



M00-20-6019 - IP Authorization Gateway

Procedure Guide



NOTE: Before you use this manual, make sure you have the most recent revision. Look at the revision of this document to make sure it agrees with the most current revision found at <http://www.opwglobal.com/opw-fms/tech-support/manuals-how-to-videos>. Download the latest revision if necessary.



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For technician registration, see
<http://www.opwglobal.com/opw-fms/tech-support/technician-registration>

For in-depth training through OPW University, see
<http://www.opwglobal.com/opw-fms/tech-support/training-certification>



Compliance Information

Software is compliant with Visa U.S.A. Payment Application Best Practices (PABP) /Payment Card Industry Payment Application Data Security Standard (PCI PA-DSS) guidelines by restricting user access to sensitive cardholder data.

Specific to networks that process bankcards (i.e., Visa, MasterCard, T-Chek™, Comdata, American Express, Discover and JCB) using the dual-serial port convertor and connecting the inbound port to the Fuel

Site Controller direct-connect serial port (Port 1) conflicts with the guidelines described in the “M030001_PA1-PA-DSS-Implementation-Guide” provided with your Fuel Site Controller. Please review the “M030001_PA1-PA-DSS-Implementation-Guide.pdf” for more information on maintaining your PCI-DSS compliance.

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Important First Data Service and Warranty Information

The hardware described in this guide is supplied, warranted and serviced by First Data. To receive regular updates and ongoing support from the First Data help desk you must enroll in one of the First Data Gateway Support Plans.

Processing cards on the Bypass Network from the FSC3000 requires a First Data Micronode IP Converter device. Contact First Data to purchase the converter and establish a merchant account at:

Carl Bowen (678) 255-4159

Section 1 Introduction

The instructions in this guide explain the installation of your First Data Micronode with your FSC3000™ Fuel Site Controller.

The Micronode, when used with the Petro Vend® FSC3000™ Fuel Site Controller, provides the ability to use a high-speed Internet connection to authorize fleet and/or credit-card transactions. This creates a secure outbound IP connection for card authorizations. The gateway also contains a dial-up modem that will automatically be used whenever the Internet is unavailable. To use this feature, the gateway must be plugged into a standard phone line.

Section 2 Micronode Installation

Prior to the installation of the Micronode, an initial site assessment, gateway requirements and network connectivity must be established. Follow the installation procedure below for connecting the Micronode.

2.1 Verify Network Communications

1. Test the network connectivity.
 - a. Plug a CAT5 cable into the Ethernet port on your laptop and plug the other end into an open port on the router at the client site. Verify that you are NOT connecting via wireless.
 - b. Open the Internet browser and type www.google.com.



NOTE: If you are able to access the Internet, proceed to the next step. If you cannot access the Internet, proceed to "Troubleshooting" on page 9.

2. Move the CAT5 cable from the Ethernet port on your laptop to the Ethernet port of the Micronode.
3. Connect the included power cable to the Micronode. Twist a quarter-turn (1/4) to the right in order to lock the power cable in place.
4. Plug the power cable into an available electrical outlet and wait for the status light of the Micronode to turn **green** and begin blinking slowly (approximately once per second).

2.2 Connecting the Micronode

1. Connect one of the OPW-FMS-supplied serial modem cables (20-1517-01) to the outbound port on the FSC.
 - a. On the Petro Vend System2 this is Aux 3.
 - b. On the FSC3000 this is COM 5.

Connect the other end to POS Serial Port 1 on the Micronode.

2. Connect the other OPW-FMS-supplied serial modem cable (20-1517-01) to the inbound port on the FSC.
 - a. On the Petro Vend System2 this is the Modem Port.
 - b. On the FSC3000 this is COM 1.

Connect the other end to POS Serial Port 2 on the Micronode.

2.3 Testing the Micronode for Network Authorization

1. Verify that the FSC3000 is configured properly for the processors that will be supported at the site.



NOTE: You are configuring the FSC3000 to work in dial-out mode exactly as if you were going to use the "new" OPW-FMS modem and a phone line.



IMPORTANT: For the Bypass network, configure the modem communication parameters to 2400 baud, 8N1 to match the Gateway.

2. Test the connection by running a test card at the pump. You should receive a prompt stating Select Pump, Enter Pump Number or that the Pump is Activated; this indicates that you have received authorization.



NOTE: You do not need to pump fuel at this time.

2.4 Testing the Micronode for Inbound Communication



IMPORTANT: The IT administrator at the site will need to configure Port Forwarding to the Static IP Address of the Micronode (Port 8002) before inbound communications will work.

Using Phoenix® or ARTWare, establish a connection to the fuel site controller using the static IP address assigned to the Micronode.

2.5 Dial Back-up (Optional)

At this point, transactions should be processing properly over the IP connection, and you should be ready to test the Dial Back-up functionality.

1. Plug a phone line into the Line port on the Micronode.



IMPORTANT: This phone line may be shared with another device, but should never be shared with a voice line.

2. Remove the CAT5 cable from the Micronode **Ethernet** port.
3. Test the **Dial Back-up (DBU)** by running a test transaction for all processors (networks) supported at the site. These test transactions will take longer than the high-speed transactions as they are running over a phone line instead of an IP connection. You should receive a prompt stating **Select Pump, Enter Pump Number** or that the **Pump is Activated**. This indicates that you have received authorization.



NOTE: You do not need to pump fuel at this time.

4. Plug the CAT5 Ethernet cable back into the Micronode Ethernet port.



NOTE: If all tests were successful, you are now operating on high-speed processing. If any of the above tests failed, contact the OPW-FMS Help Desk at 877-679-8324 and select Option 1



for Fuel Management Systems. Tell the Help Desk Technician that you are installing a Micronode and provide a description of the problem you are experiencing.

2.6 Troubleshooting

1. Test the network connectivity.
 - a. Plug a CAT5 cable into the Ethernet port on your laptop and plug the other end into an open port on the router at the client site.
 - b. Open the Internet browser and type `http://www.google.com`, or you can:
 - i. Click the **Start** button on your PC screen (located in the lower-left corner of the screen).
 - ii. Select **Run...**
 - iii. Type **cmd** in the window labeled **Open**. Click **OK**.
 - iv. Type the command **ping www.google.com** in the **cmd** window.
 - v. Press **Enter/Return** key.



NOTE: If you can browse the Internet or "ping" a website successfully, you have Internet connectivity and your Micronode should be able to access the Internet.

- c. Close the **cmd** window and go back to "[Micronode Installation](#)" on page 7 of this document to restart the installation process.
2. If you are unable to establish network connectivity, complete the following:
 - a. Locate the high-speed modem and router at the site. There may be only one piece of equipment if the modem has a built-in router. Verify with your network administrator.
 - b. Check the status lights on all device(s). If there is a DSL and/or Internet light, these should be **green**.
 - c. Please record what the status light(s) on the high-speed modem and/or router are doing.
 - d. Please record what the status light on the Micronode is doing.



NOTE: You may need to reboot (power cycle) the high-speed modem, router and the Micronode.

- e. Reboot the devices in this order:
 - i. Power down the Micronode.
 - ii. Power down the router at the site.
 - iii. Power down the high-speed modem.
 - f. Wait 20 seconds and power up all of the devices in reverse order:

- i. Power up the high-speed modem. Wait until Power, DSL and all Internet lights are green.
 - ii. Power up the router at the site. Wait until Power and Ethernet/Internet/LAN light are green.
 - iii. Power up the Micronode.
- g. Repeat "[Troubleshooting](#)" on the previous page to verify network connectivity.



NOTE: If you are still unable to successfully access the Internet, you will need to speak with the person who handles the network for the site. This may be the Network Administrator or this may be the Internet Service Provider (ISP).

Revisions - M00-20-2019

Revision #	ECO	Effective	Software Version	Key Changes
0	1932	7/1/2021	NA	Initial Release



NOTE: It is possible that older software versions might not support all features



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