Spectrum ONU (SONU) Modem
10G EPON DPoE Advanced Fiber Voice Modem
User Guide
Applies to all models of SONU

Spectrum▶

SAFETY NOTICES

Device Powering: This unit requires an input 100-127Vac, 50-60Hz output 12Vdc 1.5A power adapter. The power adapter AC plug must be keyed for proper polarization, and the DC barrel must be fully inserted to contact the back of the SONU power connector port to ensure a snug connection.

Disconnecting the Device: If the SONU modem becomes damaged or encounters some other abnormality, disconnect the power adapter from the AC wall outlet immediately.

Temperature and Altitude: Install the device in a location not to exceed the normal operating temperature range of 104°F (40°C) to 32°F (0°C). Maximum operating altitude is 3962 m (13000 ft.).

UNDERSTANDING DEVICE CONNECTIONS

REAR PANEL:

10G Ethernet (Internet): Connect to an Ethernet-enabled device such as a wireless access point/router (LAN switch, router) using an RJ45 Ethernet cable.

1G Ethernet (ATA): Connect to an Ethernet-enabled ATA (External ATA), or IP Phone.

Battery: Use to connect to the eBBU with USC link cable provided by dedicated eBBU vendor. This port is only used to transmit the signal data and alarms.

Power: Use to connect to the eBBU DC output cable or to the supplied power adapter. Plug the other end into the wall power outlet.
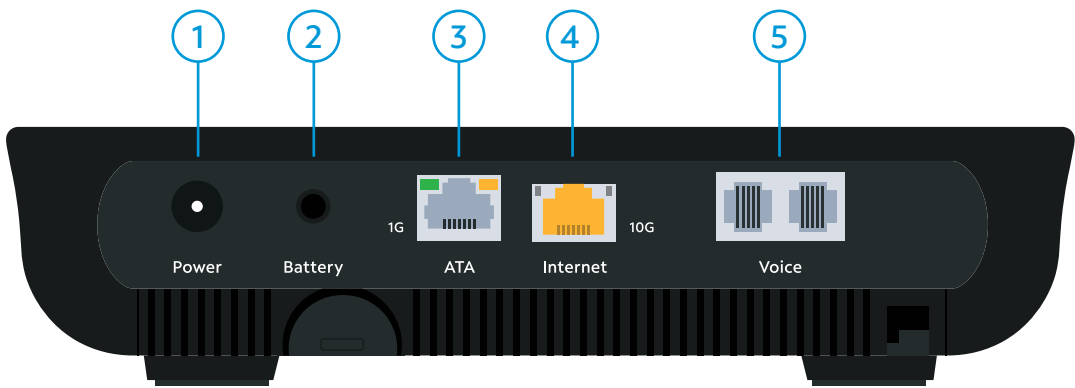
Voice 1-2: Use to connect analog telephones or a DECT base station to the device. Telephone service must be enabled via spectrum.net/support

DEVICE RESET

Device Reset: Use to restart the device or reset the device settings. When the lights on the FRONT PANEL are illuminated, press and hold the reset button for 4 seconds to initiate a power cycle (restart). Also, the device can be factory reset. Press and hold the button for 10 seconds to reset the device to factory default settings.

Note: all settings will be deleted with a factory reset. If you experience connectivity issues, refer to support article at **spectrum.net/support** or call Customer Service at **(800) 495-6590.**
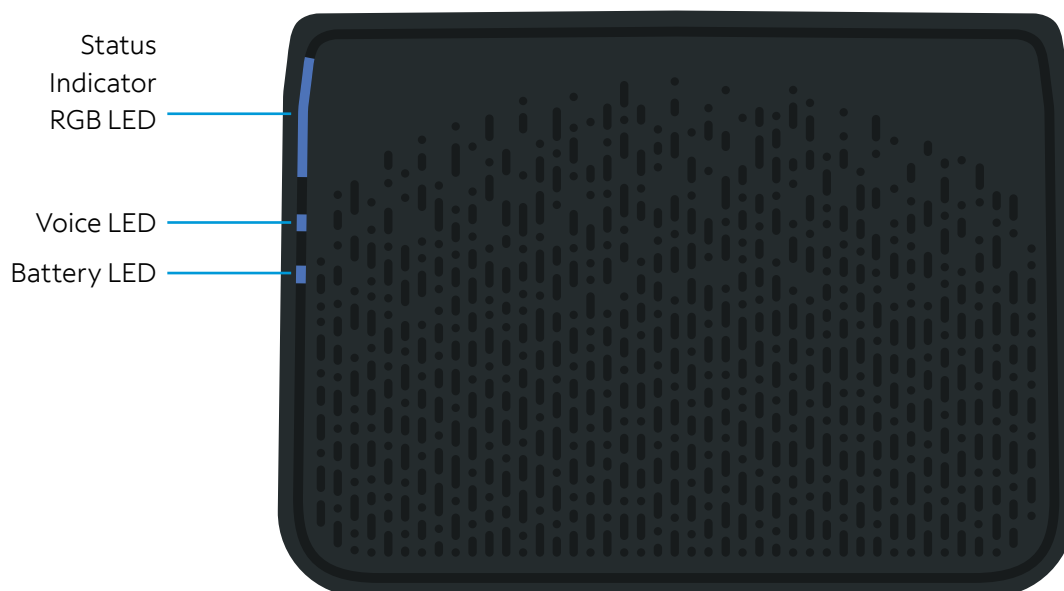
I/O PORT

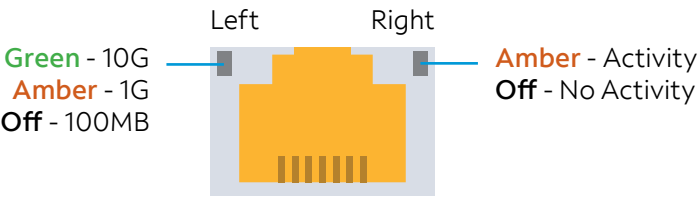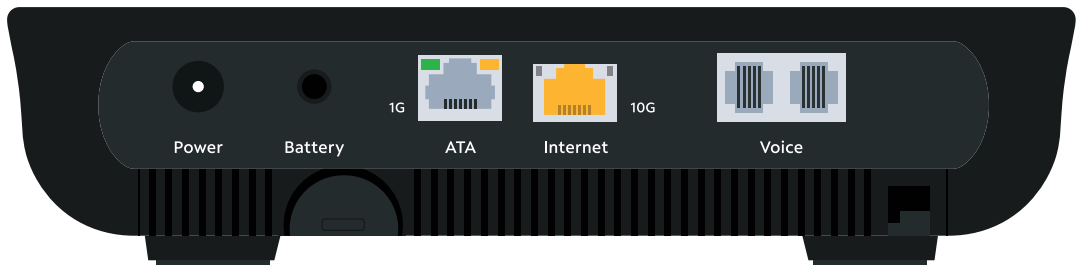| Port	Description
1 Power	Only use provided adaptor or external backup battery (EBBU)
2 Battery	Serial port for EBBU communications
3 1G	1G Ethernet port for external ATA
4 10G	10G Ethernet
5 Voice 1 & 2	2 FXS lines of carrier-grade VoIP

FRONT PANEL LED BEHAVIOR AND LOCATION

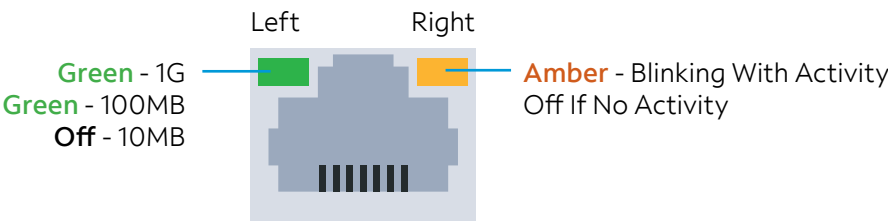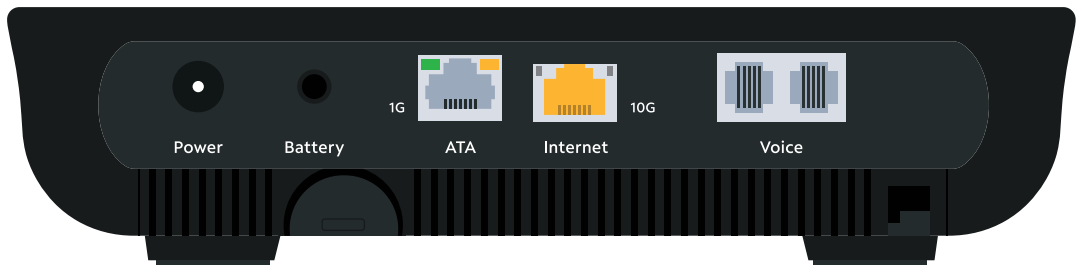The LED status lights are located on the top side of the device.

Status Indicator RGB LED

Voice LED

Battery LED

Front Panel LEDs	Color	Description
Status Status Light	Blue Red White	• Powering Up: **Flashing** between On Blue and Off • Finding Connection (PON Signal): **Pulsing** between **On** Blue and **Off** • Normal Operation: On Blue • PON not operational: **Pulsing On** Red and **Off** • PON Loss of Signal: **Pulsing** between **On** Red and **On** White
Voice Status Light	Blue	• Voice Service Not Provisioned: **Off** • Voice Service Provisioned: **On** Blue • Any Phone Off-Hook on Battery: **Flashing** between **On** Blue and **Off** • Any Phone Off-Hook on AC power: **Pulsing** between **On** Blue and **Off** • Unable to Establish Phone Network Connection: **Off**
Firmware Upgrade Indication		• Loop 'Status, Voice, Battery' LEDs On Blue for 0.75 sec in 3 seconds each cycle during Firmware Download

LED Action

| Status LED ON | StatusLED OFF Voice LED ON | VoiceLED OFF Battery LED ON | Battery LED OFF |

Time (sec.)

0   .75   1.5   2.25

LED Order

	Status	Status	Status	Status
	Voice	Voice	Voice	Voice
	Battery	Battery	Battery	Battery

LEDs will repeat until firmware download is complete

INTERNET BACK PANEL 10G LED BEHAVIOR AND LOCATION

Left   Right

Green - 10G
Amber - 1G
Off - 100MB

Amber - Activity
Off - No Activity

Speed	Left LED Speed Status	Right LED Activity Status
100MB Ethernet	Off Ethernet Device	Amber blinking with activity data is being passed between SONU and the connected device. Off if no activity
1G Ethernet	On Amber Ethernet Device	Amber blinking with activity data is being passed between SONU and the connected device. Off if no activity
10G Ethernet	On Green Ethernet Device	Amber blinking with activity data is being passed between SONU and the connected device. Off if no activity

ATA BACK PANEL 1G LED BEHAVIOR AND LOCATION

Left   Right

Green - 1G
Green - 100MB
Off - 10MB

Amber - Blinking With Activity
Off If No Activity

Speed	Left LED Speed Status	Right LED Activity Status
10MB	Off	Amber Blinking With Activity Off if no activity
100MB	On Green	Amber Blinking With Activity Off if no activity
1G	On Green	Amber Blinking With Activity Off if no activity

1G ATA port for external voice expansion only