

Introduction

This tech note provides the procedure for connecting an Inovonics IP gateway via IP connectivity through a firewall. While there are no open TCP ports or services on an IP gateway, Inovonics does not recommend connecting to an IP network without a firewall to comply with IT best practices for commercial applications.

Materials Needed

- CAT 5e or CAT 6 Ethernet.
- Ethernet router/firewall.
- Internet connection with a minimum of 512 Kbps up and down, and no filtering or proxying of HTTPS outgoing connections.
- Inovonics IP gateway.

To Connect your IP Gateway Through a Firewall

- 1. Ensure the following for your router:
 - The router must assign addresses via DHCP.
 - The DHCP lease of the router must be set to a non-zero and non-infinite value, and should be set to a value greater than 30 seconds.
 - The router must allow outbound connections on the ports below to connect through the firewall:
 - DNS (UDP 53).
 - HTTPS (TCP 443).
 - NTP (UDP 123).
 - TCP port 9000
 - Ensure the network is not double NATed, where traffic is flowing through multiple routers that are doing network address translation.
- 2. Install the IP gateway per the installation instructions.
- **3.** Configure the IP gateway.
- Refer to the Last Sync date in the Network section of the IP gateway application to confirm the gateway is checking.
- If the gateway fails to sync within 15 minutes, confirm the gateway's power and data connectivity LEDs are solid green and amber, respectively. If they are not, check cabling.

- **6.** If the IP gateway continues to fail to sync, disable auto negotiation and set the network switch port to 100 Mbps Full-Duplex.
- **7.** If the IP gateway continues to fail to sync, contact Inovonics technical support:
 - E-mail: support@inovonics.com.
 - Phone: (800) 782-2709; (303) 939-9336.