BGW8

MODBUS RTU to BACnet/IP & MS/TP Gateway

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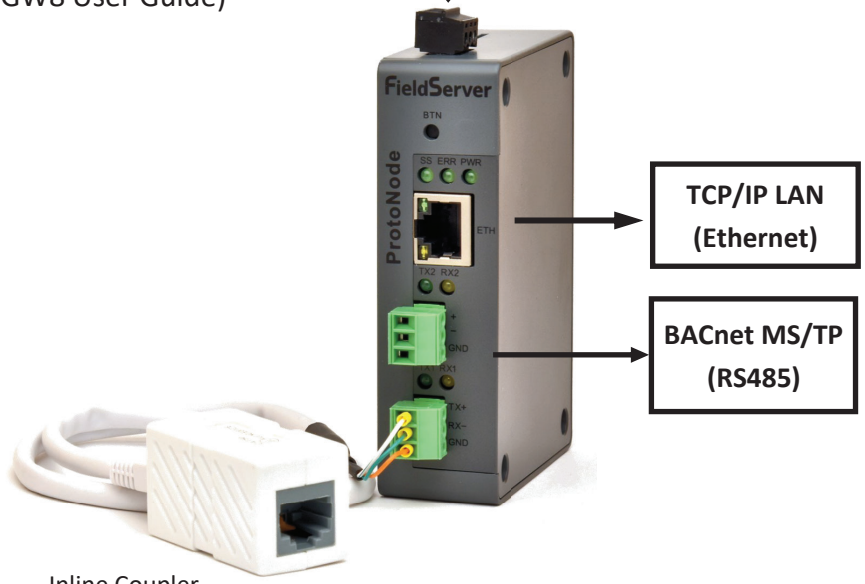
Installation Outline

1. Mount gateway to DIN rail or panel box to wall.
2. Connect to fan-filter network using factory-provided RJ45 inline coupler and serial cable.
3. Connect 3-pin screw terminals to BACnet MS/TP
   or
   Connect to Ethernet for BACnet TCP/IP network.
4. Connect to power.
5. Verify operation. (see BGW8 User Guide)

DIN Rail Mounting



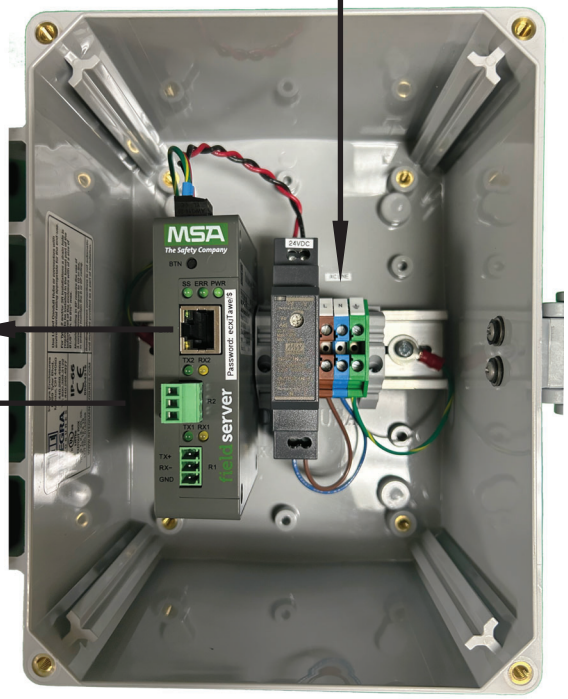
Gateway only
(12-24VDC or 24VAC)



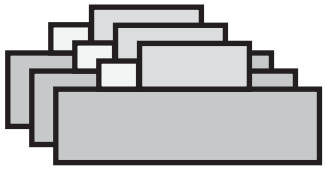
Inline Coupler

Cat5e Cable

Gateway in panel box
(100-240VAC)



Fan –Filter Units



info@envirco.com
www.envirco-hvac.com

101 McNeill Road
Sanford, NC 27330

Tel: (800) 884-002
Fax: (800) 458-2379

Step 1: Connect via Ethernet

- Use a **Cat-5 Ethernet cable** to connect your PC to the ProtoNode Gateway.

Step 2: Set PC IP Address

- Default Gateway IP: **192.168.1.24**
- Subnet Mask: **255.255.255.0**

If your PC is on a different network:

1. Open **Control Panel → Network and Internet → Network and Sharing Center**
2. Click **Change adapter settings**
3. Right-click **Local Area Connection → Properties**
4. Select **Internet Protocol Version 4 (TCP/IPv4) → Properties**
5. Assign a static IP (for example **192.168.1.100)**
6. Click **OK** to save and exit

Step 3: Access the Gateway Login Page

- Open a browser and enter: **192.168.1.24**
- Login with:

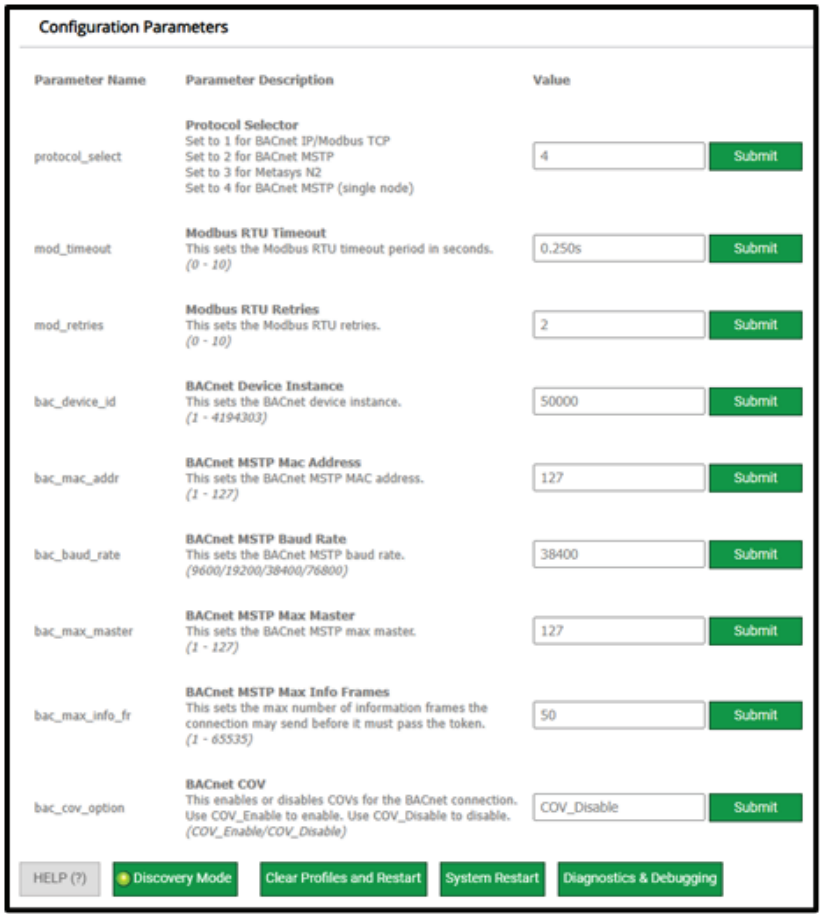
-**Username**: admin

-**Password**: (found on FieldServer label or via QR code)

Step 4: Configure Network Settings

From the FS-GUI landing page:

- Go to **Network Settings**
- n **protocol_select**, choose:
    - 1 for BACnet IP / Modbus TCP
    - 2 for BACnet MSTP
    - 4 for BACnet MSTP (single node)
- Click **Submit**, then **System Restart**



Configurations based on BMS protocols:

- **Bac_device_instance**
- **Bac_baud_rate**
- **Bac_mac_address**

BGW8

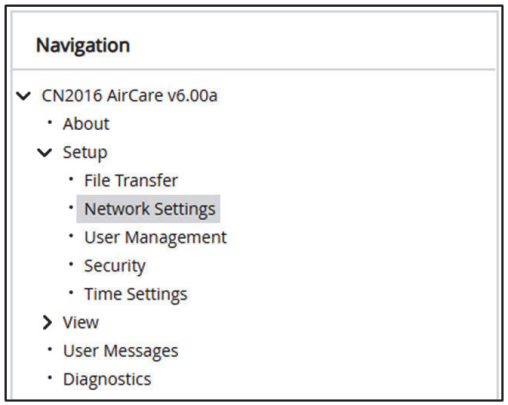
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Access FS-GUI & Network Settings

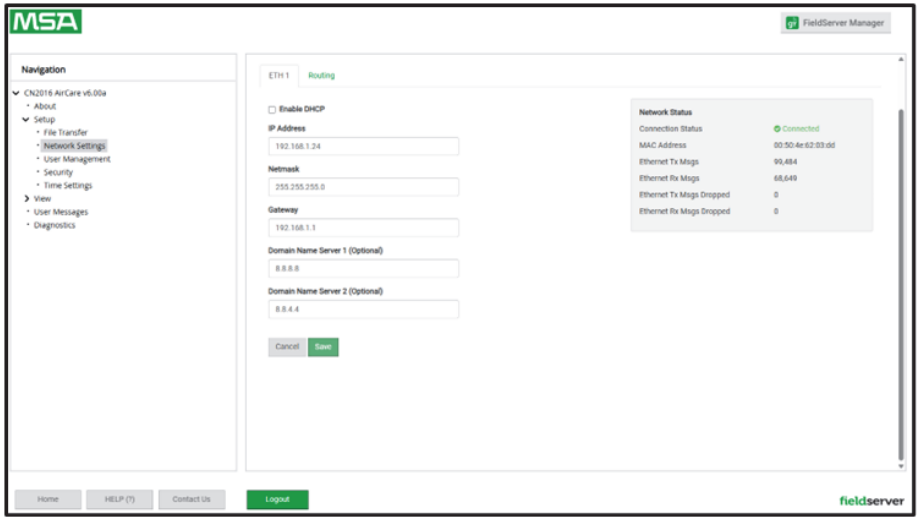
- Click **Diagnostics & Debugging** (bottom right of FS-GUI)
- Use the **Navigation Tree** (left side of screen) and expand:

FieldServer title/CN number → Setup → Network Settings



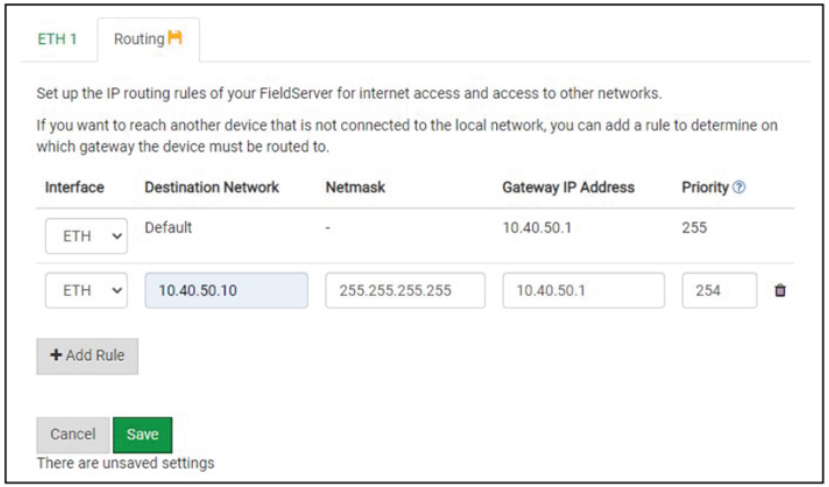
Modify as needed:

- **IP Address** (N1 IP Address)
- **Netmask** (N1 Netmask)
- **IP Gateway** (Default Gateway)



Configure Routing Settings

- Click **Add Rule** to create a new routing entry and enter:
  - **Destination Network**
  - **Netmask**
  - **Gateway IP Address**
- Set **Priority** (1 = highest, 255 = lowest)
- Click **Save** to apply changes



Lost or Incorrect IP Address

- Ensure **FieldServer Toolbox** is installed on your PC
    - if not, download **FieldServer-Toolbox.zip** from the MSA Safety wesite
- Extract and install the executable file
- Connect a **Cat-5 Ethernet cable** between PC and ProtoNode
- Launch **FS Toolbox Utility** → Click **Discover Now**
- Locate the IP Address of your gateway

Verifying FFU Connections

- On FS-GUI home page, click **Discovery Mode** (bottom of screen)
- Click **OK** to restart and begin discovery
- A **light green circle** next to Discovery Mode confirms it's active
- Under **Active Profiles**, view all connected FFUs

To disable Discovery Mode:

- Click **Discovery Mode** again
- Confirm with **OK** to restart
- Click **Clear Profiles and Restart**
- Confirm restart with **OK**
- Note: For **MSTP connections**, clearing profiles and restarting is required.

