# Watt Point ™

# By Control Module Inc., EVSE LLC

# State of the Art EVSE

# **Gateway Module**

# Model 3727-200



# Control Module Industries Founded in 1969

# EVSE LLC

**User Manual and Installation Guide** 

### Models 3727-200

### **EVSE** Gateway Module

**Patents Pending** 

3727-UG-200

December 2015

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# Important Notes

# Safety and Compliance

This document provides instructions for installing and using the Watt Point<sup>™</sup> Gateway Module 3727-200, which manages data communication within a network of Watt Point Charging Stations (EVSE's). Before installation of the Watt Point Gateway Module by licensed professionals, you should review this manual carefully and consult with a licensed contractor, licensed electrician and trained installation expert to ensure compliance with local building practices, climate conditions, safety standards, and state and local codes. As part of a total EVSE network, the Watt Point Gateway Module and Charging Station should be inspected by a qualified installer prior to the initial use. Under no circumstances will compliance with the information in this manual relieve the user of responsibility to comply with all applicable codes or safety standards. This document describes the most commonly-used installation and mounting scenarios. If situations arise in which it is not possible to perform an installation following the procedures provided in this document, contact Control Module Inc., EVSE LLC. Control Module Inc., EVSE LLC, is not responsible for any damages that may occur resulting from custom installations that are not described in this document.

# Warranty Information and Disclaimer

Your use of, or modification to, the Watt Point Gateway Module in a manner in which the Watt Point Gateway Module is not intended to be used or modified will void the limited warranty. Other than any such limited warranty, the Control Module Inc., EVSE LLC, products are provided "AS IS," and Control Module Inc., EVSE LLC, and its distributors expressly disclaim all implied warranties, including any warranty of design, merchantability, fitness for particular purposes and non-infringement, to the maximum extent permitted by law.

### Limitation of Liability

IN NO EVENT SHALL CONTROL MODULE INC, EVSE LLC, OR ITS AUTHORIZED DISTRIBUTORS BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST PROFITS, LOST DATA, LOSS OF USE, COST OF COVER, OR LOSS OR DAMAGE TO THE WATT POINT CHARGING STATION OR GATEWAY MODULE, ARISING OUT OF OR RELATING TO THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CONTROL MODULE INC, EVSE LLC, OR ITS AUTHORIZED DISTRIBUTORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

### FCC Compliance Statement

**Note**: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

#### Important

Changes or modifications to this product not authorized by Control Module Inc., EVSE LLC, could affect the EMC compliance and revoke your authority to operate this product.

### Exposure to Radio Frequency Energy

The radiated power outputs of the ZigBee® radio and cellular modem (optional) in this device are below the FCC radio frequency exposure limits for uncontrolled equipment. This device should be operated with a minimum distance of at least 7.9 inches (20 cm) between all antennas and a person's body and must not be co-located with any other antenna or transmitter by the manufacturer, subject to the conditions of the FCC Grant.

### **Copyright and Trademarks**

Copyright 2015 Control Module Inc., EVSE LLC. All rights reserved. This material is protected by the copyright laws of the United States and other countries. It may not be modified, reproduced or distributed without the prior, express written consent of Control Module Inc., EVSE LLC.

Watt Point is a U.S. registered trademark and service mark of Control Module Inc., EVSE LLC. All other products or services mentioned have the trademarks, service marks, registered trademarks or registered service marks of their respective owners. Control Module Inc., EVSE LLC, has filed several patent applications.

ZigBee is a registered trademark of the ZigBee Alliance.

# Instructions Pertaining To Risk of Fire or Electrical Shock

The following is a summary of safety concerns relevant to the installation and use of the Model 3727-200 Gateway Module. Failure to follow these safety instructions may lead to serious injury, death and/or damage to the equipment.



WARNING: is used to provide a warning of hazardous voltage and possibility of electric shock.



**CAUTION:** is used to provide awareness of important safety information in these instructions.



#### IMPORTANT SAFETY INSTRUCTIONS

**WARNING:** Only qualified personnel should perform the installation. This installation must be performed in accordance with all local electrical/building codes and ordinances. Follow lockout/tagout procedures.

Improper connection of the equipment grounding conductor may result in a risk of electric shock. Reference National Electrical Code, ANSI/NFPA 70 for proper sizing of the ground conductor.

**CAUTION:** To reduce the risk of fire when installing the Gateway, connect only to a dedicated circuit with 15A maximum branch circuit over–current protection in accordance with the National Electrical Code, ANSI/NFPA 70.

To satisfy FCC RF exposure requirements for mobile transmitting devices, a separation distance of 20 cm or more should be maintained between the antenna(s) of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended. The antenna(s) used for this transmitter must not be co-located in conjunction with any other antenna or transmitter.

Additional considerations which will contribute to safe operation of this unit include the following:

- DO: Read all instructions before using this product.
  - The device should be supervised when used around children.
  - In case of a problem, contact your installer or CMI Customer Support.
- DON'T: Use this product if the enclosure is broken, cracked, open or shows any other indication of damage.
  - Attempt to repair or service the unit yourself.

#### SAVE THESE INSTRUCTIONS

# Instructions De Sécurité Importantes



**AVERTISSEMENT:** est utilisé pour fournir un avertissement de tension dangereuse et possibilité de choc électrique.



**ATTENTION:** est utilisé pour fournir la prise de conscience de l'information de sécurité importante dans ces instructions.



#### **INSTRUCTIONS DE SÉCURITÉ IMPORTANTES**

AVERTISSEMENT: Seul le personnel qualifié devrait effectuer l'installation. Cette installation doit être effectuée en conformité avec tous les codes électriques/bâtiment locaux et ordonnances. Suivre les procédures de verrouillage/verrouillage.

Mauvaise connexion de l'équipement de mise à la terre chef d'orchestre peut entraîner un risque de choc électrique. Référence National Electrical Code, ANSI/NFPA 70 pour le bon dimensionnement du conducteur au sol.

**ATTENTION:** Afin de réduire le risque d'incendie, se connecter uniquement à un circuit dédié avec protection maximum des branches des over–current circuits 15A bis conformément aux dispositions du Code électrique National, ANSI/NFPA 70.

Pour satisfaire les exigences d'exposition RF de la FCC pour les appareils mobiles de transmission, une distance de séparation de 20 cm ou plus devrait être maintenue entre l'utilisation de ce dispositif et les personnes au cours de l'opération de l'appareil. Afin d'assurer la conformité des opérations à plus proche que cette distance n'est pas recommandée. L'utilisation utilisée pour cet émetteur ne doit pas être détachée en conjonction avec tout autre antenne ou émetteur.

Considérations supplémentaires, ce qui contribueront à la sécurité de fonctionnement de cette unité sont les suivants :

- DO: Lire toutes les instructions avant d'utiliser ce produit.
  - L'appareil doit être supervisé lorsqu'il est utilisé autour des enfants.
  - En cas de problème, contactez votre installateur ou soutien à la clientèle CMI.
- NE PAS: N'utilisez pas que ce produit si l'enceinte est cassée, fissuré, ouvrir ou afficher toute autre indication de dommages.
  - N'essayez pas de réparer ou d'un service de l'unité de vous-même.

#### ENREGISTREZ CES INSTRUCTIONS

# Introduction to Model 3727-200 Gateway Module

The Model 3727-200 Watt Point Gateway Module operates as the central communication system manager for a network of Electric Vehicle Supply Equipment (EVSE) charging systems.

Communication to each charging system is facilitated by a ZigBee mesh network, allowing the Gateway to be located up to 66 feet (indoor/urban) or up to 164 feet (RF line-of-sight) from the nearest ZigBee equipped electric vehicle charger.

Externally, the Gateway Module is able to communicate to third-party systems via Ethernet, which is standard with the unit. An optional cellular modem is also available. The modem is configured to be compatible with either of the AT&T or Verizon networks, but not both simultaneously.

The Gateway Module is packaged in a NEMA 3R-rated enclosure, so it is compatible with outdoor conditions while providing a degree of protection against wind-blown dust, rain, sleet and external ice formation. Units are shipped with a standard three-prong, 120 VAC, electrical plug. The associated electrical receptacle must be mounted in a weatherproof, *in use* enclosure, as well, for the system to be truly weatherproof for outdoor installations. The installer has the option of hard wiring the power to the unit if desired.

# Specifications

Product Code	Model 3727-200		
	Mounting: On EVSE Pole, Remote Pole or Wall		
	Communication to EVSE: ZigBee Mesh or Serial RS-232		
	Communication to Network: Ethernet or Cellular		
Electrical			
Voltage	+24VDC @ 1 amp		
Power Consumption	Less than 24 watts (Based on Configuration)		
Hardware			
CPU	1 GHz		
Ethernet	IEEE 802.3 10Base-T and 802.3u 100Base-T		
ZigBee	Frequencey: 2.4 GHz		
Environmental			
Operating Temp	-22F to +122F (-30C to 50C) Ambient		
Operating Humidity	0 to 90% non-condensing		
NEMA Rating	3R		
Compliance			
EMC	Meets FCC Class A, Canadian ICES-003		
Accessories			
Communication to EVSE (ZigBee)	Contains - FCC ID: MCQ-PROS2B, IC: 1846A-PROS2B (optional)		
Communication to Network (Cellular	Contains - (V) FCC ID: N7N-SL5011, IC: 2417C-SL5011 (optional)		
Modem)	- (A) FCC ID: N7N-SL8090, IC: 2417C-SL8090 (optional)		
General			
Weight	1.85 pounds		
Size	4 in (w) x 17.48 in (h) x 1.34 in (D)		

\*Observe all required Lockout/Tagout procedures while making any electrical connections or servicing the unit.

#### State of the Art EVSE

	Networking	Comm	Mount
	<u>Options</u>	<u>Options</u>	<u>Options</u>
Gateway Communication Module			
Base Unit: <b>3727-200</b>	x	x	ХХ
Networking Options			
Ethernet	E		
CDMA (Verizon)	V		
GSM (AT&T, Sim Card Cust Supplied)	А		
Communications Options			
Serial		S	
ZigBee		Z	
Mounting Options			

None	(When mounted on EVSE pole as part of shipped assembly)	хх
Pole	Standalone Gateway with Pole w/24VDC power supply (for ZigBee comm)	P1
Pole	with 1-2 Mux (includes standalone Gateway, 3x6 pole, 1-2 EVSE, serial)	P2
Pole	with 1-4 Mux (includes standalone Gateway, 3x6 pole, 1-4 EVSE,serial)	Р3
Pole	with 5-8 Mux (includes standalone Gateway, 3x6 pole, 5-8 EVSE serial)	P4
Pole	Gateway Tower	Р5
Pole	with Pole w/POE (for ZigBee communication)	P6
Wall	Includes standard wall frame and 24 VDC power supply (for ZigBee com)	W1
Wall	with 1-2 Mux (includes Gateway, wall frame, mux, 1-2 EVSE, serial)	W2
Wall	with 1-4 Mux (includes Gateway, standard wall frame, mux, 1-4 EVSE, serial)	W3
Wall	with 5-8 Mux (includes Gateway, standard wall frame, mux, 5-8 EVSE, serial)	W4
Wall	Includes standard wall frame and POE (for ZigBee communication)	W6
Wall	Includes standard wall frame, plug in power module (for ZigBee comm)	W7

Key:

GA = 3727-200-E-S-xx

GC = 3727-200-E-Z-xx

GE = 3727-200-V-S-xx

GG = 3727-200-V-Z-xx

GI = 3727-200-A-S-xx

GK = 3727-200-A-Z-xx

# Lockout/Tagout



#### Warning: Disconnect power from service lines.

#### Avertissement: Déconnecter puissance de lignes de service.

Prior to performing electrical wiring for installation of the Gateway, ensure that power has been removed from the service lines originating from the service panel.

To maintain the safety of all persons in the area, a lockout/tagout procedure should be followed per 29 CFR 1910.147.

Lockout is the placement of a lockout device on the service panel energy isolation device (circuit breaker) to ensure that the power source cannot be operated until the lockout device is removed. A lockout device utilizes a positive means such as a lock (key or combination lock with a circuit breaker lockout) to hold the breaker in a safe position to prevent energization.

Tagout is the placement of a tagout device (a tag or other prominent warning device) on an energy isolation device to indicate that the energy isolation device and the equipment being controlled cannot be operated until the tagout is removed. The tagout device should be non-reusable, attached by hand, self-locking and non-releasing, with a minimum unlocking strength of no less than 50 pounds.

The lockout approach shall be used unless the utilization of a tagout procedure will provide full personnel protection.

# Installation

The Gateway Module is easily mounted to the wall or a pole. See the *3725 series of Installation Sheets* for more information.





# Wiring

An internal view of the 3727 Gateway Module wiring. **Figure 2** is a cellular ZigBee version, **Figure 2A** is serial Zigbee and **Figure 2B** is serial only.



Figure 2



Figure 2A



Figure 2B

# Indicator Lights – Cell Modem Status

Once you have successfully installed and powered the unit, the indicator lights (Figure 3) for the optional cellular modem display specific patterns consistent with the cellular operating mode. They are identified as *Network*, *Signal*, *Active* and *Power*.





<u>Network</u>: When lit solid, this LED indicates a successful connection to the network with an IP address given and a channel acquired. A tri-mode LED network blinks slowly while searching for cellular service. Once it finds cellular service, it blinks faster while it is attempting to authenticate on the cellular network. It is finally solid when the device is authenticated on the cellular network and is provided an IP address by the cellular network.

Signal: A slow blink indicates a signal is being received.

RSS/Signal LED Status	Ranges of RSSI (dBm)
Slow Blink	-90 to -99
Not Lit	Equal to or weaker than -100

Active: Lights will flash as data is transferred to and from the cellular modem on the remote network.

<u>Power</u>: This LED indicates that the cellular modem is receiving power.

Light Patterns: Light patterns for the above LED's indicate various modem states.

- Normal: Each LED is lit as applicable for its function.
- **Start Up**: The LED's cycle from left to right.
- Configuration Reset: The LEDs will cycle left to right and then right to left four times.
- Authentication Failure: The Network, Signal and Active LEDs blink every 2 seconds
- Data Retry: The Network, Signal and Active LEDs blink every 3 seconds.
- OTASP: The Network, Signal and Active LEDs blink, one at a time, in order.

# Indicator Lights - Server LEDs

These lights reflect communication between the Gateway and the OCPP Server, and the Gateway and EVSE. The lights blink slow during communication to indicate:

- RXD = Signals received on for approximately one minute when a message is received
- **TXD** = Signals transmitted always on

**PWR** indicates the Gateway is on and receiving power.



Figure 4

# Accessing the Web Browser Interface

The Gateway Module hosts a web browser-based application that allows you to manage the EVSE network and configure various options associated with each EVSE. In addition, it allows you to view current status and historical information that has been accumulated from each EVSE, and configure the Gateway Module's own system.

The first step to gaining access to the user interface is to open a web browser and establish a connection with the Module. Connections can be made over either Ethernet or a cellular option.

### Ethernet Connection

For an Ethernet connection, the default URL (case-sensitive) to contact the Payment Module is <a href="http://192.168.13.99:8080/Gateway/evse">http://192.168.13.99:8080/Gateway/evse</a>. Open a browser and enter this address into the URL. If you want to change the Module's IP address after you have logged in, see *Changing the IP Address for an Ethernet Connection* on page 15. If you are working with a Network Management System, set up port forwarding between the public port (1-9999) to the internal IP address of the EVSE gateway.

If you cannot use the default URL from your network, use an Ethernet cable to plug your laptop directly into the back of the Module.

- 1. Slide the Module up off the pole or wall, remove your network's Ethernet cable and plug the other end of the Ethernet cable from your laptop into the Ethernet port.
- 2. Bring up a browser on your laptop and enter the Module's default IP address into the URL.
- 3. Log into the Module: Username=admin; Password=pass
- 4. Follow Steps 1-5 in *Changing the IP Address for an Ethernet Connection* on page 16.
- 5. Remove the Ethernet cable connecting your laptop to the Module and plug in your network's Ethernet cable.
- 6. Slide the Module back onto the pole or wall.
- 7. From your network's browser, enter <u>http://[IP address]:8080/Gateway/evse</u> into the URL and log back into the Module.

### Cellular Connection

When the Gateway Module includes a cellular modem, the cellular modem must have a static LAN IP address. The private local area IP address of the cellular modem is 192.168.13.31/24. To obtain the public IP address of the cellular modem, consult your Cellular Internet Service Provider to obtain your public IP settings. The cellular modem will handle NAT-ing for the Gateway Module. The default NAT configuration for the cellular modem is as follows:

- It will forward web traffic on TCP port 8008 to the Gateway Module at 192.168.13.99:8080
- It will forward ssh traffic on TCP port 46 to the Gateway Module at 192.168.13.99:22
- It will forward modbus traffic on TCP port 502 to the Gateway Module at 192.168.13.99:502

Plug the chosen IP address into the URL(case-sensitive): <u>http://[IP address]:8008/Gateway/evse</u>

#### Logging In

Once a connection is established, the login screen displays.

	Login Info
	User:
	Password:
	Login
	Login

Enter the default username and password: Username: admin; Password: pass

Be sure to change these as soon as possible. See *Error! Reference source not found.* on page 25 for more information.



#### Changing the IP Address for an Ethernet Connection

1. Display the System Configuration screen by clicking **File** and selecting **Open Sys Config** from the dropdown list.

	Status View Sys Config View ×	Reservation Info
+ Add New EVSE	System Config Time Zone Network Settings	Enable Reservations
File ×       Zigbee Setup ×       Help ×            ◆ Add New EVSE                 ◆ Open Comm View                 ◆ Open Log View                 ◆ Open Sys Config                 ◆ Open Sys Config                 ◆ Open Sys Config	Sys Config Info Login User: admin Login Password: •••••• Version: 9923-002 Zigbee Info Zigbee Pan ID: 43 4d 49 00 00 00 00 23 Set PanID Query Zigbees Test Zigbee Maintenance Info Days to Keep Local Messages: 90 Days to Keep Charge History: 90 Message Queue Info MQ URL: localhost MQ Test Post Office Test	SMTP Info Host: Port: 25 Power Monitoring Settings Shutdown Delay (min): 1 Reset Backup Module Reset Gateway White List Badge Format O Decimal • Hex Cable Management Cable Retract Delay (Min): 5 Miscellaneous Outdoor Unit Has New Backup Module Disable Backup Module Watch Dog Timer

2. Click the Network Settings tab. The following screen displays:

+ Add New EVSE		th <mark>TUUM///UN//maxman_converse_was</mark>
File 🗸 Help 🗸		
<ul> <li>EVSE Status Reports</li> <li>Client Apps</li> <li>System Apps</li> <li>System Apps</li> <li>White List</li> <li>Evenide List</li> <li>Kiosk</li> </ul>	Status View Sys Config View  System Config Time Zone Network Settings Petwork Settings PAddress: 192.168.1.135 Netmask: 255.253.254.0 Gateway: 192.168.0.4 DNS Server: 192.168.0.15 Save changes Refresh	

Save changes

- 3. Enter a <u>public</u>, <u>static</u> IP address for the Module in the **IP Address** field.
- 4. Fill in the remaining fields as necessary for your system's configuration.
- 5. Click **Save Changes**. The system automatically resets the gateway. This will take a few minutes.
- 6. From your network's browser, enter <u>http://[IP address]:8080/Gateway/evse</u> into the URL and log back into the Module.

# Setting Up a ZigBee Mesh Network

Within a ZigBee Mesh network, a Gateway Module can interface with EVSEs containing ZigBee modules. When setting up a network for the first time, you will need to add the EVSEs one at a time. These EVSEs will already have been installed at the site. Before you begin, make sure the covers of the EVSEs have been removed as you will need access to their GFI dip switches. See that EVSE's installation guide for those instructions. Refer to **Figure 5** for the EVSE's GFI dip switch location.

**Note**: Power must remain on for the Payment Module and the EVSEs to ensure communication does not get interrupted before the process completes.



Figure 5

- 1. Turn on the Gateway Module.
- 2. Turn on the first EVSE. This is usually the EVSE closest to the Payment Module.
- 3. Slide that EVSE's GFI Dip Switch number 3 to **Closed** to put it into ZigBee Setup Mode (**Figure 5**). After a few moments, all the lights on the Control Module will begin flashing, letting you know the EVSE is now in ZigBee Setup Mode.







- 5. The Gateway Module is now in Listening Mode and will find the EVSE. The EVSE's ZigBee Module ID will display in the empty area of the screen. This might take a minute or two.
- 6. Highlight that ZigBee number and enter a number for the EVSE in the EVSE Number field. This is the number the customer will use when selecting an EVSE to use for charging. For example, if this EVSE is located in parking spot 33, assign it the number 33. Note: Use only numeric characters.
- 7. Click Update EVSE.
- 8. The Gateway Module updates this information and returns to Listening Mode. It is ready to discover the next EVSE to add to its network.
- 9. Slide that EVSE's Dip Switch 3 to the **Open** position. After a few moments, its Control Module will first show all lights on with no flashing, and then just the blue Power light will remain on. Replace that EVSE's cover.
- 10. Move to the next EVSE that will be part of this Gateway Module's network. Repeat Steps 2-9 until all of this Gateway Module's EVSE's have been added.
- 11. Once all EVSEs have been added, leave the Synch EVSE screen to take the Gateway Module out of Listening Mode.
- **Note**: Adding an EVSE to an existing, operational network interrupts communication within the network while the Gateway Module is in Listening Mode. Tracking Data that occurred during the time the Payment Module was in Listening Mode will be collected after the Gateway Module returns to live operational mode. No data will be lost.

### Testing the ZigBee Mesh Network

- 1. Turn on the Gateway Module.
- 2. From the Main menu, expand the EVSE list and highlight the EVSE you just added. The following screen displays:

atus view 001.	3a200400a5320 x		
EVSE Setup		Notes/Description	
Name:	0013a20040da5320	Notes:	
Radio Address:	00 13 a2 00 40 da 53 20		
Location :			
Type:	Overhead	*	
Evse Number:	3	Commands	
	✓ Enabled		
		U	
Enable Optional	Features	Start Charge Set Time Reset EVSE	



- 3. Click Start Charge.
- 4. The Gateway Module sends a Charge message to that EVSE. If the message successfully went through, the yellow Connected light will be on on that EVSE's Control Module. At this point you can plug the EVSE's cable into a tester to check that a charge is actually occurring, or connect it to a car to check charging.
- 5. After test completes, click **Stop Charge**.
- 6. Remove any EVSE from the Gateway Module's network that did not receive the Charge message and repeat Steps 2-9 in *Setting Up a ZigBee Network*.
- 7. To remove an EVSE, highlight that EVSE on the EVSE Stations dropdown list and click **Delete EVSE** on the bottom of the screen you used to test the charge.

Repeating Intervals				
Heartbeat(sec):	60			
Export Power interval:	5			
Save changes Delete EVSE				
4		111		

# Replacing a ZigBee Mesh Gateway Module

In the event that you need to replace a Gateway Module, install it as discussed in the 3725 series of Installation Sheets. After installation, perform the following steps to synch it back up with the existing ZigBee Mesh Network of EVSEs. It is assumed you have logged into the browser. See *Logging In* on page 15 for more information.

- 1. Make sure the power is on to all the EVSEs in this Gateway Module's network.
- 2. Choose an EVSE closest to this Gateway Module. Refer to that EVSE's installation guide for cover removal instructions and remove its cover.
- 3. Slide that EVSE's GFI Dip Switch number 3 to **Closed** to put it into ZigBee Setup Mode (**Figure 5**). After a few moments, all the lights on the Control Module will begin flashing, letting you know the EVSE is now in ZigBee Setup Mode (**Figure 6**).
- 4. From the main Web browser screen, select the **ZigBee Setup** dropdown menu and click **Synch Payment Station**. The following screen displays:

Status View	Config Mode View ×	₽
		٦

- 5. The Gateway Module can now find all the EVSEs associated with its network. These EVSEs begin displaying their ZigBee Module numbers in the blank area of this screen. Once they have all displayed, Close Switch 3 on the EVSE's GFI. Its Control Module will first show all lights on with no flashing, and then just the blue Power light will remain on.
- 6. Replace the EVSE's cover. The network can now resume regular functions.

# Web Browser Interface Operation

The Web Interface allows you to manage the EVSE network and configure various options associated with each EVSE. In addition, it allows you to view current status and historical information that has been accumulated from each EVSE.

# Changing EVSE Assigned Numbers (Serial Connection)

1. From the main screen, expand your list of EVSEs from the EVSE Station dropdown list and click the EVSE number you want to change. The following screen displays:

-			- 14	EVSE Stations
	Status View 0013	3a20040b1374d ×		🔊 0013a2004099de77
	– EVSE Setup –			🔝 0013a20040b1374d
	Name:	0013a20040b1374d	}  }	Status Reports
	Radio Address:	00 13 a2 00 40 b1 37 4d		Client Apps System Apps
	Location:		+	🔁 White List
	Type:	Overhead 💌		🔁 Vehicle List
	Evse Number:	2	⊢ F	🔁 Kiosk
		✓ Enabled		
Ľ				

- 2. Enter your preferred number and click **Save Changes** at the bottom of the screen.
- 3. You must now reset the Module. Click **File** and select **Open Sys Config** from the dropdown list.
- Add New EVSE
   Zigbee setup
   Add New EVSE
   Add New EVSE
   Open Comm View
   Open Log View
   Add New Client App
   Open Sys Config
   Open Sys Config
   be Kiosk

4. The following screen displays:

Status View Sys Config View ×	Reservation Info
System Config Time Zone Network Settings	Enable Reservations
Sys Config Info	SMTP Info
Login User: admin	Host:
Login Password: *****	Port: 25
Version: 9923-002	- Dowor Manitoring Sattings
Zigbee Info Zigbee Pan ID: 43 4d 49 00 00 00 00 23 Set PanID Ouery Zigbees Test Zigbee	Shutdown Delay (min): [ Reset Backup Module] Reset Gateway
	White List Badge Format
Days to Keep Local Messages: 90	O Decimal
Days to Keep Charge History: 90	Cable Management
Message Queue Info	Cable Retract Delay (Min): 5
MQ URL: localhost	
MQ Test Post Office Test	

5. Click **Reset Gateway**. The Module resumes operation in approximately 30 seconds.

Note: You will not be able to log back into the Module's Web Browser page for approximately five minutes.

### Viewing EVSE Status and Messages

\_\_\_\_\_

Once you have successfully logged in you will be brought to the EVSE status screen, which provides a list of all EVSEs in the system, as well as their current status.

1. Select File in the top left corner of the screen to get a dropdown list.

+ Add New EVSE				<u>IIII marma waees</u>	
File     Zigbee Setup     Help       # Add New EVSE       # Open Comm View       # Open Log View       # Add New Client App       Open Sys Config	Status View × Table Viewer Filter				
)	Evt ID         EVSE           1         0013a20040da5320           2         0013a2004099de77	Code Description          0       READY         0       READY	Data	Time Stamp 2015-08-14 08:43:43.( 2015-08-14 08:43:47.(	

2. From the dropdown, select **Open Comm View.** 

Click arrows to expand option choices	Status View         Corum status         Even2           Filter messages by EVSE	
ne	Internet I Protected Mode On	

This screen will automatically update to display any messages sent to or received from the EVSEs.

Historical events

Charge history

# Status Reporting

The Status Report navigation tree allows users to view the current status of all EVSEs, review historical communication events, historical charge status and the current version of installed applications. You can export history and charging reports to your desktop. From the Main screen, click the ▶ arrow next to the **Status Reports** folder to expand and view available reports.

#### **Current Status**

Current Status view provides a color-coded list of all EVSEs and their current state.

- Table Viewer					
Filter					
Evt ID	EVSE	Code	Description	Data	Time Stamp
1	00 13 a2 00 40 b1 37 4	0	READY		2015-05-29 11:43:18.0
2	00 13 a2 00 40 99 de 7	0	READY		2015-05-29 11:43:21.0
3	00 13 a2 00 40 c4 2a c	5	HEARTBEAT EXPIRED		2015-05-12 10:32:31.(

#### Historical Events

The historical events view allows users to display a list of the events that were received by the Gateway Module from each EVSE or a specified EVSE for the specified date range. Once a list of events is retrieved, specific events can be located by using the free-form text filter.

St	atus Viev	v 🗴 Charge History View					
Γ	Table Vi	ewer					
	Filter	EVSE		▼ From: 05/29/2015 🔹 To	05 / 29 / 2015	Go Export	
	Evt ID	EVSE	Code	Description	Data	Time Stamp	

### Charge History

Similar to historical events, charge history allows users to search for completed charge events. The charge event indicates the total power consumed by the vehicle, the vehicle ID if available, the driver ID if available, and the date/time of the event.

St	atus View	Charge History View ×						¢
	Table Viewer							
	Filter     EVSE     From:     05/29/2015     To:     05/29/2015     Go     Export							
	ID	EVSE NAME	Vehicle ID	Driver ID	Power WHr	Mileage	VIN	Start Time

### App Versions

Lists the current versions of applications installed on your system.

Versions				
Refresh				
App Name	Version			
System	9923-002			
WebApp	1.0.0.26			
PostOffice	1.0.0.34			
OcppWebServices	1.0.0.13			
ОсррАрр	1.0.0.13			
ADR-KIOSK-APP	1.0.1.0			

### Connecting to a Network Management System

If you are using a network management system (NMS) as part of your setup, you need to set up communication between the Gateway Module and the NMS.

1. From the Main screen, click the ► arrow next to the Client App folder to expand it and click OcppApp. The following screen displays.

+ Add New EVSE		t <mark>MMMMM fearmal wacels we</mark>
File 👻 Zigbee Setup 👻 Help 🤸		
<ul> <li>&gt; &gt;</li></ul>	Status View OcppApp  Client App Info Name: OcppApp  Client Message From EVSEs Enable Client Application	Class Name: com.controlmod.evse.gateway.clientapp.ocpp.OcppApp
) 🦻 Kiosk	Retry Info Max Retries: -1 Retry interval (Seconds): 5	Expiration Info Message Expiration (Minutes): 5 Expires

- 2. Click the Enable Client Application checkbox.
- 3. Click Save.
- 4. Click **OcppWebServices**. The following screen displays.

+ Add New EVSE		ti <mark>mini//////////////////////////////////</mark>
File → Zigbee Setup → Help →	Status View OcppApp OcppWebServices x	
<ul> <li>&gt; constance</li> <li>&gt; client Apps</li> <li>&gt; client Apps</li> <li>&gt; APR-KIOSK-APP</li> <li>&gt; Consultance</li> <li>&gt; CopyWebServices</li> <li>&gt; by Stem Apps</li> <li>&gt; &gt; White List</li> </ul>	Client App Info Name: OcppWebServices	Class Name: com.controlmod.evse.gateway.clientapp.ocpp.OcppWebServiceApp Receive Acks from EVSEs
>	Retry Info Max Retries: 5 Retry interval (Seconds): 5	Expiration Info Message Expiration (Minutes): 5 Expires

- 5. Click the **Enable Client Application** checkbox.
- 6. Click Save.
- 7. You must now reset the Gateway Module. Click **File** and select **Open Sys Config** from the dropdown list.

- Add New EVSE

  File 
   Zlybee Setup 
   Help 

   Add New EVSE

   Open Comm View

   Open Log View

   Add New EvsE

   Open Log View

   Xou start count rupp

   Open Sys Config

   Open Sys Config
- 8. The following screen displays:

Status View Sys Config View ×	Reservation Info
System Config Time Zone Network Settings	Enable Reservations
Sys Config Info Login User: admin Login Password: ***** Version: 9923-002 Zigbee Info Zigbee Pan ID: 43 4d 49 00 00 00 00 23 Set PanID Query Zigbees Test Zigbee	SMTP Info Host: Port: 25 Power Monitoring Settings Shutdown Delay (min): 1 Reset Backup Module Reset Gateway
Maintenance Info Days to Keep Local Messages: 90	White List Badge Format
Days to Keep Charge History: 90	Cable Management
Message Queue Info MQ URL: [localhost MQ Test ] [post office Test]	Cable Retract Delay (Min): 5

9. Click Reset Gateway. The Gateway Module resumes operation in approximately 30 seconds.

**Note**: You will not be able to log back into the Gateway Module's Web Browser page for approximately five minutes.

### System Configuration

To display the System Configuration screen, click File and select Sys Config View from the dropdown list.

tatus View Sys Config View X	Reservation Info
System Config Time Zone Network Settings	Enable Reservations
Sys Config Info           Login User:         admin           Login Password:         ******           Version:         9923-002           Zigbee Info         Zigbee Pan ID:           43 4d 49 00 00 00 00 23         Set PanID	SMTP Info Host: Port: 25 Power Monitoring Settings Shutdown Delay (min): 1
Agent Andre Good Cool Cool         Agent Andre Good Cool         Agent Andre Good         Agent Andre Good Cool         Agent Andre Good Cooo         Agent Andre Good Cool	Reset Backup Module)     Reset Gateway       White List Badge Format     O Decimal       O Decimal     Hex
Days to Keep Local Messagles: 90 Days to Keep Charge History: 90 Message Queue Info	Cable Management Cable Retract Delay (Min): 5
MQ URL: [localhost [MQ Test] Post Office Test]	Miscellaneous Outdoor Unit Has New Backup Module Disable Backup Module Watch Dog Timer

The System Configuration screen provides setup information for the Gateway Module, allowing you to configure options such as:

- Username used to access the web console
- Password used to access the web console
- Version refers to the system currently installed
- ZigBee PAN ID Network ID that is assigned to all radios in the network during ZigBee Mesh Network setup.
- SetPANID button configures the USB ZigBee radio to use the preset PAN ID (used if replacing the USB ZigBee radio)
- Query ZigBees button sends a query to all EVSE radios to retrieve system status
- Test ZiBee Queries ZigBee to make sure communication is working properly
- Days to keep local messages retention period for status events
- Days to keep charge history retention period for charge history
- MQ URL tcp://localhost:61616 specifies the connection information for the Payment Module messaging interface.

Note: This value should not be modified unless directed to do so by Customer Support personnel.

- MQ Test Tests Message Queue operations
- Post Office Test Tests the message sorting portion to make sure it's working properly
- Reservation Info Enables/disables being able to reserve EVSEs over OCPP Web Services
- Reset Gateway Resets the Gateway Module
- White List Badge Format Specifies the format to use for White List Badges; for both manual entry and OCPP transactions
- Cable Management Sends a Charge Stop message to an ESVE who's dropped cable has not started charging after a specified time

Enter your changes and click **Save Changes**. You can also change your time zone via the Time Zone tab and your network settings via the Network settings tab. Only qualified Admin should edit network settings.

## Moving, Transporting and Storage



#### WARNING:

Ensure electrical power has been shut-off at the source before working with electrical wiring.



AVERTISSEMENT : Assurer l'alimentation électrique a été fermeture à la source, avant de travailler avec câblage électrique.

- Should the Model 3727-200 Gateway Module need to be relocated, remove the unit in the reverse order that it was installed.
- Bag all attaching hardware and secure on/in the unit.
- Store the unit in a dry, low humidity area.
- Protect the unit using appropriate packaging.

# **Customer Support:**

Should questions about installation, operation, optional features, maintenance or service arise, please call Technical Support at 1-888-753-8222 between the hours of 8:30 am to 5:00 pm EST, Monday to Friday.

LetterService Department<br/>Attn: Jack Batalha, Director Product Support<br/>Control Module Inc.<br/>89 Phoenix Avenue<br/>Enfield, CT 06082Fax1-860-741-6064

e-mail jbatalha@controlmod.com

# Warranty

FOB Enfield, CT

EVSE proprietary hardware products are warranted to be free from defects in materials and workmanship for a period of 1 (one) year from the date of receipt of the product. Customer can report an Equipment defect to the Control Module Service Division by (a) telephone between 8:00 A.M. and 4:30 P.M. (EST), Monday through Friday, excluding Control Module holidays, or (b) through the support website.

Telephone number: 800-527-4998

Email address: service@controlmod.com

The foregoing warranty does NOT include

- Furnishing supplies for, painting or refinishing the product
- Electrical work external to such product
- Installation, maintenance or removal of alterations, attachments or other devices not furnished by EVSE, LLC.
- Services which cannot be practicably performed due to alterations in or attachments to the product
- Services for accessories
- Repair or replacement of defective product to the extent the defect is attributable to:
  - Neglect or misuse (including use of the product for purposes other than that for which it was designed)
  - Transportation, vandalism or burglary of the product, acts of terrorism, accident or disaster, or other external causes (including water, wind , lightning and dust)
  - o Alterations to the product or servicing of the product by a third party
- The foregoing warranty shall also not apply to the extent the defect in the product is due to the use of the product in conjunction with other products not manufactured by EVSE or to product from which the serial number has been altered, defaced or removed. This warranty extends only to the original purchaser of the product. It may not be assigned to any third party.

Disclaimer of All Other Warranties: THE WARRANTY SET FORTH ABOVE IS THE SOLE WARRANTY THAT EVSE PROVIDES WITH RESPECT TO THE EQUIPMENT. CUSTOMER ACKNOWLEDGES THAT CMI EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY, NON-INFRINGEMENT OR FITNESS FOR A PARTICULAR USE OR PURPOSE, OR ANY WARRANTY IMPLIED THROUGH COURSE OF CUSTOM OR USAGE OF TRADE.

<u>Disclaimer of Liability</u>: IN NO EVENT SHALL EVSE BE LIABLE TO CUSTOMER OR ANY THIRD PARTY CLAIMING THROUGH CUSTOMER FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOSS OF EARNINGS, PROFIT OR GOODWILL OR COSTS OF COVER, IN EACH CASE RELATING TO THIS WARRANTY OR TO THE EQUIPMENT, EVEN IF SUCH DAMAGES WERE FORESEEABLE AND EVEN IF THIS WARRANTY FAILS OF ITS ESSENTIAL PURPOSE.

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