses, contact B&B Technical Support.



## Set Up Wzzard SmartMesh IP Network

The Network Gateway needs to be programmed to communicate to the Wzzard Edge nodes over the SmartmeshIP wireless network, and to the application layer via the MQTT broker. Refer to the IoT Gateway Settings page, found under customization/user module, to program both the SmartMesh IP and MQTT settings by selecting the "IoT Gateway" hyperlink.



Spectre 3G and LTE routers are certified for many North American carriers. Check with B&B Technical Support for the latest carrier certifications.



#### Cellular Antennas

http://www.bb-elec. com/Global/Site-Search.aspx?searcht ext=antenna&search mode=anyword



#### **Ethernet Cables**

http://www.bb-elec. com/Products/Power-Supplies-Accessories/Ethernet-Cables. aspx



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Quick START GUIDE



Spectre LTE/3G/RT **Spectre Network Gateways** 



Before you begin, be sure you have the following:

- SPECTRE LTE/3G/RT router
- Power Supply
- Crossover UTP cable
- External Antennas
- O DIN rail adapter

