

**AMBR**  
Amatis Border Router



**PRODUCT OVERVIEW**

The Amatis Controls Border Router (AMBR) is our wireless lighting control system communication gateway. AMBR communicates wirelessly with drivers, sensors and controllers to form a robust mesh network.

Every Amatis device connects to AMBR via our proprietary 6LoWireless protocol. AMBR uses this wireless communication to configure each device automatically to create a secure 6LoWireless mesh network.

**FEATURES**

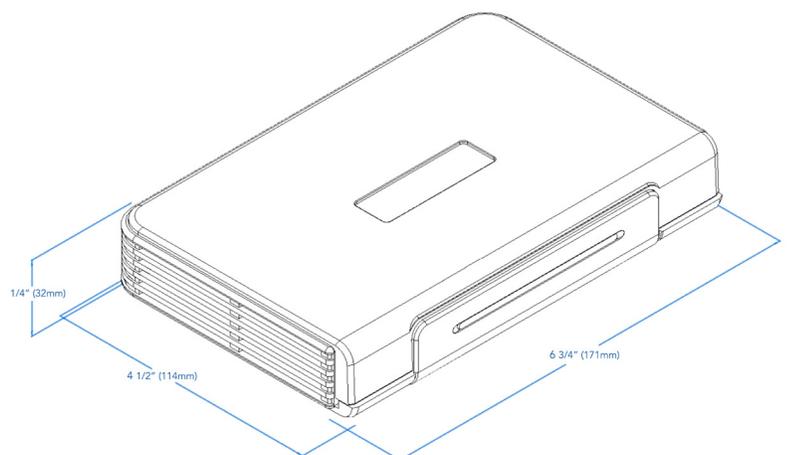
Plug and play installation
LEDs indicate power and Internet status
Hosts up to 100 wireless devices
IPv6 addressable wireless nodes
Mesh communication up to 200 feet between nodes
Open source OS for third-party integration
Real-time data uploaded to the Energy Dashboard
Includes CAT5E cable
Includes DC Power Adapter
Communicates with all connected Amatis devices using secure IPv6 6LoWireless mesh network
Includes Ethernet connection for BACnet-over-IP integration, web-based Energy Dashboard access, scheduling, and real-time data capture
Includes AES 128-bit encryption and secure VPN connection to the Internet
Commissioning App easily commissions the border router and all devices on the mesh network

AMBR connects to the web using a secure, encrypted VPN connection. It also uploads real-time data from each device to our web-based user interface—the Amatis Energy Dashboard—via Ethernet or cellular network connections.

AMBR’s solid-state design ensures the hardware is consistent and reliable. AMBR outperforms other routers on memory, stability, signal strength, functionality, and affordability.

**TECHNICAL SPECIFICATIONS**

Communicates with all connected Amatis devices using secure IPv6 6LoWireless mesh network
Dual internal antennas provide robust signal strength and dependable communication
Single Ethernet port for LAN connectivity and management
Utilizes trusted electronics to prevent any interference from non-Amatis devices



## LIGHT INDICATOR REFERENCE TABLE

LED	Flashing	Solid	Off
Green	Processor boot-up <b>SUCCESS</b>	Processor boot-up <b>SUCCESS</b>	Processor <b>ERROR</b>
Orange		Off Line data logging <b>SUCCESS</b>	Off Line logging <b>ERROR</b>
Blue	Data logging and configuration enabled <b>SUCCESS</b>	Data logging enabled <b>SUCCESS</b>	Internet connection Error <b>ERROR</b>
White			Normal Operation
Red		Power connection <b>SUCCESS</b>	Power connection <b>ERROR</b>



## EXTERNAL INPUTS

**Button "A":** Press and hold this button for 2 seconds to hard reset the AMBR. This functionality is the same as unplugging and plugging in the AMBR. *Note: Do not press this button repeatedly upon AMBR startup.*

**Button "B":** Allows user to select between DHCP (selected by default) and Static IP address, or reset their AMBR. To adjust the following settings, first press the "B" button for 3 seconds. The white LED will begin to blink, indicating the AMBR is ready to receive the next inputs. Press the "B" button...

- 1 time to configure AMBR to DHCP. Blue LED will illuminate
- 2 times to configure the AMBR to Static IP. Orange LED will illuminate
- 3 times to exit configuration mode. Green LED will illuminate.

Press and hold "B" button for 3 seconds to commit to selection.

The USB connection is disabled to the end user.

More information can be found in the AMBR manual in the resources section of the Amatis Website.

**Complete Your System With:**  
Advanced Load Controller (ALC)  
Smart Driver  
Sensor MLTH  
Switch

The 6LoWireless mesh network is a robust communication system used by all Amatis Controls devices to communicate commands and data across the building. Each device is in constant communication with other devices in the network, thereby eliminating range limitation, creating a system that is fault-tolerant should one of the devices lose communication and allows for a system that acts cohesively across zones.

The Amatis Border Router (AMBR) communicates with other devices in the network via 6LoWireless communication and then sends the data to the Internet using Ethernet or cellular connections. This aggregated data is available through the Amatis Energy Dashboard. AMBR also uses this internet connection for our device commissioning app.



The Amatis communication system is built on IPv6 protocol standards; the language of the Internet. This allows us to protect all of the data with the same 128-bit encryption used by banks, e-commerce and other secured websites. As security protocols for the entire Internet are updated, so are ours. This means all of your data is not just secure today, but always.