

**AMBR** AMATIS BORDER ROUTER

v1.0



## PRODUCT OVERVIEW

The Amatis Border Router, AMBR, is the brain of the Amatis Solution. AMBR communicates wirelessly with meters, monitors, and controls, configuring each device automatically to form a 6LoWireless mesh network. Ambr uploads real-time data from each device via high speed Ethernet or cellular network connections to our web-based uer interface - the Amatis Energy Dashboard.

AMBR's solid-state design ensures the hardware is consistent and reliable. AMBR outperforms other routers on memory, stability, signal strength, functionality, and affordability. Amatis devices connect to AMBR via 6LoWireless protocols.

The simple design requires no technical expertise or prgramming experience for installation.

## **FEATURES**

- Plug and play installation
- LEDs indicate power and internet status
- Hosts up to 100 wireless devices
- Mesh communication up to 300 feet between nodes
- IP6 addressable wireless nodes
- Open source OS for third-party integration
- Real-time data uploaded to the Energy Dashboard

## **TECHNICAL SPECIFICATIONS**

- 400MHz ARM 926EJ-S Microprocessor
- 64MB RAM
- 512MB NAND Flash
- 10/100 Ethernet
- Two RS232 Serial Ports
- 1 External USB Port; 1 Internal USB Port
- Internal MicroSD Socket
- Linux OS running Contiki
- 2.4GHz IEEE 802.15.4 radio with antenna diversity
- 6LoWPAN Communications protocol
- Linux Drivers for Atmel RF233 radio
- Available GPIOs
- Constrained Application Protocol (CoAP)
- +5V 2A DC Power Supply
- 12bit ADC
- Real-time clock with supercap back-up
- Housing Dimensions: W=6.8" L=4.3" H=1.2"

## **ENERGY DASHBOARD**

