

# Eaton EV Charging Bus plug Commissioning

Important Note: If you procured GMEV80CMC1B-AA, GMEV80CMC1B-AB, or GMEV80CMC1B-AC 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 QR label affixed to the EV Bus Plug – see image below. Refer to <u>site host guide</u> for claiming instructions.



(sample form)

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## 1.0 Document Overview:

For scenarios other than the ones mentioned in the 'Important Note' on page 1, refer to this document for **instructions on how to use Eaton's EV charge station commissioning tool** to connect EV charging Busway to Eaton CNM software. Additionally, this document provides instructions to operate your EV Charge station in a non-CNM (non-network) mode.



Figure 1: EV Charging Bus Plug

Note 1: Instructions on how to install this EV charger commissioning tool and connect to the EV Charge station, are provided in section 5.0. You will need a laptop or computer with Windows 8/10/11 and a RJ45 (Ethernet) cable.

Note2: Please note that some of the setting under "Cellular", "OCPP" and "LCD" tabs, of the commissioning tool, are not applicable for EV Charging Bus Plug products.

## 2.0 EV Charge station commissioning via Wi-Fi

Model numbers GMEV80CME1B-AA, GMEV80CME1B-AB, and GMEV80CME1B-AC 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 supports only 2.4GHz Wi-Fi currently.





Figure 2: EV Charge station commissioning with Wi-Fi

Follow the steps below to enable Wi-Fi:

- 1. Connect the EV Charge station to the Commissioning tool per instructions in section 5.0.
- Once your EV Charger is connected to the Commissioning tool, go to 'Settings -> Wi-Fi. Type in the SSID and Password of the Wi-Fi network you wish to connect and 'Submit'.
- 3. Confirm that the EV Charge station received these credentials in the Activity log.

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

Figure 3 Activity log showing the successful transfer of Wi-Fi credentials

- 4. Reboot the EV Charge station thru 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 Eaton CNM.



## 3.0 EV Charge station commissioning via Ethernet

All EV Bus Plug model numbers support Ethernet connection. Once an ethernet (RJ45) cable with valid internet connection is plugged in, EV Charge station will automatically attempt to connect to Eaton CNM. LCD screen icons indicate ethernet connection and an Eaton CNM connection as well. Please note that an Ethernet connection will take priority over the cellular connection.

#### Important: Please enable DHCP on the router supporting the Ethernet connection.



Figure 4: Ethernet Port on EV Bus Plug

### 4.0 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 (nonnetwork) mode. In this mode, EV Charge station 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.

Commissioning tool for Green Motion Fleet and Green Motion Buildi      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: Click 'Connect' once ready     Step 3: Click 'Connect' once ready     Step 3: Click 'Source' once ready     Step 4: Click 'Source' once ready     Step 5: Click 'Source' once r	ng — C X Connect to EV Charger EV Charger Serial#: Password: Set up Connect
effect. Disconnect Ethernet cable between computer and EV Charger to resume normal functionality.      Activity Log	Serial # Example: EJA-15B-0025 Located on Product label
	Other Functions Get EV Charger Info Update Firmware
Wi-Fi Cellular OCPP LCD Password Reset	Clear Activity Log
OCPP server:	Reboot EV Charger
Authorization Key: submit submit	Help
/2.1.3 client disconnect	F:T·N

Figure 5: EV charge station set up in Non-network (Free) mode

- 1. Connect the EV Charge station to the Commissioning tool per instructions section 5.0.
- 2. Go to 'Settings -> OCPP'
- 3. Click on 'Operate in Non-network (Free) mode'
- 4. Reboot the EV Charge station thru 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.

Your EV Charge station is now available in non-network mode.

## 5.0 EV Charge station Commissioning Tool Install and Setup

#### Eaton's EV Charge station Commissioning Tool can be downloaded from Eaton's product website.

Necessary tools: 1. Laptop or computer with Windows 8/10/11 and RJ45(ethernet) port

#### 2. RJ45 (ethernet) cable

#### Follow the below steps to install and use the EV Charge station commissioning tool.

#### 5.1 Install the EV Charge station Commissioning tool

Download the EV Charge station Commissioning Tool on your computer and open the tool. (Note that the set up instructions are also displayed when you click 'Set up' button on the commissioning tool.)



Figure 6: EV Charge station commission tool set up

### 5.2 Connect your computer to the EV Charge station

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



Figure 7: Use ethernet cable to connect computer with EV charge station

### 5.3 Update TCP/IP settings on your computer

Note: These instructions are also displayed in detail when you click 'Set up' button on the commissioning tool.

Note: If your computer is on a company network, please contact your IT department for assistance.

- a. Access the TCP/IP settings from your computer's Control Panel -> Network and Internet -> Network and sharing center -> change adapter settings
- b. Right click on the 'Ethernet' connection (connected to EV Charge station) and select



'Properties'-> Networking Tab ->Internet Protocol Version 4 (TCP/IPv4) – Select this setting and click on Properties. See image below.

Ethernet Properties	×
Networking Authentication Sharing	
Connect using: Intel(R) Ethernet Connection (14) I219-LM <u>Configure</u>	
This connection uses the following items:	
Install Uninstall Properties	)
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.	
OK Cance	el

Figure 8: Ethernet connection properties

c. Update the IP addresses as shown in the red box below. Select OK.

Internet (TCP/IPv4) Properties	×
General	
You can get IP settings assigned au this capability. Otherwise, you need for the appropriate IP settings. Obtain an IP address automati	tomatically if your network supports to ask your network administrator cally
O 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 aut	tomatically
O Use the following DNS server a	ddresses:
Preferred DNS server:	
Alternate DNS server:	
Validate settings upon exit	Advanced
	OK Cancel

Figure 9: IP address updates

d. You are now ready to connect the EV Charge station commissioning tool to the EV Charge station

Note 1: Users may see a Firewall setting pop-up. Check the settings as shown and click 'Allow access'.



💼 Windows Secu	ırity 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 netw	rorks, such as m	ny home or work network	
because the	se networks oft	en have little or no security)	
What are the risks	of allowing an a	pp through a firewall?	
		Allow access Cance	

Figure 10: Firewall setting to allow access to commissioning tool

Note 2: 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.

hllowed apps				-	×
← → ✓ ↑ 🅍 « Syste	em and Security $ ightarrow$ Windows Defender Firewall $ ightarrow$ Allowed apps $$	C Search C	Control Panel		Q,
	Allow apps to communicate through windows Defende	er Firewall			
	To add, change, or remove allowed apps and ports, click Change settings.				
	What are the risks of allowing an app to communicate?	<b>P</b> CF	ange settings		
	Allowed apps and features:				
	Name	Privat	e Public		
	⊠DiagTrack				
	☑ DIAL protocol server	2			
	Distributed Transaction Coordinator				
	☑ Dolby Access	×	¥		
	Reaton green motion building and fleet commissioning tool.exe				
	Email and accounts	V			
	⊠Feedback Hub	¥	¥		
	☑ File and Printer Sharing		¥		
	□File and Printer Sharing over SMBDirect				
	⊠Get Help				
	Glance by Mirametrix®	Ø	2		
		Details	Remove		
		Allow a	nother app		
		OK	Cancel		

Figure 11: Add EV Charge station commissioning tool to allow list

#### 5.4 Log in and connect commissioning tool to EV Charge station

a. To connect to EV Charge station, you will need the EV Charge station Serial number. You will find this Serial number 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.



b. Click 'Connect'. Message indicating a successful connection will appear in the 'Activity Log'

	low to use this tool: tep 1: Connect themere (R45) cable between computer and EV Charger. Click in 'Set Up' for additional structions. tep 2: Click 'Connect' once ready tep 3: Once successfully connected, update EV Charger settings as needed. Few examples: a. Use "VFI'Tab. Poleou on enter WI: F1 network redentials. b. Use "Cellular' tab below to enter Cellular network redentials. c. Use "CP" tab. Poleou to view/cell COPE settings. Use this tab to pair the EV Charger with a harging management platform or operate EV charger in Non-networked mode. tog 4: After all settings are complete, click on "Rebot EV Charger to resume normal functionality.	Connect to EV Charger EV Charger Serial# EUA-158-0025 Password: ***** Set up Connect <
	Activity Log	Located on Product label
	Â	Other Functions
	, ,	Update Firmware
Wi-Fi Cellular	Settings CCPP LCD Password Reset	Update Firmware
Wi-Fi Cellular OCPP serve	Settings           OCPP         LCD         Password Reset           :	Update Firmware Clear Activity Log Reboot EV Charger
Wi-Fi Cellular OCPP serve Authorization Key	Settings           OCPP         LCD         Password Reset           -	Update Firmware Clear Activity Log Reboot EV Charger Help

Figure 12: Connecting EV charge station to Commissioning tool



Figure 13: EV Charge station Serial Number

c. 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:



- a. Follow the steps described in 5.1 through 5.4 to connect the EV Charge station commissioning tool to the EV Charge station. Update the password under the 'Settings -> Password Reset' tab
- b. 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 steps below

- a. Follow the steps described in 8.1 through 8.3 to connect your computer and the EV Charge station.
- b. Open the EV Charge station commissioning tool
- c. Go to 'Settings -> Password Reset' tab. Click on 'Reset Password to default'
- d. Click 'OK' on the pop-up window
  - e. Wait for the "Authentication success(recovery)" message on the Activity Log



Figure 14: Activity log showing EV charge station ready for power cycle

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

#### End of document