

# Petro Vend® IP Authorization Gateway Procedure Guide

Part Number: M00-20-6013

Revision: 1



IP Authorization Gateway

DFS *Worldwide Brands*



**IMPORTANT:** 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 in the FMS Technical Library. Download the latest revision if necessary.



**READ CAREFULLY:** OPW Fuel Management Systems and Dover Fueling Solutions cannot be held responsible for installations, configurations or use of its products that does not comply with the most recent documentation available.



**NOTE:** It will be necessary to have Single Sign-On (SSO) credentials to get access to manuals, instructions, software updates and other important assets. Speak with your FMS sales representative or contact FMS Customer Service at 1-888-679-3835 (1-888-OPW-FUEL) for information. Once you have been approved for SSO credentials go to the [FMS Technical Library](#) to find the most recent revisions of all manuals and instructions.



**NOTE:** All references to other manuals and instructions in this manual can be found in the FMS Technical Library. Make sure you have the most recent revision.

## Related Manuals

Other related manuals necessary to install, configure, maintain or use this product:

[M1010 PV200 Installation, Operation and Maintenance](#) (see the Appendix for *Modem and Gateway Installations*)

[M1010-DIV2 PV200 DIV2 Installation, Operation and Maintenance](#) (see the Appendix for *Modem and Gateway Installations*)

[M1700 FSC3000 Fuel Site Controller IOM](#)

[M00-051.00 FSC3000 Command-Line Configuration](#)



OPW Fuel Management Systems is a part of Dover Fueling Solutions.

## Copyright Information

© 2023 Dover Fueling Solutions. All rights reserved. DOVER, the DOVER D Design, DOVER FUELING SOLUTIONS, and other trademarks referenced herein are trademarks of Delaware Capital Formation, Inc./Dover Corporation, Dover Fueling Solutions UK Ltd. and their affiliated entities.

## Contact OPW Fuel Management Systems

200A Parker Drive; Suite 400 • Austin, TX 78728

Visit us at <https://www.doverfuelingsolutions.com/>.

Sales Support: (888) 679-3835 (7:30 a.m. to 4:00 p.m., US CST) • Email orders to: [FMSorders@doverfs.com](mailto:FMSorders@doverfs.com) • Send billing inquiries to: [Dbs\\_na\\_ar\\_inquiries@dovercorp.com](mailto:Dbs_na_ar_inquiries@dovercorp.com)

Call 1-877-OPW-TECH (877-679-8324) Monday through Friday, 7 a.m. to 6 p.m., US CST

## 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.

# Table of Contents

- Section 1 Introduction ..... 6
- Section 2 Ethernet IP Authorization Gateway Installation ..... 7
  - 2.1 Site Assessment for the Ethernet IP Authorization Gateway ..... 7
  - 2.2 Requirements for the Ethernet IP Authorization Gateway ..... 8
  - 2.3 Verify Network Communications ..... 9
  - 2.4 Connecting the Ethernet IP Authorization Gateway ..... 9
  - 2.5 Testing the Ethernet IP Gateway for Network Authorization ..... 9
  - 2.6 Testing the Ethernet IP Gateway for Inbound Communication .....10
  - 2.7 Dial Back-up (Optional) ..... 10
  - 2.8 Troubleshooting ..... 11

## Important PDI Service and Warranty Information

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

For support enrollment information contact Kenya McIntear, Sales Support Specialist:

- Mobile: +1.678.429.9044
- Email: Kenya.mcintear@pditechnologies.com

Visit the PDI Technologies web site at <https://pditechnologies.com/>



## Supported Networks

Networks supported by this device are as follows:

CFN

TCH

T-Chek™

NBS

Comdata

FleetOne

Paymentech

## Section 1 Introduction

The instructions in this guide explain the installation of your IP Gateway with your FSC3000™ Fuel Site Controller.

IP Gateways are certified to communicate with these standard authorization networks:

Hardwire	
Fleet and Bank Card	20-6013

The Ethernet IP Gateway, when used with the 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 and also allows inbound connections to the fuel-site controller. 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 Ethernet IP Authorization Gateway Installation

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



**NOTICE:** Never press the **reset** button on the IP Gateway. This will erase the program and it will have to be reloaded. There is a fee associated with reloading the program.



**NOTE:** Refer to the [M1700 FSC3000 Installation Manual](#) for connection information between the Gateway and the FSC3000.

For support plan and setup information contact PDI at +1.678.429.9044 8:30 am - 5:30 pm Eastern Time. Refer to "[Important PDI Service and Warranty Information](#)" on [page 5](#) for information.



**NOTE:** Before you call PDI you must have your device's MAC address. This can be found on the device's label on the bottom of the unit.

### 2.1 Site Assessment for the Ethernet IP Authorization Gateway

Prior to installing any version of the Ethernet IP Gateway, collect the following information or provide this document to the IT Manager so that the following information can be filled in.

- Is the LAN (internal) network at the site DHCP-enabled (dynamic)?  
 Yes    No
- Are there any outbound port-blocking rules in place on the network?  
 Yes    No



**NOTE:** If the network is DHCP-enabled and no outbound ports are blocked, skip to "[Requirements for the Ethernet IP Authorization Gateway](#)" on the next page. Otherwise, proceed with the information as follows below.



**NOTE:** The following ports must be open for outbound traffic; 53, 80, 123, 443, 10001, 10002.



**IMPORTANT:** If the site chooses to use the Inbound Communications option, then a Static IP Address must be programmed into the unit regardless of whether the LAN is dynamic or static, and the below information must be provided.

If this is a **Static IP** LAN environment, enter the **IP Address**:

\_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

Enter the **Subnet Mask**: \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

Enter the **Default Gateway**: \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

Enter the **DNS** (Domain Name Server) 1: \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

Enter the **DNS** (Domain Name Server) 2: \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_

If a **Static IP Address** is required, the Help Desk will configure it for you once you have completed the following steps:

1. Plug the IP Authorization Gateway into a DHCP-capable router (this may be at your office before you arrive onsite).
2. Verify that the **status light** on the Ethernet IP Authorization Gateway is green and blinking once per second.
3. Verify the last six (6) digits of the MAC address located below the barcode on the bottom of the IP Authorization Gateway:
  - **000:80:44:** \_\_\_\_\_.

## 2.2 Requirements for the Ethernet IP Authorization Gateway

Call PDI at +1.678.429.9044 for assistance. You will need the items that follow:

- A Laptop Computer to be used for troubleshooting any connectivity issues that may arise on-site.
- One (1) IP Gateway Converter (Systech model 7522) with two (2) 20-1517-01 Modem Cables.
- Two (2) standard CAT5 cables (one for communications from the router/switch to the Gateway Converter, one to connect a laptop to the router/switch for troubleshooting communication issues).
- For **Systech model 7522**: (fill in the appropriate blank fields)
  - CFN Site ID#: \_\_\_\_\_
  - TCH Site ID#: \_\_\_\_\_
  - T-Chek™ Site ID#: \_\_\_\_\_
  - NSB Terminal ID #: \_\_\_\_\_
  - Comdata Terminal ID#: \_\_\_\_\_

- FleetOne Terminal ID #: \_\_\_\_\_
- Paymentech Merchant # #: \_\_\_\_\_

You will need appropriate test cards: Credit (i.e., MasterCard, Visa, etc.) and/or fleet cards (i.e., CFN, TCH, T-Chek™, Fuelman®, etc.) for running test transactions at the site depending on what card types will be processed at the site.



**IMPORTANT:** You will not be required to purchase fuel during the test process; you **will** be required to request authorization. You may then pick up and hang up the pump handle to complete the transaction.

## 2.3 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](http://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 11](#).

2. Move the CAT5 cable from the Ethernet port on your laptop to the Ethernet port of the Ethernet IP Authorization Gateway.
3. Connect the included power cable to the Ethernet IP Authorization Gateway. 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 Ethernet IP Authorization Gateway to turn **green** and begin blinking slowly (approximately once per second).

## 2.4 Connecting the Ethernet IP Authorization Gateway

Refer to the [M1700 FSC3000 Fuel Site Controller IOM](#) and [M1010 PV200 Installation, Operation and Maintenance](#) manuals for connection information.

## 2.5 Testing the Ethernet IP Gateway 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" modem and a phone line.



**IMPORTANT:** Configure the modem communication parameters to 2400 baud, 7E1 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.

## 2.6 Testing the Ethernet IP Gateway for Inbound Communication



**IMPORTANT:** The IT administrator at the site will need to configure Port Forwarding to the Static IP Address of the Ethernet IP Authorization Gateway (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 Ethernet IP Authorization Gateway.

## 2.7 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 Ethernet IP Authorization Gateway.



**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 Ethernet IP Authorization Gateway **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 Ethernet IP Authorization Gateway 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 Help Desk at 877-679-8324 and select Option 1 for Fuel Management Systems. Tell the Help Desk Technician that you are installing an Ethernet IP Authorization Gateway and provide a description of the problem you are experiencing.

## 2.8 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 IP Converter should be able to access the Internet.

- c. Close the **cmd** window and go back to ["Ethernet IP Authorization Gateway 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 Ethernet IP Authorization Gateway is doing.



**NOTE:** You may need to reboot (power cycle) the high-speed modem, router and the Ethernet IP Authorization Gateway.

- e. Reboot the devices in this order:
          - i. Power down the Ethernet IP Authorization Gateway.
          - 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 Ethernet IP Authorization Gateway.
- 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

Revision #	Approval	Effective	Software Version	Key Changes
0	1931	7/1/2021	na	Initial Release
1	EC20340P	8/24/2023	na	Remove references to Abierto and replace with PDI Technologies, remove references to OPW. Update internal cross-references and external hyperlinks and PDI contact info. Update to MarCom brand standards and add new CCC (Copyright/Contact/Compliance) page.



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

