

# Cascade 500 IoT Gateway

Edge Connectivity, Computing & Security for Low-Power Wireless

## Overview

Rigado's Cascade 500 IoT Gateway is the hardware component of our Cascade Edge-as-a-Service™ solution. It gives teams building IoT solutions flexible edge computing power, a robust containerized application environment, and a wide variety of wireless device connectivity options. It also includes advanced hardware, file system and OS security and when combined with our EdgeProtect managed security service, provides comprehensive and up-to-date edge security.

The Cascade 500 IoT Gateway is **included with Rigado's Cascade Edge-as-a-Service** offering at no additional cost and offers a powerful and cost-effective solution for large-scale low-power wireless deployments. We can even put your logo on it.



## Specifications

<b>Computing &amp; Storage</b>	<ul style="list-style-type: none"> <li>• 800MHz ARM with 512MB RAM</li> <li>• 8GB of storage</li> </ul>
<b>Wireless Connectivity</b>	<ul style="list-style-type: none"> <li>• Long Range Bluetooth 5 + PA/LNA</li> <li>• 802.15.4 including Zigbee &amp; Thread</li> <li>• Wirepas Mesh</li> <li>• Wi-Fi 802.11a/b/g/n/ac</li> </ul>
<b>Ethernet</b>	<ul style="list-style-type: none"> <li>• 10/100 Ethernet with PoE 802.3af</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>• Secure element hardware security module</li> <li>• Encrypted file system &amp; Secure Boot</li> </ul>
<b>Cellular Options</b>	<ul style="list-style-type: none"> <li>• Verizon Cat 1 LTE (Q3 2018)</li> <li>• Worldwide Cat 1 LTE with 2G/3G Fallback (Q3 2018)</li> </ul>
<b>Accessory Options</b>	<ul style="list-style-type: none"> <li>• Wall/Ceiling Bracket</li> <li>• International Power Adapter</li> </ul>
<b>Enclosure options</b>	<ul style="list-style-type: none"> <li>• Custom pad printed logo &amp; color</li> <li>• Outdoor / Weatherproof enclosures</li> </ul>

## Key Features & Benefits

### Simple, Flexible, Extended Connectivity

Full range of IoT networking options to support both existing devices and future-proof solutions - including Bluetooth 5, 802.15.4, Mesh, Wi-Fi, Cellular and more. Includes APIs to simplify connectivity to common sensors & devices. With outbound and inbound amplification we significantly increase connectivity range.

### Edge Computing

Run your application at the edge for reduced latency, local command and control, and better management of the data being generated by IoT

### Easy Management

Comes with Rigado EdgeDirect for fast, secure device orchestration & updating at scale with performance monitoring & alerts included

### Multi-level Security

Hardware and software level security features with automatic updates

## Cascade Edge-as-a-Service

Cascade Edge-as-a-service™ combines Rigado's Cascade 500 IoT Gateways with a secure platform, scalable tools and a managed service – **all offered as a single monthly subscription of \$10/month.**



### EdgeConnect

compute & connect

### EdgeDirect

orchestrate & update

### EdgeProtect

managed security

### EdgeConnect

*Secure connectivity and computing platform with containerized edge OS*

#### Optimized security & performance

Ubuntu Core OS, secure boot & encrypted file system

#### Containerized edge environment

Snaps, a simple application packaging system to make it easier for developers to build and maintain application containers at the edge

#### Reliable, remote maintenance and upgrades

Remotely upgradeable with atomic transactional upgrades and roll-back ability. Regular maintenance updates keep technicians out of the field

#### Secure multi-application environment

Easily and securely add multiple apps and functionalities onto a single gateway

#### Easy device connectivity

Connect to sensors and beacons using API calls that do not require device or protocol expertise

### EdgeDirect

*Intuitive tools for orchestration & edge performance*

#### Quickly orchestrate updates and deploy builds

Schedule, manage and apply application and OS updates, and integrates with DevOps systems.

#### Securely provision devices

Gateways are provisioned with secure IDs and encrypted keys, enabling verified field updates

#### Easily monitor and alert

Monitor and create alerts around key performance metrics such as CPU load and connectivity

### EdgeProtect

*Managed service for automatic security updates*

#### Automate core updates

OS updates & fixes to vulnerabilities delivered automatically as soon as they are available

#### Manage with confidence

Signature authentication to prove that what's running is exactly what developers have published, for greater end user security

## Start with our IoT Evaluation Kit



- 60 days of **free** Edge-as-a-Service
- Cascade 500 IoT Gateway
- A Nordic Thingy:52 Sensor with motion, gyro, and more
- Self-guided tutorials
- Device-to-cloud demo code

Available at [www.rigado.com](http://www.rigado.com)

## About Rigado

Rigado powers Edge Connectivity for more than 300 global IoT customers.

Our gateways, modules and Edge-as-a-Service significantly reduce the time, cost & risk of building & managing IoT solutions.

Rigado is headquartered in Oregon, USA with offices in London, UK and Shenzhen, China. Visit us to learn more at [www.rigado.com](http://www.rigado.com).