



## Configurable IoT Gateway

This plug-and-play IoT Gateway with edge compute power comes with a range of connectivity options for maximum flexibility, allowing customers to choose the connection capabilities they need today - as well as future-proof for tomorrow. It includes Rigado tools for secure OTA updates.

A CUSTOMIZED GATEWAY TO MEET YOUR EXACT IOT REQUIREMENTS

Add **external antennas** if required

Customize with **your own Logo & Color**



Wireless options include **WiFi, BLE, Thread, Zigbee** + more

Optional **mounting bracket**



Add connectivity such as **Ethernet w/ PoE & USB 2.0**

### Configurable Connectivity

Choose your modular wireless connectivity options, including WiFi (802.11a/b/g/n 2.4/5 GHz), Thread or proprietary 2.4GHz, Bluetooth Low Energy and 10/100 Ethernet with PoE.

### Powerful Processing

A 528MHz 32bit ARM Cortex®-A7 running Yocto Linux BSP offers plenty of edge compute power and cloud connectivity options. Upgradable to 64MB Flash, 512MB RAM and 8GB eMMC storage.

### Fully Brand-able Enclosure

Based on our extensive ODM experience bringing more than 100 IoT products to market, Rigado's team will customize and manufacture your Gateway enclosure to match your brand.

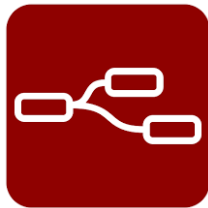
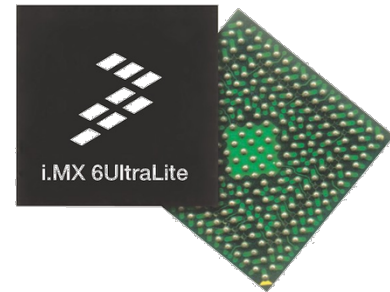
### Build-to-Order Components

We can quickly customize a Gateway with just the components required for your specific application, allowing you to optimize cost and functionality for your solution.

## KEY BENEFITS OF THE CONFIGURABLE IOT GATEWAY

### Edge Compute Capabilities

Armed with a 528MHz 32bit ARM Cortex®-A7 processor and up to 8GB of storage (even more if using the internal SD card) Rigado's IoT Gateway supports a host of edge compute applications. Coupled with a Linux operating system and standard cloud integrations, developers can use standard tools to create applications to collect and process information locally and then stream data to public cloud tools or enterprise backends.

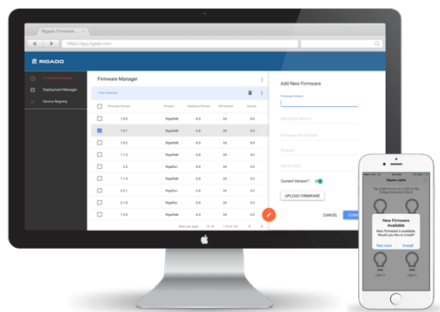


### Flexible Development Environment

The Rigado IoT Gateway includes a robust development environment to make creating and deploying both prototype and production applications a snap. Gateways are pre-loaded with Node-RED to provide a simple way to create browser-based workflows to connect hardware devices, APIs and online services. Developers can also deploy node.js, python, Java, or compiled applications to the gateway.

### Custom Branding and Enclosures

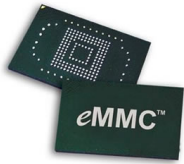
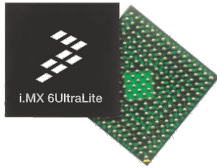
Rigado offers multiple branding and enclosure options depending on your application. Gateways can be customized with your own brand color and pad printed logo – or built without an enclosure for integration into a custom design. We can also provide IP67 rated enclosure options, or design new enclosures tailored to fit custom applications.



### Rigado DeviceOps for Secure Updates

Rigado DeviceOps is a cloud-based platform for device monitoring and secure firmware updates at scale. It works with Rigado's Modules and IoT Gateways for a seamless, end-to-end solution with fast & flexible firmware updating. Rigado Gateways don't require DeviceOps – customers are welcome to use their own secure updating tools instead.

## Hardware Specifications and Configuration Options



Processor	
528MHz ARM Cortex®-A7	i.MX6UL G3
Memory and Storage	
DRAM	128MB
	256MB
	512MB
NOR Flash	None
	16MB
	32MB
	64MB
Bulk Storage	microSD, no card
	microSD, 8GB
	eMMC, 4GB
	eMMC, 8GB
Wireless	
WiFi	WiFi/BT 4.0, Internal Antenna
Low Power Wireless	Bluetooth 4.2 <i>Rigado BMD-300 module based on Nordic nRF52832</i>
	Bluetooth 4.2 + 802.15.4 <i>Rigado R41Z module based on NXP KW41Z</i>
	Add optional 4Mbit Flash for above modules
	No Module
Expansion Options	Cellular LTE (2H'17)
	Lora (2H'17)
Case, Options & Accessories	
Enclosure	Standard Enclosure
	Enclosure with custom pad printed logo
	IP67 rated Enclosure (requires PoE)
	No Enclosure
Power over Ethernet & USB	No PoE or USB
	PoE 802.3af only
	USB 2.0, Type A only
	PoE 802.3af & USB 2.0 Type A
Available Accessories	Wall/Ceiling Bracket
	10W Wall Adapter

## Standard Hardware Configurations

The below Standard Configurations are available in single-unit quantities through our distribution partners. Note that customized orders typically require a 250 piece minimum order, and may have a 14-week lead time.

Standard Model Part #	DRAM	NOR Flash	Bulk Storage	Ethernet	WiFi	Low Power Wireless	Expansion Header	PoE / USB	Accessories
Vesta-100B VG3-1E4-B0-US	128MB	None	4GB eMMC	Yes	No	BMD-300 BLE 4.2	No	USB	No
Vesta-100R VG3-1E4-TA-US	128MB	None	4GB eMMC	Yes	No	R41Z BLE 4.2 + 802.15.4	No	USB	No
Vesta-200B VG3-2E4-WIB0-USA	256MB	None	4GB eMMC	Yes	Yes	BMD-300 BLE 4.2	No	USB	Wall mount AC Adapter
Vesta-200R VG3-2E4-WITA-USA	256MB	None	4GB eMMC	Yes	Yes	R41Z BLE 4.2 + 802.15.4	No	USB	Wall mount AC Adapter
Vesta-300B VGS-23E4-WIB0C0-ASA	256MB	32MB	4GB eMMC	Yes	Yes	BMD-300 BLE 4.2	Yes	PoE + USB	Wall mount AC Adapter
Vesta-300R VGS-23E4-WITAC0-ASA	256MB	32MB	4GB eMMC	Yes	Yes	R41Z BLE 4.2 + 802.15.4	Yes	PoE + USB	Wall mount AC Adapter

## Software Specifications

### Development Environment

- Linux OS (Yocto open source distro)
- Vagrant build recipes for multiple development environments
- Support for application development in Python, Node.js, Java (JamVM)
- Rapid prototyping and application development using Node-RED visual development framework

### IoT Frameworks

- Wirepas – Adaptive mesh networking
- Alljoyn – Open source device discovery
- Iotivity – Open source device connectivity

### Cloud support

- Amazon Web Services (AWS)
- Microsoft Azure
- Ayla IoT Platform
- Arrayent Connect Platform
- IBM Bluemix

### Networking Support

- HSDK and Threadmanager
- NAT64/DNS64 Stack
- IP Tables
- MyNewt HCI controller
- PC-BLE-Serialization
- BlueZ
- MQTT (Mosquito and paho-mqtt)
- LoRa Gateway Bridge

### Rigado DeviceOps (optional)

- Remote Gateway Management – Install apps, kernel updates, configuration changes & more
- End Device Updating – Remotely manage firmware deployments to end devices connected to the IoT Gateway
- Remote Log Management – Retrieve logging data from routers and aggregate and analyze it using your log management tool of choice
- Network configuration and management – Remotely manage and monitor mesh network topology and devices

For additional information, including custom configuration orders, contact us at [info@rigado.com](mailto:info@rigado.com)