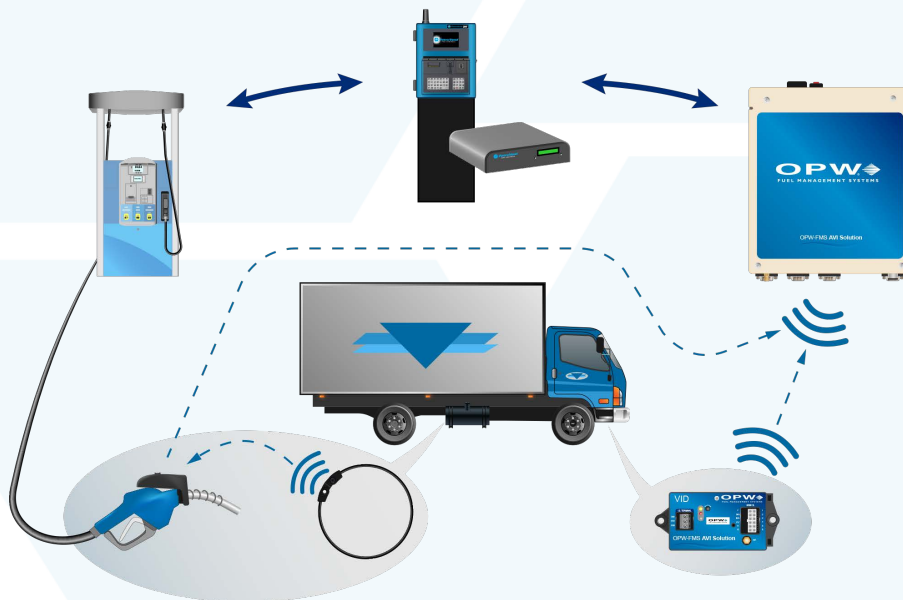


OPW-FMS AVI Solution



M00-20-8225-AVI -Remote VIS

Installation 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>



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Section 1 Introduction

This section contains important safety and installation information. Read and understand all of the information in this section before you install this product.

Topics in this section include:

"Safety Warnings" on the next page

"Installer Safety" on page 7

"NEMA Type 3R Enclosures" on page 8

"Electrostatic Sensitive Devices (ESD)" on page 9

1.1 Safety Warnings

This manual contains many important Safety Alerts. There can be a risk of injury or damage to property if you do not obey these alerts. The panels below show the types of safety warnings that can be seen and how each is specified.



DANGER: Indicates an immediately hazardous condition that, if not prevented, will result in death or serious injury.



WARNING: Indicates a possibly hazardous condition that, if not prevented, could result in death or serious injury.



CAUTION: Indicates a possibly hazardous situation that, if not prevented, could result in minor or moderate injury.



NOTICE: Indicates important information not related to hazards. A condition that, if not prevented, can result in property damage.



SAFETY INSTRUCTIONS: Indicates instructions and procedures related to safety or gives the location of safety equipment

1.2 Information Panels



NOTE: This panel gives more information about an instruction or procedure.



IMPORTANT: This panel contains special information that is important and must be read and obeyed.



REMINDER: This panel shows information that has been given before in the manual that is important to show again.



TIP: A step or procedure that is recommended to make another step or procedure easier.



INFORMATION: This panel shows references to more information in other sources.



READ CAREFULLY: This panel points to information that must be fully read and understood before doing the procedure(s) that comes after.

1.3 Installer Safety



CAUTION: Incorrect installation can cause a risk of injury to installers and users of this equipment. Incorrect installation can result in environmental contamination or equipment damage. Read these instructions carefully!



Refer to the National Electrical Code (NFPA No. 70) and the Motor Fuel Dispensing Facilities and Repair Garages Code (NFPA No. 30A) to make sure your installation is correct.

Installers must obey the instructions in this document to complete a safe installation.

For installations outside the United States, make sure that the installation obeys all applicable local codes.

The installer must know and obey all applicable local codes in the country or county where this unit is installed.



NOTE: Local codes can specify special installation requirements. Installation is subject to approval by the local authority with jurisdiction at the site.

1.4 NEMA Type 3R Enclosures

The enclosure that contains the components shown in this manual is rated by the National Electrical Manufacturers Association as a NEMA Type 3R enclosure.

The properties of a NEMA Type 3R enclosure are as follows:

- The enclosure can supply protection to personnel from hazardous components.
- The enclosure can help prevent damage to internal components from unwanted external contamination (such as dirt and dust).
- The enclosure can help prevent damage to internal components from negative weather effects (such as rain, sleet and snow).
- The enclosure can help prevent damage to internal components if there is ice on the external surfaces of the enclosure.

1.5 Electrostatic Sensitive Devices (ESD)

This product contains components that can be damaged by Electrostatic Discharge. See the instructions below to work safely with these components.



ATTENTION: Electrostatic Sensitive Device - To prevent damage from electrostatic discharge, obey the precautions below when it is necessary to move or touch electrostatic sensitive devices.

- Use correct grounding techniques.
- Use an ESD Field Service Kit with wrist strap, dissipative mat and grounding cord when possible.
- Do not stand on carpeted surfaces while working with Electrostatic Discharge Sensitive (ESDS) devices when possible.
- Never leave ESDS components/assemblies unattended.
- A new component to be installed should be kept in its anti-static package as long as possible before installation.
- Only touch ESDS components by the edges. Do not touch any of the circuitry.

1.6 FCC Compliance

This system complies with Part 15 of the Federal Communications Commission (FCC) Rules & Regulations. Operation is applicable to these conditions:

- This device must not cause harmful interference.
- This device must accept interference received, including interference that can cause undesired operation.

Section 2 Remote VIS Installation for AVI

There can be possible installations where it is necessary to use a Remote Enclosure (FMS Part Number 20-8225-AVI). This will usually occur in installations where it is not possible to install the VIS in a building or if is necessary to have a remote site installation that uses a wireless connection.

2.1 Specifications

Remote Enclosure Specifications	
Cabinet Dimensions:	10" H x 12-3/4" W x 5-11/16" D (25.4 x 31 x 14.6 cm)
Install Hole Centers:	10-3/4" H x 10" W (27.3 x 25.4 cm) Hole Diameter 9/32"
Power Requirements:	115/230 VAC 50/60 Hz, 1.0/0.7 A
Operating Temperature:	- 40° - 122° F (-40° - 50° C)

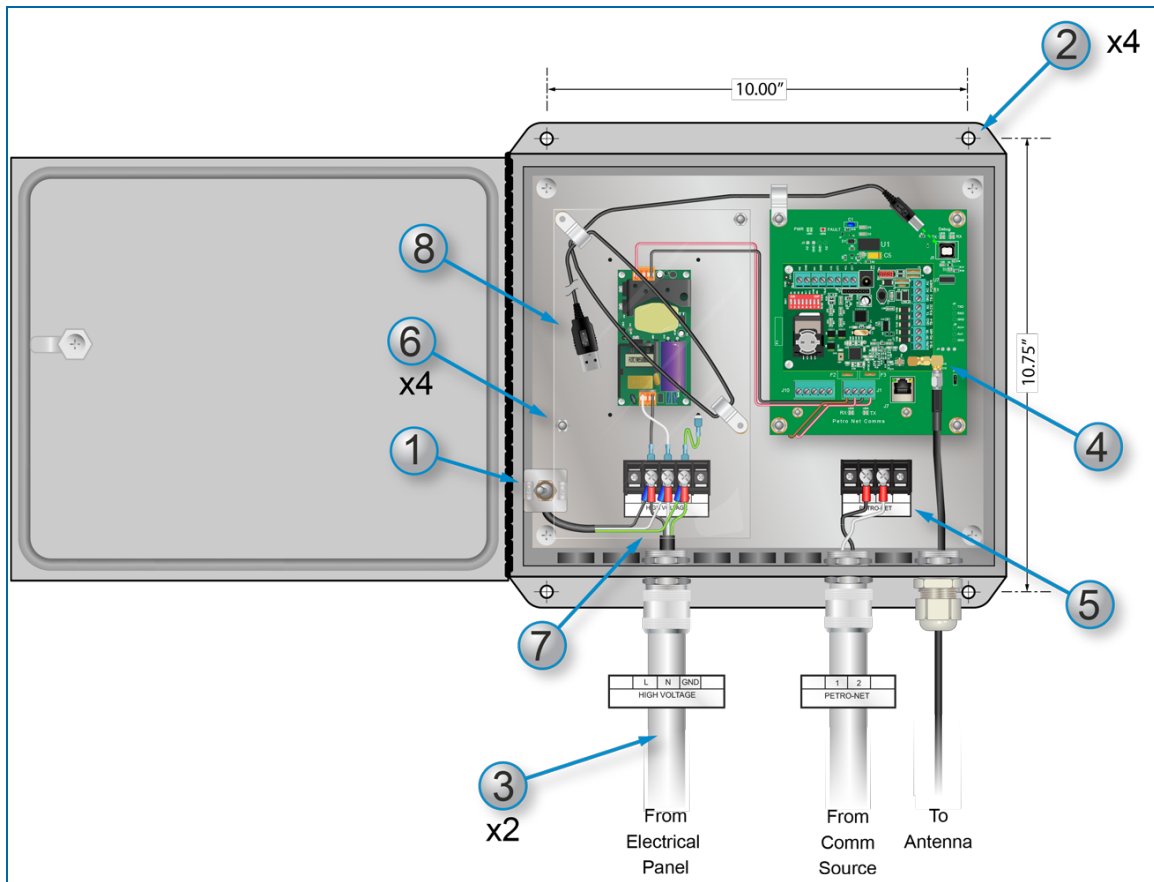
2.2 Remote VIS Enclosure Installation



WARNING: To prevent electrical shock, de-energize the system before you do this installation.



ATTENTION: Electrostatic Sensitive Device - To prevent damage from electrostatic discharge, obey the precautions in [Electrostatic Sensitive Devices \(ESD\)](#) when it is necessary to move or touch these components.



1. The enclosure does not come with a built-in ON/OFF switch. A switch is optional and can be installed if necessary. Install the switch power terminals to the power terminal block.
2. The enclosure is a NEMA Type 3R and can be installed indoors or outdoors. Refer to the section, "[NEMA Type 3R Enclosures](#)" on page 8 for information. Use the four (4) screw holes to install the enclosure on a wall or applicable outdoor location.
3. Install rigid steel conduit for serial power and Petro-Net (RS-485).
4. Install the antenna in an applicable location (see below). Install an F-Type right-angle female to male coaxial adapter on the coaxial connector of the VIS board in the enclosure. Run the antenna cable to the remote VIS enclosure and connect the cable to the adapter.
5. Run the Petro-Net twisted pair wires from the RS485 communication source to the Petro-Net terminal block in the enclosure.



NOTICE: Make sure to maintain the polarity of Petro-Net wiring throughout the system.

6. Remove the four (4) nuts that hold the plexiglass shield and cable clamps. Remove the clamps and shield to get access to the power terminal block. Run the Line, Neutral and Ground terminals from the electrical panel to the remote VIS enclosure.

7. Connect the terminals to the applicable poles of the terminal block. Install the plexiglass shield and cable clamps again.
8. A USB cable is supplied for diagnostic testing. Use the supplied cable clamps to wind the USB cable when not in use.

2.3 Antenna Installation

For information on the installation of the recommended antenna types (Body Mount or Panel style) refer to M1040-ANT AVI Antenna Installation.

Revisions - M00-20-8225-AVI

Revision #	ECO	Effective	Software Version	Key Changes
0	1866	2/22/2021	NA	Initial Release



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

Warranty

OPW Fuel Management Systems warrants that all OPW Tank Gauge and Petro Vend Fuel Control systems supplied by OPW Fuel Management Systems to the Original Purchaser will be free from defects in material and/or workmanship under normal use and service for a period of 12 months from the date of installation or 15 months from the date of shipment from OPW. Additionally, OPW Fuel Management Systems warrants that all upgrades and replacement parts (new and remanufactured) supplied by OPW Fuel Management Systems will be free from defects in material and workmanship under normal use and serviced for a period of 90 days from the date of installation or for the remainder of the system's original warranty, whichever is greater, as set forth in the first sentence of this statement. The foregoing warranties will not extend to goods subjected to misuse, neglect, accident, or improper installation or maintenance or which have been altered or repaired by anyone other than OPW Fuel Management Systems or its authorized representative. The buyer's acceptance of delivery of the goods constitutes acceptance of the foregoing warranties and remedies, and all conditions and limitations thereof.

If a claim is made within the warranted time period that any equipment and/or remanufactured part is defective in material or workmanship under normal use and service, such equipment and/or remanufactured part shall be returned to OPW Fuel Management Systems, freight prepaid. If such equipment or remanufactured part is found by OPW Fuel Management Systems in its sole judgment to be defective in material or workmanship under normal use and service, OPW Fuel Management Systems shall, at its sole option, repair or replace such equipment and/or remanufactured part (excluding, in all instances, fuses, ink cartridges, batteries, other consumable items, etc.) OPW Fuel Management Systems shall not be held responsible for data loss or retrieval on returned products.

The warranties, as set forth above, are made expressly in lieu of all other warranties, either expressed or implied (including, without limitation, warranties of merchantability and fitness for any particular purpose and of all other obligations or liabilities on OPW Fuel Management Systems' part.) Further, OPW Fuel Management Systems neither assumes, nor authorizes any other person to assume for it, any other liability in connection with the sale of the systems, or any new/replacement part that has been subject to any damage from any act of nature or any force majeure. Any terms proposed by the Original Purchaser either orally or in writing are expressly rejected. The terms and conditions expressed in this document may only be changed upon the express written consent of OPW Fuel Management Systems.

The term "Original Purchaser" as used in these warranties shall be deemed to mean the authorized OPW Fuel Management Systems' distributor to which the system or any new/replacement part was originally sold. These warranties may be assigned by the original purchaser to any of its customers who purchase any OPW Fuel Management Systems' systems or new/replacement parts. This document shall be governed by and construed in accordance with the law of the State of Illinois. OPW Fuel Management Systems and Original Purchaser agree that any legal action or proceeding under or with respect to this document may ONLY be brought in the courts of the State of Illinois, or the United States District Court having jurisdiction in the City of Hodgkins, Illinois. Original Purchaser expressly consents to personal jurisdiction in any of the above-mentioned forums and agrees to waive all defenses based on improper venue or inconvenient form should an action be brought therein.

The sole liability of OPW Fuel Management Systems, for any breach of warranty, shall be as set forth above. OPW Fuel Management Systems does not warrant against damage caused by accident, abuse, faulty or improper installation or operation. In no event shall manufacturer's liability on any claim for damages arising out of the manufacture, sale, delivery or use of the goods exceed the original purchase price of the goods. In no event shall OPW Fuel Management Systems be liable for any direct, indirect, incidental or consequential damage or loss of product.

TERMS

Ex-works our factory, Hodgkins, Illinois, USA

Installation not included.

All trade names are registered. Patents pending.

Subject to engineering improvement and/or other changes.



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