Effective January 2024

Eaton Green Motion Building and Green Motion Fleet commissioning



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NOTICE

IF YOU PROCURED GMEV40CMC1B-WC OR GMEV80CMC1B-WC MODELS WITH EATON CHARGING NETWORK MANAGER (CNM) SOFTWARE SUBSCRIPTION AND EATON SUPPLIED SIM CARD FOR CELLULAR CONNECTIVITY, THEN YOU DO NOT NEED TO FOLLOW INSTRUCTIONS OUTLINED IN THIS DOCUMENT. ONCE POWERED, YOUR EV CHARGE STATION WILL AUTOMATICALLY CONNECT TO EATON CNM.

YOU NEED SERIAL NUMBER, OCPP ID, AND STATION DISPLAY ID TO CLAIM AN EV CHARGE STATION WITHIN THE EATON CNM. THIS INFORMATION CAN BE FOUND ON THE SHIPPING LABEL AFFIXED TO THE UNIT BOX—SEE IMAGE BELOW. REFER TO SITE HOST GUIDE FOR CLAIMING INSTRUCTIONS.



Cat #: GMEV40CMC18-WC Serial Number: ABC-XYZ-0001 0CPP ID: ABC-XYZ-0001 Station Display ID: ABC-XYZ-0001 SIM Card ID: ABC01234567XYZ



(Sample form)

1.0 Document overview

For scenarios other than the ones mentioned in the "NOTICE" on the previous page, refer to this document for instructions on how to use Eaton's EV charge station Commissioning Tool to connect Green Motion[™] Building and Green Motion Fleet (EV charging station) to Eaton CNM software. Additionally, this document provides instructions to operate your EV charge station in a non-CNM (non-network) mode. The table below outlines the EV charge station model numbers and connectivity options.

Model number	Description	Connectivity to CNM
GMEV40CME1B-WC	9.6 kW AC Level 2 charger, 240 Vac, 40 A	Wi-Fi, Ethernet
GMEV40CMC1B-WC	9.6 kW AC Level 2 charger, 240 Vac, 40 A	4G, Ethernet
GMEV80CME1B-WC	19.2 kW AC Level 2 charger, 240 Vac, 80 A	Wi-Fi, Ethernet
GMEV80CMC1B-WC	19.2 kW AC Level 2 charger, 240 Vac, 80 A	4G, Ethernet

Figure 1. Green Motion Building/Fleet (EV charge station)



The LCD screen example below shows home screen of an EV charge station with various icons.

Figure 2. Green Motion Building charger (GMEV40CMC1B-WC Ethernet and cellular) LCD home screen



Figure 3. Green Motion Building charger (GMEV40CME1B-WC Ethernet and Wi-Fi) LCD home screen



Figure 4. LCD icons indicating status

Note: Instructions on how to install this EV charger Commissioning Tool and connect to the EV charge station are provided in Section 8.0. You will need a laptop or a computer with Windows' 8/10/11 and an RJ45 (Ethernet) cable.

	Connected	Disconnected
Wi-Fi	(îr-	
Ethernet		X
Cellular	4G .ıl	ag
Eaton CNM	Ø	€×

2.0 EV charge station commissioning via Wi-Fi

Model numbers GMEV40CME1B-WC and GMEV80CME1B-WC support Wi-Fi. To use Wi-Fi for Eaton CNM connectivity, users are required to use the Eaton EV charger Commissioning Tool.

The Eaton EV charge station currently supports only 2.4 GHz Wi-Fi.

Figure 5. EV charge station commissioning with Wi-Fi

🖫 ເປັດແມ່ນ Commissioning tool for Green Motion Fleet and Green Motion Buildi	ng – 🗆 X
How to use this tool: Step 1: Connect: Ethermet (R/45) cable between computer and EV Charger. Click in 'Set Up' for additional instructions. Step 2: Click: 'Connect' once ready Step 3: Once successfully connected, update EV Charger settings as needed. Few examples: a. Use "Wi-Fi" tab, below to enter Wi- Fi network credentials. b. Use "Cellular" tab below to enter Cellular network credentials. c. Use "COP" to b, below to userier Cellular network credentials. c. Use "COP" to b, below to enter Cellular network credentials. Step 3: After all settings are complete, click on "Reboote EV Charger in Non-networked mode. Step 4: After all settings are complete, click on "Reboote EV Charger to resume normal functionality.	Connect to EV Charger EV Charger Serial# Password: Setial # Example FIA-158-0025
Activity Log	Located on Product label
	Other Functions Get EV Charger Info Update Firmware
A Settings	Clear Activity Log
WI-FI Cellular OCPP LCD Password Reset	Reboot EV Charger
V2.1.5 client disconnect	E:T•N

Follow the steps below to enable Wi-Fi:

- 1. Connect the EV charge station to the Commissioning Tool per instructions in Section 8.0.
- 2. When the EV charger is connected to the Commissioning Tool, go to Settings -> Wi-Fi. Type the SSID and password of the Wi-Fi network you wish to connect and click Submit.
- 3. Confirm that the EV charge station received these credentials in the Activity Log.

Figure 6. Activity Log showing the successful transfer of Wi-Fi credentials

Activity Log	
ccm:model=2 ccm:fullstop=0 ccm:fullstoptime=60 ccm:energy=1142 ccm:offlinecharging=0 safe:rfd_aes_off=0 safe:jtag_en=0	^
set success, wifi ssid=NorthLab set success, wifi password=*	
	~

- 4. Reboot the EV charge station through the Commissioning Tool (Other Functions -> Reboot EV charge station).
- 5. Disconnect the EV charge station from the Commissioning Tool by disconnecting the RJ45 (Ethernet) cable.

Once the EV charge station powers up, it will connect to the Wi-Fi router and subsequently to the Eaton CNM. The image below shows the EV charge station is connected to a local Wi-Fi connection and the Eaton CNM.

Figure 7. LCD screen of EV charge station connected to Eaton CNM via Wi-Fi



3.0 EV charge station commissioning via Ethernet

All Green Motion Building and Green Motion Fleet model numbers support Ethernet connection. When an Ethernet (RJ45) cable with valid internet connection is plugged in, the EV charge station will automatically attempt to connect to the Eaton CNM. LCD screen icons indicate both an Ethernet connection and an Eaton CNM connection. Please note that an Ethernet connection will take priority over the cellular connection.



Figure 8. LCD screen of EV charge station connected to Eaton CNM via Ethernet



4.0 EV charge station commissioning via cellular (non-Eaton SIM)

Model numbers GMEV40CMC1B-WC and GMEV80CMC1B-WC have a 4G module. As indicated earlier, these model numbers ship with an SIM card supplied by Eaton's CNM. **If you wish to use a different SIM card**, you need to follow the **instructions provided in the installation guide**, to carefully disassemble the EV charge station and replace the SIM card.

Green Motion Building and Green Motion Fleet stations have Quectel EC25-AFX 4G module and support Verizon, AT&T, and T-Mobile networks. Please contact your SIM card provider to confirm that the SIM card is approved to be used with these EV charge stations.

When an activated SIM card is placed in the EV charge station, follow the steps below to commission the EV charge station.

- 1. Connect the EV charge station to the Commissioning Tool per instructions in Section 8.0.
- 2. Go to Settings -> Cellular.
- 3. Update the APN information for the new SIM and click Submit. Contact your SIM card provider for this information.

Figure 9. EV charge station commissioning via cellular



- Reboot the EV charge station via the Commissioning Tool (Other Functions -> Reboot EV Charge station).
- 5. Disconnect the EV charge station from the Commissioning Tool by disconnecting the RJ45 (Ethernet) cable.

When the EV charge station powers up, it will attempt to establish cellular connectivity with the carrier network. Once successfully connected to the cellular network, it will attempt to connect with the Eaton CNM. "Cellular" and "Eaton CNM" icons will be illuminated on the display when successful connections are established.





5.0 EV charge station in non-CNM (non-network) mode

Follow the instructions below to configure the EV charge station to operate in a non-CNM (non-network) mode. In this mode, EV charge stations will have no access control. They are free and open to any driver who connects their vehicle. EV drivers with physical access to the EV charge station will be able to initiate a charge session.

- 1. Connect the EV charge station to the Commissioning Tool per instructions in Section 8.0.
- 2. Go to Settings -> OCPP.
- 3. Click on Operate in Non-network (Free) Mode.

Figure 11. EV charge set up in non-network (free) mode

	How to use this tool: Step 1: Connect Ethernet (RJ45) cable between computer and EV Charger. Click in 'Set Up' for additional Instructions. Step 3: Click 'Connect' once ready Step 3: Once successfully connected, update EV Charger settings as needed. Few examples: a. Use 'WI-FI' tab, below to enter WI-FI network credentials. b. Use 'Cellular' tab below to enter Cellular network credentials. c. Use 'OCPP' tab, below to enter Cellular network credentials. c. Use 'OCPP' tab, below to view/edit OCPP settings. Use this tab to pair the EV Charger with a charging management platform or operate EV charger in Non-networked mode. Step 4: After all settings are complete, click on Rebote EV Charger (other Functions) for changes to take effect. Disconnect Ethernet cable between computer and EV Charger to resume normal functionality.	Connect to EV Charger EV Charger Serial#: Password: Set up Connect Serial # Example: EIA-158-0025
	Activity Log	Located on Product label
		Other Functions Get EV Charger Info Update Firmware
	Cottingo	Clear Activity Log
Wi-Fi Cellula	OCP LCD Password Reset	
OCPP ser	er:	Reboot EV Charger
Authorization K	ey: submit	Help
CAcertificate	: amazon v submit Update CA Folder CA	
V2.1.3 client disco	nnect	E:T-N

- 4. Reboot the EV charge station via the Commissioning Tool (Other Functions -> Reboot EV Charge station).
- 5. Disconnect the EV charge station from the Commissioning Tool by disconnecting the RJ45 (Ethernet) cable.

The EV charge station is now available in non-network mode.

6.0 EV charge station commissioning to a third-party (non-Eaton) CNM software

Follow the instructions below to commission the EV charge station to a non-Eaton CNM software.

- 1. Connect the EV charge station to the Commissioning Tool per instructions in Section 8.0.
- 2. Go to Settings -> OCPP.
- 3. Enter the OCPP server, authentication key, and certification details. Please contact your CNM software provider for these details.

Figure 12. EV charge station set up in non-Eaton CNM software

Commissioning tool for Green Motion Fleet and Green Motion Buildi	ng – 🗆 X
How to use this tool: Step 1: Connect Ethernet (R45) cable between computer and EV Charger. Click in 'Set Up' for additional instructions. Step 2: Click 'Connect' once ready Step 3: Once successfully connected, update EV Charger settings as needed. Few examples: a. Use "WI-Fi" tab, below to enter WI- Fi network credentials. b. Use "Cellular" tab below to enter Cellular network credentials. c. Use "COPP" tob, below to view/edit COP settings. Use this tab to pair the EV Charger with a charging management platform or operate EV charger in Non-networked mode. Step 4: After all settings are complete, click on 'Reboot EV Charger to resume normal functionality.	Connect to EV Charger EV Charger Serial#: Password: Set up Connect
Activity Log	Located on Product label
	Other Functions Get EV Charger Info Update Firmware
WI-FI Cellular OCPP LCD Password Reset	Clear Activity Log
OCFP server:	Reboot EV Charger
V2.1.3 client disconnect	Fat•N

- Reboot the EV charge station via the Commissioning Tool (Other Functions -> Reboot EV Charge station).
- 5. Disconnect the EV charge station from the Commissioning Tool by disconnecting the RJ45 (Ethernet) cable.

Please contact your CNM software provider to claim the EV charge station.

7.0 Update EV charge station LCD display language (English/French/Spanish)

Follow the instructions below to change the LCD display language on your EV charge station.

- 1. Connect the EV charge station to the Commissioning Tool per instructions in Section 8.0.
- 2. Go to Settings -> LCD.
- 3. Select the desired language. Click Submit.
- 4. Reboot the EV charge station via the Commissioning Tool (Other Functions -> Reboot EV Charge station).
- 5. Disconnect the EV charge station from the Commissioning Tool by disconnecting the RJ45 (Ethernet) cable.

When the EV charge station is powered up, the LCD display language will be updated.

Figure 13. Change the LCD display language on your EV charge station

How to use this tool: Step 1: Connect Ethemet (B/45) cable between computer and EV Charger. Click in 'Set Up' for additional instructions. Step 2: Click 'Connect' once ready Step 4: Click 'Connect' once ready Step 4: Click 'Connect' once ready Step 4: After all setting's table bow to view/edit OCPP's settings. Use this tab top all the EV Charger with a charger's click on 'Reboot EV Charger' (Other Functions) for changes to take effect. Disconnect Ethernet cable between computer and EV Charger' to resume normal functionality.	Connect to EV Charger EV Charger Serial#: EIA-158-0025 Password: **** Set up Connect Serial # Example: EIA-158-0025 Located on Product label Other Functions Get EV Charger Info
Settings	Clear Activity Log
Language: English v submit	Reboot EV Charger

8.0 EV charge station Commissioning Tool install and setup

Eaton's EV charge station Commissioning Tool is available on Eaton's product website for Green Motion Building and Green Motion Fleet, under the **Resources** section. Necessary tools:

- Laptop or computer with Windows 8/10/11 and RJ45 (Ethernet) port
- RJ45 (Ethernet) cable

Follow the below steps to install and use the EV charge station Commissioning Tool.

8.1 Install the EV charge station Commissioning Tool

Download the EV charge station Commissioning Tool on your computer and open the tool. (Note that the setup instructions are also displayed when you click the Set Up button on the Commissioning Tool.)

Figure 14. EV charge station Commissioning Tool setup

$\overline{\mathbb{F}}$ Commissioning tool for Green Motion Fleet and Green Motion Build	ing – 🗆 🗙
How to use this tool: Step 1: Connect Ethernet (R/45) cable between computer and EV Charger. Click in 'Set Up' for additional Instructions. Step 2: Click 'Connect' once ready Step 3: Once successfully connected, update EV Charger settings as needed. Few examples: a. Use 'Collular' tab below to enter Cellular network credentials. b. Use 'Cellular' tab below to enter Cellular network credentials. c. Use ''OEP' tab, below to enter Cellular network credentials. c. Use ''OEP' tab, below to enter Cellular network credentials. c. Use ''OEP' tab, below to enter Cellular network credentials. c. Use ''OEP' tab, below to enter Cellular network tredentials. Step 3: After all settings are completer. Click on 'Reboot EV Charger to resume normal functionality.	Connect to EV Charger EV Charger Serial#: Pessword: Set up Connect Set 18 E Paramite: Fig. 158-0025
Activity Log	Located on Product label
^	Other Functions
	Get EV Charger Info
	Update Firmware
Settings	Clear Activity Log
SSID:	Reboot EV Charger
Password:	негр
Note: WI-FI is available only for GMEV40CME18-WC and GMEV80CME18-WC models	
V213 Client disconnect	F:T-N

8.2 Connect your computer to the EV charge station

Use an Ethernet cable to safely connect your computer and the EV charge station. The Ethernet port is accessible at the bottom surface of the EV charge station. Once connected, the Ethernet icon on the EV charge station LCD will turn ON.

Figure 15. Use Ethernet cable to connect computer with EV charge station



8.3 Update TCP/IP settings on your computer

- Note: These instructions are also displayed in detail when you click the Set Up button on the Commissioning Tool.
- Note: If your computer is on a company network, please contact your IT department for assistance.
- 1. Access the TCP/IP settings from your computer's Control Panel -> Network and Internet -> Network and Sharing Center -> Change Adapter Settings.
- 2. Right click on the 'Ethernet' connection (connected to EV charge station) and select Ethernet Properties -> Networking Tab -> Internet Protocol Version 4 (TCP/IPv4). Select this setting and click Properties. See image below.

Figure 16. Ethernet connection properties

Ethernet Properties	×
Networking Authentication Sharing	
Connect using:	
Intel(R) Ethernet Connection (14) I219-LM	
Conf	iqure
This connection uses the following items:	iguro
Client for Microsoft Networks	^
File and Printer Sharing for Microsoft Networks	
QoS Packet Scheduler	
Juniper Network Service	
✓ Internet Protocol Version 4 (TCP/IPv4))
Microsoft Network Adapter Multiplexor Protocol	
<) ×
Install Uninstall Prop	erties
Description	
Transmission Control Protocol/Internet Protocol. The d	lefault
wide area network protocol that provides communication	on
across diverse interconnected networks.	
OK	Cancel

12

3. Update the IP addresses as shown in the red box below and select OK.

Figure 17. IP address updates

nternet (TCP/IPv4) Properties	×
General	
You can get IP settings assigned autor this capability. Otherwise, you need to for the appropriate IP settings.	matically if your network supports a ask your network administrator
Obtain an IP address automatical	lly
 Use the following IP address: 	
IP address:	192 . 168 . 100 . 100
Subnet mask:	255.255.255.0
Default gateway:	192 . 168 . 100 . 1
Obtain DNS server address autor	matically
OUse the following DNS server add	dresses:
Preferred DNS server:	
Alternate DNS server:	· · ·
Validate settings upon exit	Advanced
	OK Cancel

4. You are now ready to connect the EV charge station Commissioning Tool to the EV charge station.

Note: Users may see a firewall setting pop up. Check the settings as shown and click Allow Access.

Figure 18. Firewall setting to allow access to Commissioning Tool

💼 Windows Secu	urity Alert		×
Windo app	ws Defend	er Firewall has blocked some features of this	
Windows Defender Commissioning Tool	Firewall has blo on all public an	cked some features of Eaton Green Motion Building and Fleet d private networks.	
	Name:	Eaton Green Motion Building and Fleet Commissioning Tool	
	Publisher:	Eaton	
	Path:	C:\users\99155\desktop\eaton\eaton green motion building and fleet commissioning tool.exe	
Allow Eaton Green	Motion Building	and Fleet Commissioning Tool to communicate on	
 Private networks, such as my home or work network Public networks, such as those in airports and coffee shops (not recommended because these networks often have little or no security) 			
What are the risks of allowing an app through a firewall?			
		Allow access Cancel	

Note: If you are still unable to connect your computer to the EV charge station, please check the firewall list and add "eaton green motion building and fleet commissioning tool. Exe" to the Allow list.

Figure 19. Add EV charge station Commissioning Tool to Allow list

Allowed apps				-	×
← → ∽ ↑ 🏪 – Syster	m and Security $ ightarrow$ Windows Defender Firewall $ ightarrow$ Allowed apps $ ightarrow$	C Search (Control Panel		Q
	Allow apps to communicate through Windows Defender	Firewall			
	What are the risks of allowing an app to communicate?	9 0	nange settings		
	Allowed apps and features:				
	Name	Privat	e Public		
	EDesktop App Web Viewer	X	2		
	E DiagTrack	2	2		
	■DIAL protocol server		• -		
	Distributed Transaction Coordinator				
	EDolby Access	N	2		
	Seaton green motion building and fleet commissioning tool.exe				
	Email and accounts		3		
	≌Feedback Hub	N	2		
	■File and Printer Sharing		7		
	File and Printer Sharing over SMBDirect				
	≌Get Help		2		
	Clance by Mirametrix®	M	7		
		Details	Remove		
		Allow a	nother app		
		OK	Cancel		

14

8.4 Log in and connect Commissioning Tool to EV charge station

- To connect to the EV charge station, you will need the EV charge station serial number, which is found on a QR code sticker attached to the EV charge station. Default password to log in is "eaton". It is recommended that this default password be updated to a stronger password upon installation.
- 2. Click Connect. A message indicating a successful connection will appear in the Activity Log.

Figure 20. Connecting EV charge station to Commissioning Tool

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Activity Log	Located on Product label
	Other Functions GetEV Charger Info Update Firmware
Settings	Clear Activity Log
Wi-Fi Cellular OCPP LCD Password Reset OCPP server:	Reboot EV Charger

Figure 21. EV charge station serial number



3. Users will be forced to update the default password to a stronger password. Strong password requirements are mentioned under Settings -> Password Reset tab.

Once connected, you will be able to update various EV charge station settings available under the Settings menu.

Instructions to change password or reset to default password

If you remember your password:

- Follow the steps described in 8.1 through 8.4 to connect the EV charge station Commissioning Tool to the EV charge station. Update the password under the Settings -> Password Reset tab.
- 2. Click Disconnect and reconnect with the updated password.

If you DO NOT remember your password:

You can reset to default password (default password: eaton) by following the steps below.

- 1. Follow the steps described in 8.1 through 8.3 to connect your computer and the EV charge station.
- 2. Open the EV charge station Commissioning Tool.
- 3. Go to Settings -> Password Reset tab. Click Reset Password to Default.
- 4. Click OK on the pop-up window.
- 5. Wait for the "Authentication success!(recovery)" message on the Activity Log.

Figure 22. Activity Log showing EV charge station ready for power cycle

Activity Log			
client num:1	^		
Searching 10 sec			
Version info			
Vendor=Joint			
Model=evc1x_80			
SN=EJD-11B-0004			
Hardware=ACP2100US-80A			
Software=N1-3P2_C_1.2.1C6_R4690			
Authentication success!(recovery)			
Please power off to restart			

- 6. Within 15 minutes, power cycle the EV charge station by tripping and resetting the circuit breaker powering the EV charge station.
- 7. You can now connect to the EV charge station with the default password (eaton).
- 8. You will be required to update the password to a stronger password.

This concludes the commissioning instructions.

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