EdgePod
User Manual

Green Edge Computing Corp.

Revision History

Date	Revision Description	Revision
2024/06/28	Initial Release	A
2025/01/22	Added information to cover EdgePod V4 configurations. DC input specification changed from 12-48Vdc to 18-48Vdc.	A.2

Table of Contents

1 Acronyms and Related documents

1.1 Acronyms

AI	Artificial Intelligence
BMC	Baseboard Management Controller
DHCP	Dynamic Host Configuration Protocol
ECA	Edge Computing Appliance
IoT	Internet of Things
IP	Internet Protocol
ML	Machine Learning
MEC	Multiaccess Edge Computing
OTS	Over the Shoulder

Table 1: Glossary

1.2 Related Documents

- UM001 (EdgeCard Server)
- TN001 (EdgeCard Removal and Installation)
- QF001 (GECCO Warranty Policy)

2 Product summary and key features

Description: Ultra compact, rugged, fanless, Edge Computing Appliance (ECA) with pluggable EdgeCard servers.

Applications: Zero-touch computing for edge deployments, remote management, virtual machines, containers, Windows/Linux, multiaccess edge computing (MEC), IoT/AI/ML applications. Suitable for defence, aerospace, telecom, retail, infrastructure, mining, refining, process industries, smart agriculture, smart city, manufacturing, maritime, and more!

Benefits: Easy to deploy because its small size, low weight, and pluggable design eliminates wiring problems. Easy to maintain and EdgeCard swap out for upgrades and repairs.

2.1 What you will find in the box

- 1x EdgePod, transportable variant
- 1x Reference Sheet
- 2x Emergency Power Connector (V3 models only, 9V battery not included)
- 2x Barrel key (only if equipped with lock bypass)

2.2 Installation Instructions

The transportable variant of the EdgePod is a free-standing appliance and can be placed on any sturdy flat surface. This variant cannot not be exposed to water and shall be installed in a dry location.

- Carefully remove EdgePod from shipping packaging. The EdgePod shall not be lifted by the door.
- Place the EdgePod on a flat surface capable of carrying at least 36 kg (80 lbs).
- Ensure the EdgePod is oriented in such a way the heatsinks fins are vertical. Ensure air can travel freely through the heatsinks by allowing 150mm (6.0in) clearance space on the left, right and top sides of the EdgePod.
- Reserve enough space in the front of the EdgePod to allow for opening the door, if applicable.

The EdgePod shall be powered through the DC jack on the back panel. Refer to the Technical Specifications section for more detail.

2.3 Technical Specifications

Size (DxWxH)	300mm x 365mm x 390mm (11.8in x 14.4in x 15.4in)
Weight	27 kg (60 lbs)
Power	18-48Vdc, max. 300W [1]
Cooling	Passive (no internal fan)
Connectivity – front	Direct access to front panel of EdgeCards. Please refer to EdgeCard User Manual for more information.

[1] Power Consumption depends on EdgeCard configuration.

	Access is secured behind a door if the EdgePod is ordered with a door option.
Connectivity – rear	4x 2.5Gb Ethernet (2500BASE-T) [2] 4x 1Gb BMC Ethernet (1000BASE-T) [2] 1x 1Gb OTS Camera Ethernet (1000BASE-T) 1x Main Power Supply 1x Emergency Power Supply (9Vdc)
Compliance	Designed to meet: UL/CSA/NOM-019 safety standards FCC/ISED/NOM-208 radiation standards

3 Accessing the EdgePod

3.1 Front

EdgeCard connectors are accessible and LED indicators are visible from the front of the EdgePod when the EdgePod door is open. Please refer to the EdgeCard User Manual [UM001] for detailed information and user instructions.

When the EdgePod is equipped with the optional Digital ID management and access control system, the only way to open the door and gain access is through the Teleporte mobile app provided by Sera4.

Figure 1. Teleporte App icon.

1. To start, download the Teleporte app on your Android or iOS device.

GET IT ON Google Play

Available on the App Store

2. Sign in to the mobile application with the account email and password provided by your administrator or use the email link sent to you that allows access.
3. Hold your mobile device within two meters of the EdgePod, and the lock controller icon will appear on the Teleporte app screen. If multiple locks show up, because multiple EdgePods are in range, please refer to the lock hardware ID printed on the label on the rear of the EdgePod.

[2] One port for each server, only active when a server is installed.

4. Tap on the lock icon to open the lock.

Note that the EdgePod must be powered on to operate the lock controller. If no main power is available, use the Emergency Power connector supplied with the EdgePod to provide power (requires 9V battery). For further instructions and troubleshooting tips, please visit:

https://cx.sera4.com/onboarding#teleporte-mobile-application

3.2 Rear

The rear panel is freely accessible on the transportable variant of the EdgePod. Configuration of the rear panel may vary, and custom configurations are beyond the scope of this document.

Rear Panel Feature	EdgePod V3	EdgePod V4
Main power connector	7.4*5.0mm female DC jack	7.4*5.0mm female DC jack
Lock backup connector	5.5*2.1mm female DC jack	9V battery clip
OTS camera connector	RJ45 located in the lower right corner of the rear panel.	RJ45 located in the upper right corner of the rear panel.

Figure 2 shows the default panel for an EdgePod V3 without internal switch. Figure 3 shows the rear panel of the EdgePod V4 without internal switch and with optional lock bypass.

Figure 2. Rear panel of transportable variant EdgePod V3 without internal switch.

Figure 3. Rear panel of transportable variant EdgePod V4 without internal switch.

Each server slot has its own Ethernet port labelled “Primary” and its own maintenance port labelled “BMC”. These ports are only active if an EdgeCard is installed in the slot. For more information on the maintenance port and the use of the Baseboard Management Controller software, please refer to the EdgeCard User Manual [UM001].

An additional Ethernet port is available to access the OTS Camera. Please refer to section 4 for more information. The location of the OTS Camera connector varies depending on the model.

All Ethernet devices in the EdgePod are configured to dynamically receive an IP address from the network. Variants without internal switch require an external switch and a DHCP server (or similar service). Generally, a DHCP server can show a list of devices on the network and their IP addresses. If this in unavailable, an application such as Advanced IP Scanner could be used to scan the network and find Ethernet devices. Install and run this application on a separate computer attached to the same network as the EdgePod.

4 Using the OTS Camera

The OTS Camera is an IP Network Camera located in the interior of the EdgePod door. When the door is opened fully, the camara points to the front panel of the EdgePod showing the front connectors and indicators on the EdgeCards for remote, over-the-shoulder, technical support.

The OTS Camara has a built in web-interface, accessible through a regular internet browser using the camera's IP address (see section 3.2). The credentials to access the camera are as follows, and can be changed through the web-interface:

- Username: admin
- Password: admin

Alternatively, the camera can be added as an IP camera in 3rd party software. The camera is Onvif 17.06 compatible.

Note: the OTS Camara is always on, even when the door is closed, and may be warm to the touch. This is normal.

5 Maintenance

The EdgePod shall not be disassembled or modified in any way other than operating the door, remove covers from empty slots, and install and/or remove EdgeCards.

For the removal and installation of EdgeCards, please refer to document TN001 (EdgeCard Removal and Installation).

6 Warranty

GECCO products carry a 5 year limited warranty. Please refer to the GECCO Warranty Policy [QF001].