Communication and Security

Technical Overview

Power System, Electrical, and Battery information from **EcoFlex** (Envoy or Encore) and **Mobius** devices utilizing our RHYTHM or PulseTech Web solution is communicated in binary format over port 80 (HTTP), or 443 (HTTPS) for EcoFlex/Envoy, back to our Enovate API residing on Enovate servers. All connections are initiated by the device (outbound), and an inbound connection cannot be initiated from Enovate's Cloud servers. EcoFlex devices use certificates and various standard methods to ensure security and prevent impersonation.

Enovate requires that the hospital's network allow HTTP or HTTPS connections to be made to Connect.MyEnovate.com to send packet data; this address currently resolves to 40.122.135.195. We also require Ports 22222, 80 (HTTP), and 443 (HTTPS) to be open to allow updates to be applied to the workstations, and this requires connections to 52.173.141.5, 35.186.238.101, and 40.77.70.7. These are the only addresses and ports that need to be accessible for Mobius or EcoFlex connectivity and functionality.

No direct connections to the device can be initiated by Enovate. All remote management, updates, and diagnostic functions of Enovate devices are achieved through responses to the connection initiated by Mobius or EcoFlex.

Mobius Devices

- 2.4 GHz frequency
- Standards a/b/g

Network Types Supported:

- WEP
- WPA-Personal
- WPA/WPA2 Mixed (WPA2 TKIP+AES)
- WPA2-Personal

And the following encryption types (where applicable):

- TKIP
- AES

Mobius devices currently support WPA2-Enterprise with **PEAP** authentication, **but do not support EAP-TLS, EAP-TTLS, or other Radius Server configurations**. Mobius Bay Chargers do not support any form of WPA2-Enterprise or Radius network. For customers with modern Radius or ISE Servers, we recommend setting up a network

using WPA2-Personal and/or utilizing a MAC Address Whitelist on your WPA2-Enterprise network in place of user/password PEAP authentication for Mobius devices.

For networks that do not support or wish to use the above security protocols, retrofit hardware is available to upgrade Mobius Workstations to support the same wireless network types as EcoFlex (detailed below).

EcoFlex Workstations

- 2.4 and 5 GHz frequencies
- Standards a/b/g/n/ac

Network Types Supported:

- Open
- WEP
- WPA
- WPA/WPA2 Mixed (WPA2 TKIP+AES)
- WPA2-Personal (WPA2-PSK)
- WPA2-Enterprise (RADIUS)

Authentication methods:

- EAP-TLS
- EAP-TTLS (Tunneled TLS)
- PEAP (Username / Password)

Handshake / Inner Authentication Supported:
- PAP
- MSCHAPV2

All information that is sent to Enovate that is used for diagnostic, reporting, and technical services is stored in a secure database that is not accessible to any third parties or applications besides Enovate. Customer device Information that is sent back to Enovate can be viewed in detail through Pulse Tech Web and Rhythm, Enovate's customer facing applications.

Please contact TechnicalServices@EnovateMedical.com for any further information.