

EAGLE 3 Intelligent Control Gateway



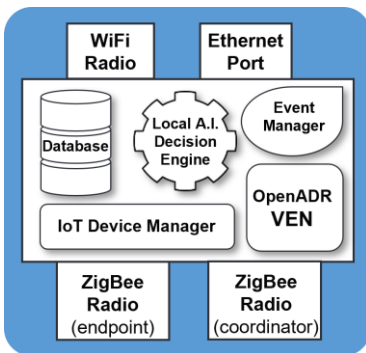
The EAGLE 3 is an intelligent grid edge device that acts as an in-building energy management system. It connects directly to the internet using either Ethernet or WiFi, allowing it to leverage the home or building's existing broadband connection. An internal database buffers data locally to eliminate data loss during network outages.

The EAGLE 3 supports two simultaneous Zigbee wireless networks:

Utility HAN: Communicating directly with a smart meter equipped with Zigbee Smart Energy wireless capability, the EAGLE 3 is an endpoint on the utility meter's Home Area Network (HAN). It gathers real-time, revenue grade, smart meter data to send to the Rainforest Cloud.

Control Network: The EAGLE 3 is also the Coordinator of its own independent Zigbee network that allows it to control and monitor Zigbee 3.0 and ZigBee Home Automation devices in the building.

An onboard OpenADR 2.0b Virtual End Node (VEN) allows the EAGLE 3 to communicate directly with utility Demand Response Management Systems (DRMS) for direct load control programs. A REST API enables control and monitoring functions to be accessed on the local network or through the Rainforest Cloud. User portals and apps give building occupants the ability to remotely control and monitor their controllable loads and can also be used for event overrides and user opt-outs. A management portal allows operators to manage fleets of devices across their service territory.



Specifications	
Software Requirements	User Interaction: Web Browser, iOS app, or Android app Demand Response: HTTP REST API; optional OpenADR 2.0b support
Internet Connectivity	Ethernet, WiFi
Zigbee Wireless Link	IEEE 802.15.4 MAC, 2.4GHz ISM Band Receiver sensitivity: -99dBm, Transmit Power: +20dBm
Zigbee Wireless Range	Up to 50m (150ft) (highly dependent on usage environment)
Zigbee Standards	Zigbee Smart Energy Profile 1.1, Zigbee Home Automation 1.2, Zigbee 3.0
WiFi Wireless Link	IEEE 802.11b/g/n, 2.4GHz ISM Band Receiver sensitivity: -90dBm (1Mbps), Transmit Power: +18dBm (802.11b)
Ethernet Link	10/100Base-T, RJ-45 connector
Ethernet Control	Sunspec Modbus TCP (inverter, battery: control and monitoring)
Upgrade Path	Field upgradable firmware over the internet
API Support	HTTP REST interface for control and monitoring (local and cloud)
Power	External AC adapter (included)
Operating Temperature	0°C to 50°C (indoor use only)
Storage Temperature	-10°C to 60°C
Dimensions	70mm x 70mm x 24mm
Weight	70g (not including AC Adaptor)
Warranty	One year

Ordering Info	
RFA-Z115-Z2-001	EAGLE 3 Control Gateway



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