ONA-800
Getting Started Guide
R002

ONA-800 Getting Started Guide

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About this Guide

This section explains how to use this *Getting Started Guide.*

Purpose and scope

The purpose of this manual is to help you successfully use the features and capabilities of the ONA-800. This manual includes task-based instructions that describe how to configure, use, and troubleshoot the general functions of the base unit.

Assumptions

This manual is intended for novice, intermediate, and experienced users who want to use the test instrument effectively and efficiently. VIAVI assumes that you have basic computer experience and are familiar with basic telecommunication concepts, terminology, and safety.

Conventions

This guide uses typographical and symbols conventions as described in the following tables.

Table 1 Text formatting and other typographical conventions

Item(s)	Example(s)
Buttons, keys, or switches that you press or flip on a physical device.	Press the **On** button. – Press the **Enter** key. – Flip the **Power** switch to the on position.
Buttons, links, menus, menu options, tabs, or fields on a PC-based or Web-based user interface that you click, select, or type information into.	Press the **On** button**.** – Click **File > Properties**. – Click the **Properties** tab. – Type the name of the probe in the **Probe Name** field.
Directory names, file names, and code and output messages that appear in a command line interface or in some graphical user interfaces (GUIs).	`$NANGT_DATA_DIR/results` (directory) – `test_products/users/defaultUser.xml` (file name) – `All results okay.` (output message)
Text you must type exactly as shown into a command line interface, text file, or a GUI text field.	– Restart the applications on the server using the following command: **`$BASEDIR/startup/npiu_init restart`** Type: **`a:\set.exe`** in the dialog box.
Command line option separators.	`platform [a|b|e]`
Optional arguments (text variables in code).	`login [platform name]`
Required arguments (text variables in code).	<`password`>

Table 2 Symbol conventions

	This symbol indicates a note that includes important supplemental information or tips related to the main text.
	This symbol represents a general hazard. It may be associated with either a DANGER, WARNING, CAUTION, or ALERT message. See Table 3 for more information.
	This symbol represents an alert. It indicates that there is an action that must be performed in order to protect equipment and data or to avoid software damage and service interruption.
	This symbol represents hazardous voltages. It may be associated with either a DANGER, WARNING, CAUTION, or ALERT message. See Table 3 for more information.
	This symbol represents a risk of explosion. It may be associated with either a DANGER, WARNING, CAUTION or ALERT message. See Table 3 for more information.
	This symbol represents a risk of a hot surface. It may be associated with either a DANGER, WARNING, CAUTION, or ALERT message. See Table 3 for more information.
	This symbol represents a risk associated with fiber optic lasers. It may be associated with either a DANGER, WARNING, CAUTION or ALERT message. See Table 3 for more information.
	This symbol, located on the equipment, battery, or the packaging indicates that the equipment or battery must not be disposed of in a land-fill site or as municipal waste, and should be disposed of according to your national regulations.

Table 3 Safety definitions

Term	Definition
DANGER	Indicates a potentially hazardous situation that, if not avoided, *will* result in death or serious injury. It may be associated with either a general hazard, high voltage, or other symbol. See Table 2 for more information.
WARNING	Indicates a potentially hazardous situation that, if not avoided, *could* result in death or serious injury. It may be associated with either a general hazard, high voltage, or other symbol. See Table 2 for more information.
CAUTION	Indicates a potentially hazardous situation that, if not avoided, could result in minor or moderate injury and/or damage to equipment. It may be associated with either a general hazard, high voltage, or risk of explosion symbol. See Table 2 for more information. When applied to software actions, indicates a situation that, if not avoided, could result in loss of data or a disruption of software operation.
ALERT	Indicates that there is an action that must be performed in order to protect equipment and data or to avoid software damage and service interruption.

Safety and compliance information

Safety information is provided in the document *Safety Instructions - ONA-800 Base Unit*, 22137678, which is shipped with the ONA-1000. Compliance information is listed below.

California Proposition 65

California Proposition 65, officially known as the Safe Drinking Water and Toxic Enforcement Act of 1986, was enacted in November 1986 with the aim of protecting individuals in the state of California and the state's drinking water and environment from excessive exposure to chemicals known to the state to cause cancer, birth defects or other reproductive harm.

For the VIAVI position statement on the use of Proposition 65 chemicals in VIAVI products, see the Hazardous Substance Control section of VIAVI's Standards and Policies web page.

Federal Communications Commission (FCC)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment was tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case you will be required to correct the interference at your own expense.

The authority to operate this equipment is conditioned by the requirements that no modifications be made to the equipment unless the changes or modifications are expressly approved by VIAVI.

Caution:

- The device complies with FCC and Industry Canada RF exposure limits set forth for an uncontrolled environment. For body worn operation, the instruments meet the FCC RF exposure limits when used with an accessory that contains no metal and that positions the instrument a minimum of 0cm from the body.
- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Industry Canada (IC)

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: 1) This device may not cause interference; and, 2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: 1) l'appareil ne doit pas produire de brouillage; et, 2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Device operation in the band 5150–5250 MHz is for indoor use only.

Dans la bande de fréquence 5150-5250 Mhz, l'utilisation du produit doit être uniquement en intérieur.

Europe

EU WEEE and Battery Directives

This product, and the batteries used to power the product, should not be disposed of as unsorted municipal waste and should be collected separately and disposed of according to your national regulations.

VIAVI has established a take-back processes in compliance with the EU Waste Electrical and Electronic Equipment (WEEE) Directive, 2012/19/EU, and the EU Battery Directive, 2006/66/EC.

Instructions for returning waste equipment and batteries to JDSU can be found in the WEEE section of VIAVI's Standards and Policies web page.

If you have questions concerning disposal of your equipment or batteries, contact JDSU's WEEE Program Management team at WEEE.EMEA@VIAVISolutions.com.

EU REACH

Article 33 of EU REACH regulation (EC) No 1907/2006 requires article suppliers to provide information if a listed Substances of Very High Concern (SVHC) is present in an article above a certain threshold.

For information on the presence of REACH SVHCs in VIAVI products, see the Hazardous Substance Control section of VIAVI's Standards and Policies web page.

EU CE Marking Directives (LV, EMC, RoHS, RE)

This product conforms with all applicable CE marking directives. Please see EU Declaration of Conformity for details.

EU Radio Equipment Directive

In accordance with Article 10.8 of the EU Radio Equipment Directive 2014/53/EU, the following table provides information on the frequency bands and the maximum RF transmit power of this product for sale in the EU:

Frequency Range (MHz)	Channels Used	Max Transmit Power (dBm/mW)
2402-2480	0-78	9dBm (8mW)
2412-2462	1-11	20.5dBm (112mW)
5180-5240	36-48	15.5dBm (36mW)
5260-5320	52-64	15.5dBm (36mW)
5500-5700	100-140	15.5dBm (36mW)
5745-5825	149-165	15dBm (32mW)

Technical assistance

For technical assistance, call 1-844-GO-VIAVI. For the latest TAC information, go to http://www.viavisolutions.com/en/services-and-support/support/technical-assistance.

ONA-800 Getting Started Guide

1

Getting started

This chapter explains how to use this *Getting Started Guide*.

The topics discussed in this chapter are as follows:

About the ONA-800

The ONA-800 is a modular communications test and measurement instrument that may be used both indoors and outdoors. Modules with specific test capabilities can be added and removed as required. The unit features an 8-inch touchscreen for quick access to the touch-based user interface. Powered by either external AC power or batteries in the field, the ONA-800 is both rugged and portable. Capabilities such as WiFi and Bluetooth are optional.

Figure 1 Front panel - touchscreen

This section covers the following topics:

Unpacking and inspection

VIAVI typically ships our instruments using anti-static packing material to stabilize the components inside the box. When unpacking the components, verify that all the items you ordered are included in the package. Accessories may be shipped in a separate box.

After you unpack the components, examine the top, bottom, front, and side panels, including ports, LEDs, and the touchscreen for damage.

If any component shows signs of damage, contact VIAVI Customer Care at 1-844-GO-VIAVI. For the latest TAC information, go to http://www.viavisolutions.com/en/services-and-support/support/technical-assistance. For information about returning equipment, see “Returning equipment to VIAVI”.

Consider saving shipping boxes and packing materials in case you need to repackage the components for shipment.

What's included with the base unit

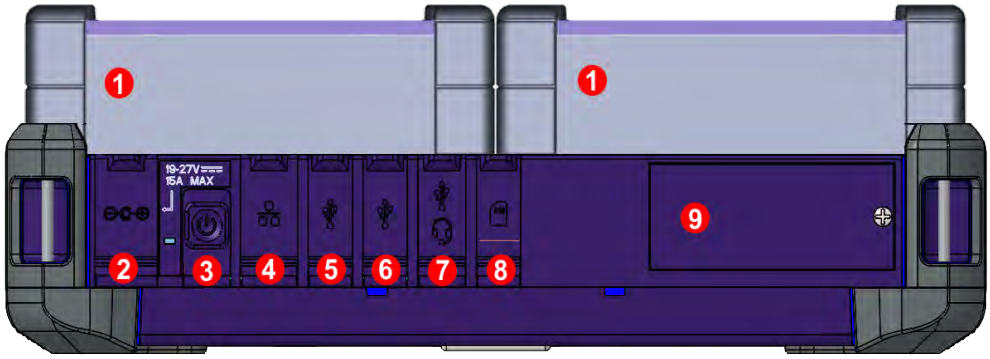
The ONA-800 base unit ships with the following equipment:

- One field-replaceable Lithium Ion battery (C5BATTERY98)
- AC adapter (PS-330W24V) and cord
- Up to two dummy modules, depending on the number of solution modules ordered
- LCD screen protector
- Soft-shell travel case

Features

Figure 2 shows the top panel of the ONA-800.

Figure 2 ONA-800 top panel

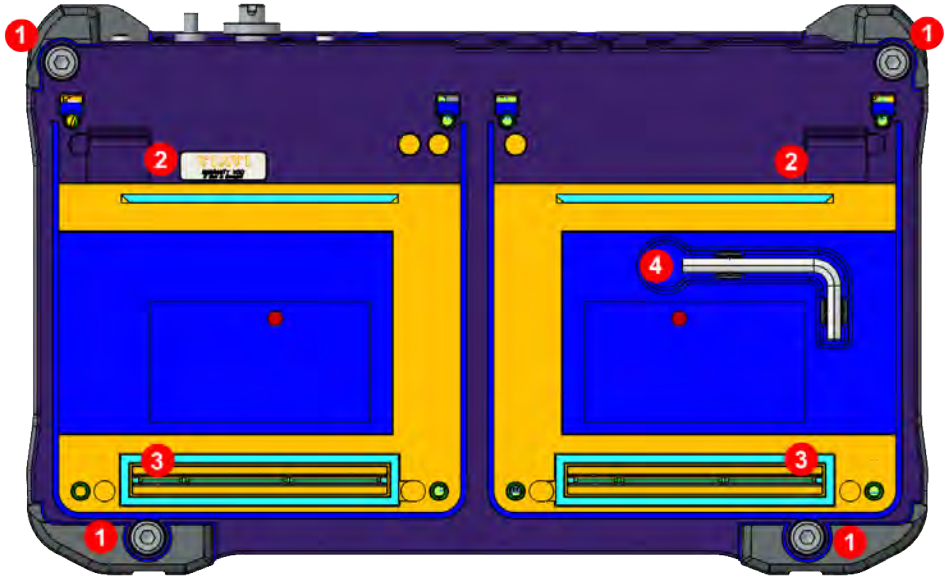


1	Modules
2	AC/DC power adapter port (19-27 V, 15A Max)
3	Power button
4	LAN port
5	USB port
6	USB port
7	USB-C port (device only)
8	Micro SD card port
9	Optional module slot

Figure 3 Right and left side panels

1	Cooling fans
2	Battery access door
3	Modules

Figure 4 Back panel, no modules



1	Screws
2	ESD ground
3	Module connector ports
4	Hex key

Attaching the screen

To attach the screen to the base unit

1 Set the screen into the base, ensuring the mating connectors between the two pieces are aligned, as shown in Figure 5.

Figure 5 Set screen to base

2 Set unit so you have access to the back. Using the Hex Key located in the groove on the back panel of the screen, tighten the four fasteners, as shown in Figure 6.

Figure 6 Fastener locations

Powering the base unit

Power is supplied to the instrument by the battery or the AC power adapter. For the ONA-800, the adapter is supplied with the instrument. Use of AC power adapters or batteries other than those supplied with your ONA-800 is not recommended as other slices/modules may be supplied with incompatible adapters or batteries. When supplying power using AC power adapter, you need to verify that you have the correct adapter.

CAUTION:

Do not attempt to run the ONA-800 in an enclosure such as the soft-shell travel case. Doing so may damage the unit.

Battery Installation

The base unit can operate supplied by the AC power adapter shipped with the unit. Figure 7 shows the battery label.

Figure 7 ONA-800 battery label

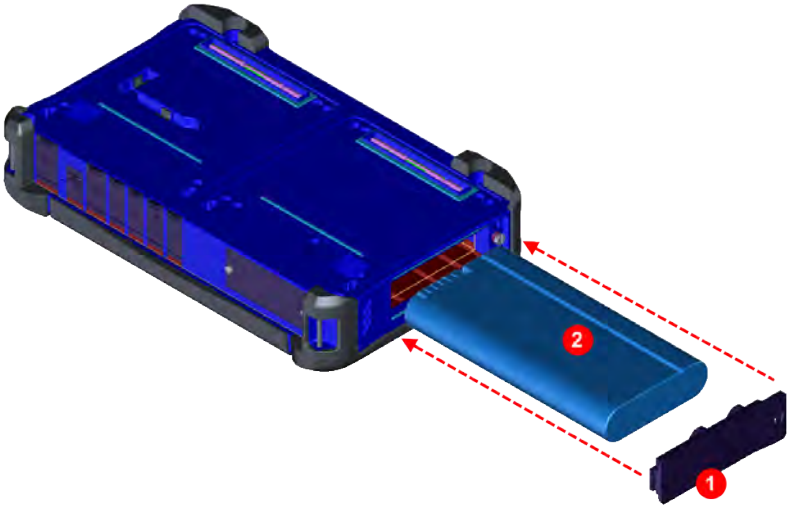
CAUTION:

The Lithium Ion batteries shipped with the unit can explode if incorrectly installed. When replacing the battery, ensure that you only use VIAVI approved battery types, as shown in Figure 7, and that they are properly installed. Always dispose of batteries according to your local safety and environmental regulations.

NOTE:

VIAVI recommends that you either power off the unit or switch to AC power before replacing the batteries.

To install the battery



1	Battery access door
2	Field-replaceable Lithium Ion battery

AC power adapter

The base unit with all applications installed operates from 19-27V DC and can operate supplied by the 19V DC, 160W AC power adapter shipped with the unit. The nominal input ratings of the power adapter are 100-240V AC, 50-60Hz, and it auto-ranges between 90-264V AC and 47-63Hz. The mains supply cord used with the power adapter must be grounded with a connection to protective earth.

NOTE:

Before connecting an AC power adapter to the base unit, refer to the label on the adapter (Figure 8) to confirm that it is the correct adapter for use with the unit. AC power adapters supplied with modules might not be compatible for use with the ONA-800.

Figure 8 ONA-800 AC power adapter label

2

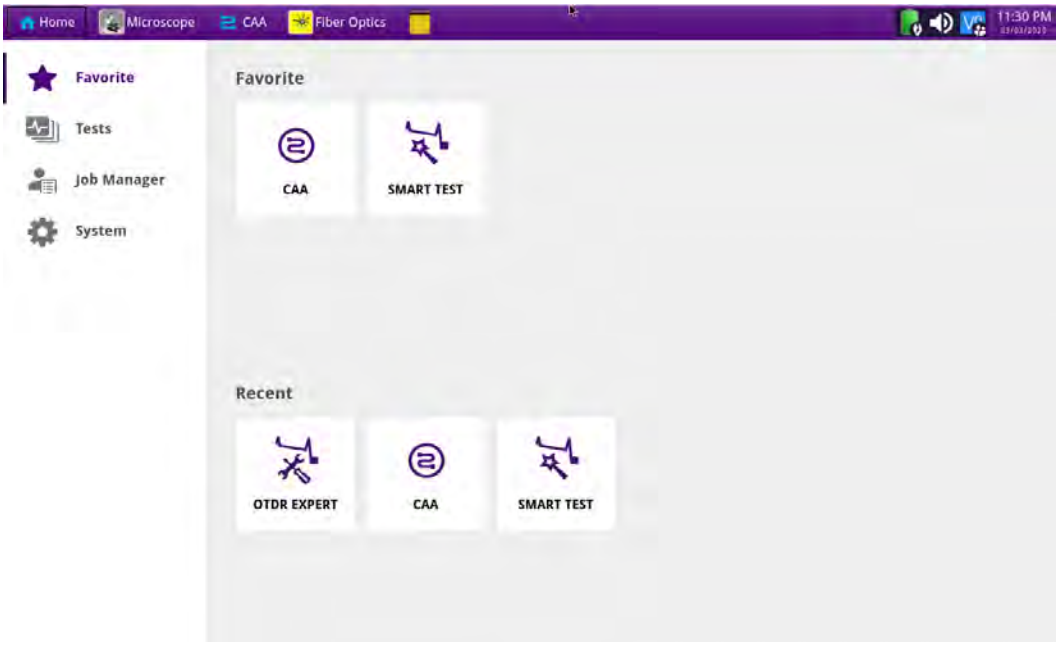
Setting up the system

This chapter covers the following information:

Home Screen

When you first start the ONA-800, the **Home** Screen appears, as shown in Figure 1.

Figure 9 Home Screen



The **Home** screen provides access to the **Tests**, **Job Manager**, and **System pages**. You can return to the **Home** screen at any time by clicking the **Home** button in the top left corner of the screen.

Figure 10 Home button

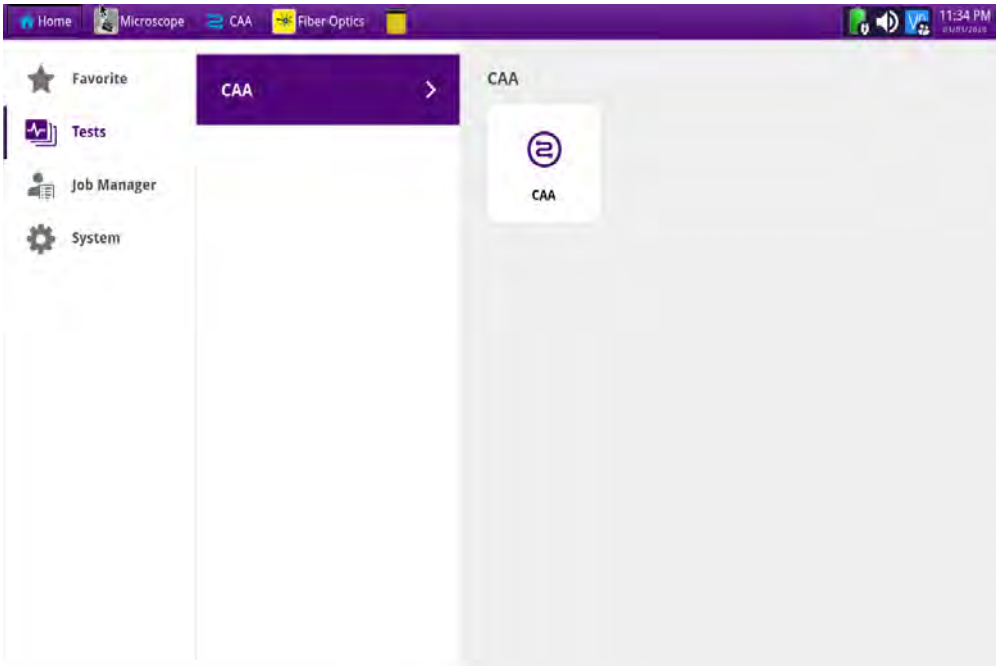
Favorites

The **Favorites** page provides access to pages identified as Favorites and the most recent pages visited.

Tests

The Tests page provides access to the available tests.

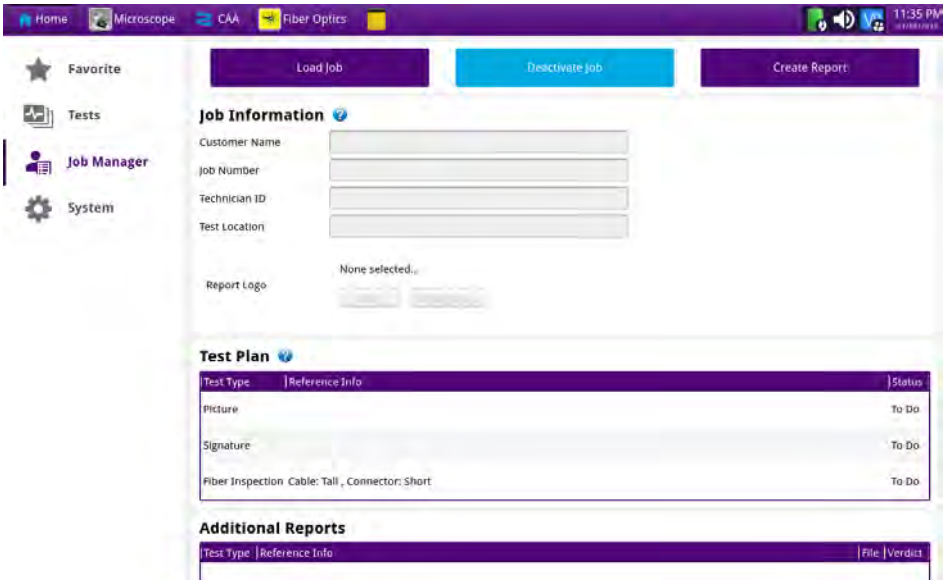
Figure 11 Tests page



Job Manager

The Job Manager allows you to specify the information to be included whenever you run a test and generate a report. Each time you generate a report, your instrument will automatically insert the Customer Name, Job Number, Technician ID, and Test Location that you specified in the Job Manager into the report heading.

Figure 12 Job Manager



NOTE
Additional tools might be available on the **System** screen when optional software features are installed.

If you change the report information on the Report Info screen (before you generate a report), the new report information will override the defaults that are specified in the Job Manager. For example, if you change the Work Order number on the Report Info screen, the Work Order number will be included in your report output instead of the default Job Number.

To specify report information

1 On the Home screen, select **Job Manager**.
The Job Manager screen appears.

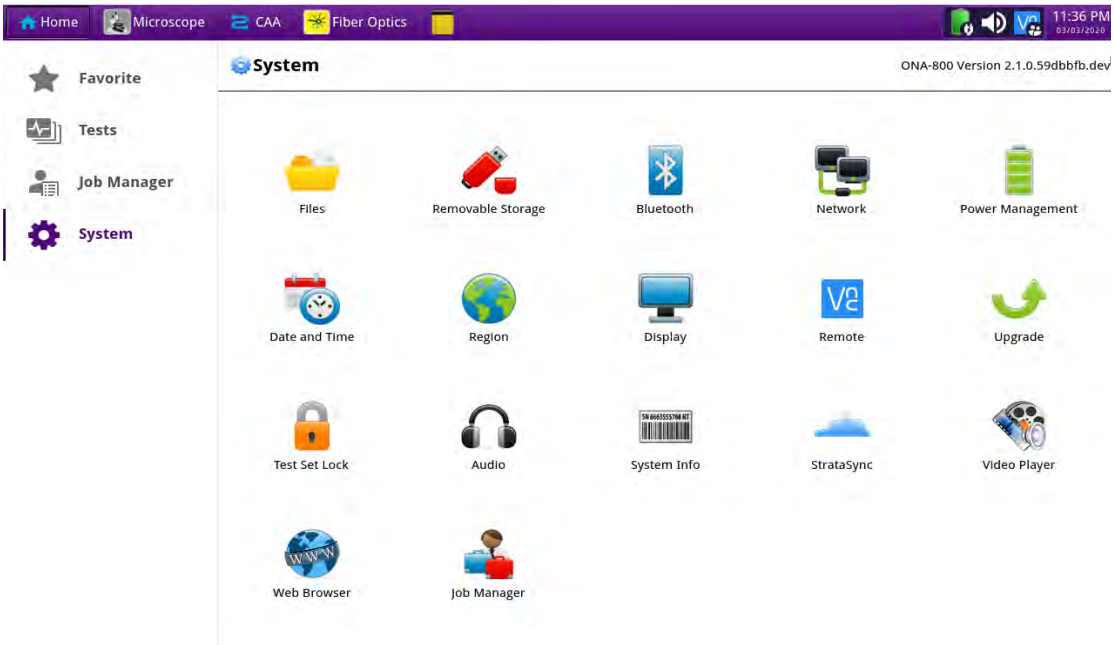
2 Specify the Customer Name, Job Number, Technician ID, and Location.
The report information is specified, and will be retained until you change it.

System

The **System** screen provides access to tools for viewing system information and performing other tasks as required.

NOTE
Additional tools might be available on the **System** screen when optional software features are installed.

Figure 13 System screen



The tool bar also provides access to certain system tools, including and power management.

Table 1 System tools

Tool	Description
Files	Access files saved to the unit.
Removable Storage	Access the USB plugged into the unit.
Network	Configure Ethernet connectivity and, optionally, Wi-Fi connectivity.
Power Management	View power supply information and manage power settings.
Date and Time	Specify date and time settings.
Region	Specify international settings, including the language of the user interface.
Display	Adjust the brightness level of the touchscreen, enable the screen saver, and, when required, calibrate the touchscreen display.
Remote	View and manage remote access settings, including, when required, VNC and Smart Access Anywhere settings.
Upgrade	Perform system software updates.
Test Set Lock	Manage lock options that prevent unauthorized access to the unit.
Audio	Manage speaker and microphone volume settings.
Clock Source	Set up a reference frequency and timing source.
System Info	View and manage system information.
StrataSync	Connect to the StrataSync server for synchronization.
Video Player	Access the video player on the unit.
Web Browser	Access the World Wide Web.
Job Manager	Specify the information to be included whenever you run a test and generate a report.

Setting up remote access

1 Select **System** on the menu bar, and then select **Remote**.

2 Type a password in the **Remote access password** field.

This password applies to all remote-access tools; for example, VNC, FTP, and SSH.

3 Optionally, do any of the following:
   – Enable or disable VNC access by selecting or deselecting, respectively, the **Enable VNC access** check box.
   – Enable or disable a password for VNC by selecting or deselecting, respectively, the **Require password for VNC access** check box.

Connecting to a Wi-Fi network

NOTE
Wi-Fi connectivity is optionally available. Contact your VIAVI sales representative for more information.

1 Select **System** on the menu bar, and then select **Network**.
2 Select **Wi-Fi**, and then select the **Enable Wireless Adapter** check box to display a list of available wireless networks.
3 Select a network, and then enter the access credentials.

Setting up a Bluetooth connection

NOTE
Bluetooth connectivity is an option that must be available on the unit before this procedure can be performed. Contact your VIAVI sales representative for more information.

1 Select **System** on the menu bar, and then select **Bluetooth**.
2 Enable the following check boxes:
   – **Enable Bluetooth**
   – **Allow other devices to pair with this device**
3 Optionally, enter a name for the unit.
4 Activate Bluetooth on the remote device to be paired with the unit.
5 On the unit, select **Start Scanning** to locate detectable devices in range.
   The names of newly detected devices appear in the **Discovered Devices**, and the names of previously detected devices appear in the **Paired Devices** list.
6 Select the remote device.
7 On the remote device, enter a pairing code if prompted, and then select **Pair** to pair it with the unit.

Using Smart Access Anywhere

Smart Access Anywhere allows you to view and control the instrument's user interface from a remote location using a workstation. In addition to configuring the instrument and performing tests, you can transfer files to and from the instrument using the instrument's file manager utility. You can also rename and delete files, or create, rename, and delete directories.

See "Using Smart Access Anywhere" on page 13 for more information.

Enabling software options

Software options may be available on the unit or purchased separately. For information about purchasing software options, contact the VIAVI Solutions Sales Office for your region.

Viewing available software options

To view available software options, select **System** on the menu bar, and then select **System Info**. Available options are listed in the **Base Options** pane. An icon indicates the status of each option.

Table 2 Software Option Status Icons

Icon	Status
	Option is enabled.
	Free-trial period for an option is expiring. When the trial period ends, a warning message appears. If a test is running when the trial period ends, the test will continue, but an expiration warning appears continuously until a license code is entered or a reset is performed.
	Option is not enabled. Contact the VIAVI Solutions Sales Office for the region for information about enabling it.

Enabling purchased software options

IMPORTANT

Before beginning this procedure, ensure that the USB stick on which software option files are saved is available.

1. Select **System** on the menu bar, and then select **System Info**.
2. Connect the USB stick to a USB port on top panel of the unit.
3. Select **Import Options from USB** below the **Base Options** pane.

A confirmation message appears when the options are installed.

4 Restart the instrument, access the **System Info** tool, and then confirm that each software option appears in the **Base Options** pane and is enabled (Table 2 on page 15).

Updating the system software

System software and solution firmware can be updated from storage media, such as a USB drive, or over the network.

This section describes the following tasks:

- “Updating the system software using a USB drive” on page 16
- “Updating the system software over the network” on page 17

Updating the system software using a USB drive

Download the system software to a PC and then extract it to a USB drive with at least 1 GB available space. VIAVI recommends that the USB drive have no other content stored on it.

The update process when using a USB drive involves the following procedures:

- “Downloading the software and extracting to a USB drive” on page 16
- “Performing a software update using a USB drive” on page 17

Downloading the software and extracting to a USB drive

1 Using a Web browser on a personal computer (PC), go to VIAVI Software Updates and Downloads.

2 Locate and then click the link for the latest version of the self-extracting system software file for the unit.

3 Save the software file to a location on the PC.

4 Plug a USB drive into the PC.

5 Using Windows Explorer, navigate to the software file, double-click the file, and then click **Run**.

6 In the dialog that appears, click **Browse** to navigate to and select the USB drive.

7 Click **Extract** to initiate extraction of the system software files to the USB drive. Do not unplug the drive from the PC while the files are extracting.

8 When all the files are extracted, navigate to the USB drive, right-click the name of the drive, and then click **Eject**.

9 Unplug the USB drive from the PC.

10 If required, go to “Performing a software update using a USB drive”.

Performing a software update using a USB drive

1 Confirm the following:

– The unit will have an uninterrupted supply of power during the software update. If necessary, connect the AC power adapter to the unit.

WARNING:

Electrical shock may result in serious injury or death. Be sure the AC power adapter is connected to the correct voltage mains. Do not use the adapter outdoors or in wet locations. Use only the AC power adapter supplied with the unit.

– A USB drive on which the extracted system software files are saved is available.

2 Plug the USB drive into the USB connector on the top panel of the unit.

3 Select **System** on the menu bar, select **Upgrade**, and then select **USB**.

The release number of the software available on the USB drive appears. Note the following symbols that may appear beside the release number on the USB stick:

– An equals symbol indicates that the software on the USB stick and the software on installed on the unit are the same (that is, have the same release number).

– A down-arrow symbol indicates that the software on the USB stick is an earlier release than the software installed on the unit.

– An up-arrow symbol indicates that the software on the USB stick is a later release than the software installed on the unit and the system software can be upgraded to the later release.

4 To upgrade to a later release, select **Start Upgrade**.

A dialog box appears with prompts to either exit all tests that are running or cancel the update if the tests cannot be stopped.

5 Select **OK** to proceed with the software update. Do not unplug the USB drive from the unit during the update.

The unit automatically restarts when the update is completed.

6 After the unit has restarted, unplug the USB drive.

Updating the system software over the network

The system software on the unit can be updated over a network connection to a server where the updated software file is located, such as ona-800.updatemyunit.net. Before beginning the update, review the following recommendations:

- Use a wired network connection.
- A unit that is behind a firewall might not be able to access the server where the system software is located. Connect the unit over a public network instead.

1 Ensure that the unit will have an uninterrupted supply of power during the update. If necessary, connect the AC power adapter to the unit.

WARNING:

Electrical shock may result in serious injury or death. Be sure the AC power adapter is connected to the correct voltage mains. Do not use the adapter outdoors or in wet locations. Use only the AC power adapter supplied with the unit.

2 Select **System** on the menu bar, select **Upgrade**, and then select **Network**.

3 Do one of the following:

a Enter the server address where the update is located.

b Enter the address where the software file is located; for example, the FTP address, server IP address or host name, and the proxy server address (if necessary), as well as the access credentials.

4 Select **Connect**.

5 After the unit accesses the server, select the link for the software file for the unit.

Note the following symbols that may appear beside the release number of the software file:

– An equals symbol indicates that the software on the USB stick and the software on installed on the unit are the same (that is, have the same release number).

– A down-arrow symbol indicates that the software on the USB stick is an earlier release than the software installed on the unit.

– An up-arrow symbol indicates that the software on the USB stick is a later release than the software installed on the unit and the system software can be upgraded to the later release.

6 Select **Start Upgrade**.

A dialog box appears with prompts to either exit all tests that are running or cancel the update if the tests cannot be stopped.

7 Select **OK** to begin the software update.

The unit automatically restarts when the update is completed.

NOTE

The software update can take several minutes, depending on the speed and reliability of the network.

Synchronizing to the StrataSync server

To automatically obtain the latest configuration settings, software options, updates and ownership registration information, the unit should be synchronized with a VIAVI server via the Internet using an optional subscription-based service called StrataSync.

In addition to the latest operating software, synchronization also uploads user files saved on the unit to the StrataSync server. A connection to the Internet would be provided upon receipt of the unit and on a regular (daily) basis thereafter to ensure that the most currently issued options and updates are available to the unit and to allow all user information to be backed up.

The unit must be able to connect to the Internet over Ethernet or Wi-Fi. When an Internet connection is available and the unit is connected to the StrataSync server, a request to initiate the syncing process appears.

NOTE

Ensure that network settings are configured on the unit via the **Network** system tool. VIAVI recommends setting the IP mode to DHCP.

1. Select **System** on the menu bar, and then select **StrataSync**.
2. Verify that the server address appears in the **Server Address** field. The default server address is stratasync.viavisolutions.com.
3. Enter the ID of the unit in the **Account ID** field.

   Synchronization cannot occur without the entry of a pre-approved, unique account ID obtained from VIAVI. Ensure that an account ID is available before attempting to access the StrataSync server.
4. Optionally, enter an ID in the **Technician** ID field.

   A default technician ID is provided. This ID can be modified at any time.
5. Select **Start Sync** to initiate a connection to the StrataSync server.

   Synchronization begins when a connection to the server is established.

NOTE

During Synchronization, icons indicating the progress and either the failure or completion of the process are displayed.

When an error or failure occurs, a message appears, detailing the possible issue.

3

Smart Access Anywhere

This chapter explains how to configure and use the Smart Access Anywhere utility.

The topics discussed in this chapter are as follows:

About Smart Access Anywhere

Smart Access Anywhere allows you to view and control the instrument's user interface from a remote location using a workstation. In addition to configuring the instrument and performing tests, you can transfer files to and from the instrument using the instrument's file manager utility. You can also rename and delete files, or create, rename, and delete directories.

Licensing

To use Smart Access Anywhere, you must have a license. Contact your VIAVI sales representative for more information about obtaining a license.

Downloading and extracting the utility

The **Smart Access Anywhere** utility must be downloaded and extracted on the workstation that you intend to use to connect remotely to the test instrument.

NOTE:

You do not need administrator privileges to install the utility on your workstation. The utility will be downloaded as a zip file.

To download the utility

1. On your workstation, open a browser and type the following address:
   http://smartaccess.updatemyunit.net
2. Click on the **SmartAccessAnywhere_Vxx.xx.xx.zip** link.
3. Select **Save** in the dialog box.
   After the download is complete, the browser can be closed.
4. Go to the download directory, then extract the files in the zip file into the desired destination directory.

The utility is downloaded and extracted.

Establishing a connection

You can connect remotely to your test instrument using a 1) wired Ethernet connection, 2) WiFi connection, or 3) Smartphone with Data Tethering. Before establishing a

connection to the instrument, verify that port 22 (SSH) or 443 (HTTS) is open on your workstation.

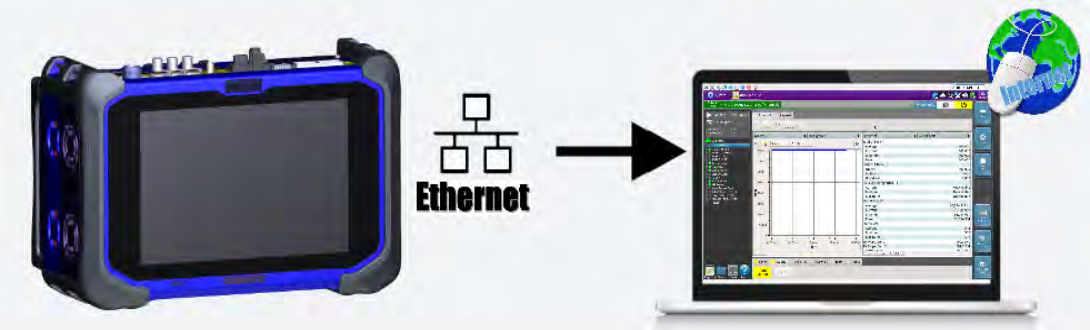
NOTE:

To connect using WiFi, the WiFi option must be installed on the target test instrument. To order the option, or to determine whether a particular Smartphone has been qualified by Viavi for the purpose of establishing remote connections to the instrument, contact VIAVI Customer Care at 1-866-228-3762 or www.viavisolutions.com.

Wired Ethernet Connection

Figure 14 illustrates a test instrument connected to a workstation via a wired Ethernet connection to the Internet. Before establishing a wired connection, you need to 1) determine the instruments IP address and, 2) configure the network proxy (if a proxy is used).

Figure 14 Wired Ethernet Connection



WiFi Connection

Figure 15 illustrates a test instrument connected to a workstation using a WiFi connection.

Figure 15 WiFi Connection

Smartphone with Data Tethering

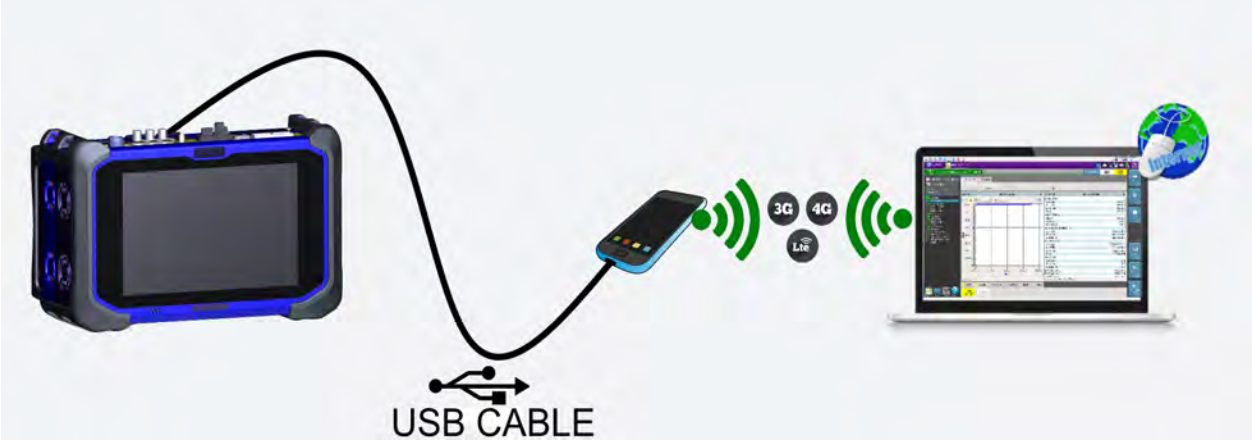
You can remotely connect to a test instrument using a Smartphone capable of data tethering and a WiFi hotspot or USB cable.

Figure 16 illustrates a test instrument connected to a workstation using a WiFi hotspot provided by a Smartphone that supports data tethering.

Figure 16 WiFi Connection using Smartphone

Figure 17 illustrates a test instrument connected to a workstation using a USB connection to a Smartphone that supports data tethering.

Figure 17 USB Connection using Smartphone



Launching the utility

To use the Smart Access Anywhere utility, you must 1) establish a connect from your PC or mobile device to the test instrument, 2) launch the utility on the test instrument to obtain the required remote access code, and then 3) launch the utility on your PC or mobile device, and enter the remote access code that was obtained from the instrument.

Launching the utility on the instrument

To launch the utility on your instrument

1. On the **System** page, select **Remote**.
2. Press **Connect** next to the SmartAccess Anywhere icon.

   The connection to SmartAccess Anywhere Server will initiate.
3. After a connection is established to the server, the instrument displays a message with the code that is required to access to the equipment remotely.
4. If you will be accessing the instrument remotely from your workstation, write down or capture the code in some manner so you have it when you return to your workstation. If another individual will be accessing the instrument remotely, provide the code to the individual.

Testing your connection

Before launching the utility on your workstation, you can also optionally test the connection between the workstation and target test instrument.

To test your connection

1. On your workstation, launch the Smart Access Anywhere utility.
2. Select **Test connection**.

   The test automatically launches.
3. To display connection log details in real time, select the **See full logs** button.

   The connection log appears, and provides the following information:
   - Upload and Download speed (in Kbyte/s) from Device to server.
   - Latency between Device and server (in ms).
4. After analyzing the results, do one of the following:
   - Select the **Clear test results** button to delete the current table, and retest the connection if desired.
   - If connection is deemed to be valid, enter the access code and establish connection.

Launching the utility on your PC or mobile device

After you establish a connection to your test instrument, you can launch the Smart Access Anywhere utility to update your instrument.

1 Launch the Smart Access Anywhere utility:
   – On your PC, go to the directory where you installed the utility, then double click **SmartAccessAnywhere.exe**.
   – On your mobile device, press the **Smart Access Anywhere** icon.

   The utility opens.

2 Enter the access code that was provided to you in the field provided on the upper part of the screen.

3 Click **Connect** to validate the code.

The Smart Access Anywhere screen appears.

NOTE:

After upgrading or rebooting a remote instrument, please wait at least two minutes before re-establishing the link between your workstation and the test instrument.

Displaying the instrument's user interface

After you launch the utility on your PC or mobile device, you can display the remote instrument's user interface on your workstation's display.

To display the instrument's user interface

- On the Introduction page, click **Remote Screen**.

  The user interface for the instrument appears on your workstation's display.

The VNC icon in the system tray indicates that the remote screen is active.

Transferring files

Single files can be transfered one by one from your PC or mobile device to the instrument, or from the instrument to your PC or mobile device.

To transfer a file to or from the workstation or instrument:

1 On the Introduction page, click **File Transfer**.

  A two-pane window appears, showing the PC or mobile device directories (or storage devices) in one pane, and the instrument directories (or storage devices) in the other pane.

2 In the "source" pane (the pane that has the file that you want to transfer), double click on the directory or storage device, then select the file to be transferred.

3 In the "destination" pane (the pane with the directory that you want to transfer the file to, select the destination directory for the file.

4 Do one of the following:
   – If you are transferring a file from your PC or mobile device to the instrument, click **Upload**.
   – If you are transferring a file from your instrument to the workstation, click **Download**.

   A dialog box appears asking you to verify the destination that you selected for the transferred file. If it is the correct destination, click OK.

5 Click **Save** to transfer the file.

A message will appear at the bottom of the screen providing details concerning the status of the file transfer. After the transfer is complete, the message disappears and the transferred file is underlined in the workstation or instrument's file manager.

Displaying and modifying connection settings

You can review information about the current remote session at any time.

To display session information

- Select the **Session icon** key.

Session details appear. This page gives information on the connection in real time.

To modify connection settings

1 Select the **Session** icon.

2 Disconnect the session using the **Disconnect** button.

3 On the session screen, select the **Network Settings** icon.

   The connection settings screen appears. The default connection is defined as **Smart-guess (default)**.

4 To modify the settings, select **Forced settings**, and then modify **SSI tunnel port** and/or **Internet proxy** as needed.

   The **Internet proxy** configuration is available exclusively if the port selected is **Alternative port (443)** and if **HTTPS packing** is selected.

NOTE:

If the default parameters need to be modified, it is recommended you discuss it with your local network administrator.

5 After configuring the settings, select **Back to main page**.

A

Physical specifications

Table 3 Physical specifications - ONA-800A-MF

Parameter	Specification
Dimensions	
Height	170 mm (6.7 in)
Width	269 mm (10.6 in)
Depth	
With dummy modules	91 mm (3.6 in)
Without dummy modules	58 mm (2.3 in)
Weight	
With dummy modules	2.4 kg (5.2 lb)
Without dummy modules	2.0 kg (4.4 lb)
Battery[1]	
Type	14.4 V, 6.7 A-h, 92 Wh, Lithium Ion
Charging time	
One battery, 100% charged	> 2.2 hours
Charging temperature	0 to 45°C (32 to 113°F)
Discharging temperature	10 to 60°C (50 to 240°F)
Storage temperature	-20 to 60°C (-4 to 140°F) **IMPORTANT:** VIAVI strongly recommends storing the battery pack in a low-humidity ≤80%RH, low-temperature <21°C (70°)F environment.
Environment	
Maximum humidity	95% RH non-condensing
Shock and vibration	MIL-PRF-28800F
Drop	MIL-PRF-28800F, ETSI EN 300 029-2-7
Storage temperature	-20 to 60°C (-4 to 140°F)

1. Battery life and charging time depends on the types of tests performed. Specified temperatures are internal to battery.

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ONA-800 Getting Started Guide
22142812 R002

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Safety Instructions

ONA-800

Important: read these instructions before connecting a module or components to a base unit!

Topics covered in these instructions include:

- Important Safety Instructions
- Interfaces and Safety Classifications
- Safety Standards

⚠ Important Safety Instructions

These instructions provide an explanation of safety symbols, definitions for safety terms, and precautions you should follow when using VIAVI instruments.

Safety symbols

The following safety symbols are used on the instruments supported by these instructions. All safety precautions must be observed when operating, servicing, or repairing the instruments. Failure to comply with the following safety precautions or with dangers, warnings and cautions used throughout this document or related manuals violates the intended use of this instrument.

	This symbol represents a general hazard. It may be associated with a DANGER, WARNING, or CAUTION message. See Table 1 for more information.
	This symbol represents hazardous voltages. It may be associated with a DANGER, WARNING, or CAUTION message. See Table 1 for more information.
	This symbol represents a risk of a hot surface. It may be associated with either a DANGER, WARNING, CAUTION, or ALERT message. See Table 1 for more information.
	This symbol represents a risk associated with fiber optic lasers. It may be associated with a DANGER, WARNING, or CAUTION message. See Table 1 for more information.

Safety terms

Table 1 defines safety terms used in the product documentation. Failure to observe these precautions while using the instruments violates the intended use of the products.

Table 1 Safety term definitions

Term	Definition
DANGER	Indicates a potentially hazardous situation that, if not avoided, *will* result in death or serious injury. It may be associated with either a general hazard, high voltage, or risk of explosion symbol.
WARNING	Indicates a potentially hazardous situation that, if not avoided, *could* result in death or serious injury. It may be associated with either a general hazard, high voltage, or risk of explosion symbol.
CAUTION	Indicates a potentially hazardous situation that, if not avoided, could result in minor or moderate injury and/or damage to equipment. It may be associated with either a general hazard, high voltage, or risk of explosion symbol.

The instruments supported by these instructions are designed to be used to test non-hazardous circuits with voltages less than 42.4 V peak and 60 VDC.

You must be responsible for your own safety by employing proper safety procedures to minimize the risk of electrical shock. Comprehensive safety training is beyond the scope of these instructions. Still, you should read and understand all safety information within before using these products.

When using the product, basic safety precautions should always be followed to reduce the risk of fire, shock, and injury to persons, including the following:

1. Read and follow all warning notices and instructions marked on the product and included in the manual.
2. CAUTION: If the equipment is used in a manner not specified by Viavi, the protection provided by the equipment may be impaired.
3. Use only the AC Adapter/Charger and main cords supplied with the product. Do not replace the mains cord with an inadequately rated cord.
4. Do not use AC Adapter/Charger outdoors or in wet or damp locations.
5. Connect the AC Adapter/Charger to the correct mains voltage as indicated on the ratings label.
6. Do not allow anything to rest on the power cord, and do not locate the product where persons can walk on the power cord.
7. This product is intended to be used with a 3-wire grounding-type plug (a plug that has a grounding pin). This safety feature is vital to the safe operation of the instrument. Do not defeat the purpose of the grounding-type by modifying the plug or using an adapter.
8. Do not position the equipment in such a way that would make it difficult to disconnect the mains cord from the AC inlet in order to remove AC power from the equipment.
9. Do not use telephone equipment (other than cordless) during a lightning storm. There is a possibility of a nearby lightning strike, which could exceed the capacity of the telephone network protective devices and harm you.
10. Do not use telephone equipment in the vicinity of a gas leak or in any explosive environment. This tester, and most other telephone equipment, could in normal operation generate a spark strong enough to ignite a fire or explosion.
11. Do not touch or otherwise come in contact with telephone conductors that could be exposed to lightning or accidental connection to power circuits without first isolating them from the telephone network.
12. Do not install telephone equipment or terminations (jacks) in wet locations unless the equipment or termination is specifically designed for such locations.
13. Do not cause or allow telephone or telecommunication circuits to come in contact with power circuits (mains).
14. WARNING: Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous high voltage points and other hazards. Refer all servicing to qualified VIAVI service personnel.
15. The ONA-800 complies with FCC and Industry Canada RF exposure limits set forth for an uncontrolled environment. For body worn operation, the instruments meet the FCC RF exposure limits when used with an accessory that contains no metal and that positions the instrument a

minimum of 0cm from the body. CAUTION: This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

16. Use appropriate cables when connecting to telecommunications circuits. Putting an RJ-11 connector in a RJ-45 port can damage the RJ45 port.
17. WARNING: Danger of extreme heat, fire, or explosion if battery is tampered with. Replace only with Viavi approved Li-ION battery. Dispose of used batteries according to the manufacturer's instructions.
18. WARNING: Charge the lithium ion battery using only the Viavi instrument or approved battery charger. The battery is to be used only with Viavi test products.
19. Only trained telecommunications technicians who understand the hazards associated with TNV lines and practice proper procedures for dealing with TNV should use this tester.
20. Be sure that TNV signals are not connected to SELV ports. If you need to access a line that may have TNV or higher voltages present using a SELV port, you must do so through an interface device that is certified to provide a SELV connection point.
21. CAUTION: When equipped with laser modules supplied by Viavi, this instrument will be a CLASS 1 LASER PRODUCT. Class 1 lasers can cause dazzle, flash-blindness, and afterimages. Avoid looking into laser output while performing safety critical operations, such as climbing on a ladder or operating machinery. Do not use laser modules of other classes.
22. Please see “Safety symbols” for safety symbols. Where the unit is labeled with a warning symbol, the operating manual must be consulted to learn more about the nature of the potential hazard and any action that must be taken.

Save these instructions

⚠ Consignes de sécurité importantes

Ce livret contient des définitions de termes et des consignes de sécurité que nous vous conseillons de respecter lorsque vous utilisez votre appareil de la famille de produits ONA-800.

Symboles de sécurité

Les symboles de sécurité suivants sont utilisés sur les instruments pris en charge par ces instructions. Toutes les précautions doivent être observées lors de l'exploitation, d'entretien ou de réparation des instruments. Omission de se conformer aux consignes de sécurité suivantes ou à risques, les dangers, les avertissements et les mises en garde utilisés tout au long de ce document ou manuels connexes viole l'usage de cet instrument.

	Ce symbole représente un danger général. Il peut être associé à un message DANGER, ATTENTION, ou PRUDENCE. Voir les conditions de sécurité pour plus d'informations.
	Ce symbole représente des tensions dangereuses. Il peut être associé à un message DANGER, ATTENTION, ou PRUDENCE. Voir les conditions de sécurité pour plus d'informations.
	Ce symbole représente un risque associé de lasers à fibre optique. Il peut être associé à un message DANGER, ATTENTION, ou PRUDENCE. Voir les conditions de sécurité pour plus d'informations.

Terminologie liée à la sécurité

Le Tableau 2 définit les termes de sécurité utilisés dans la documentation du produit. Non respect de ces précautions tout en utilisant les instruments viole l'utilisation prévue des produits.

Tableau 2 Terminologie liée à la sécurité

Terme	Definition
DANGER	Indique une situation présentant un danger immédiat qui, si elle n'est pas évitée, engendrera des blessures graves ou mortelles.
ATTENTION	Indique une situation présentant un danger potentiel qui, si elle n'est pas évitée, peut engendrer des blessures graves ou mor- telles.

Tableau 2 Terminologie liée à la sécurité

PRUDENCE	Indique une situation présentant un danger potentiel qui, si elle n'est pas évitée, pourrait engendrer des blessures mineures ou légères, ou une détérioration de l'appareil.

Les instruments pris en charge par ces directives sont conçues pour servir à tester les circuits non dangereux avec des tensions moins de 42,4 V crête et 60 VDC.

Vous êtes le seul responsable de votre propre sécurité. Par conséquent, appliquez des procédures de sécurité correctes afin de minimiser le risque d'électrocution. Le présent livret n'ayant pas pour objectif de dispenser une formation étendue sur la sécu- rité, lisez attentivement toutes les consignes de sécurité et veillez à les appliquer correctement avant d'utiliser ce produit.

Lorsque vous utilisez ce produit, plusieurs consignes de sécurité primaires doivent toujours être appliquées afin de réduire le risque d'incendie, de décharge électrique et de blessure corporelle :

1. Lisez attentivement et respectez tous les avertissements et toutes les instructions figurant sur le produit et dans sa notice.
2. PRUDENCE : Si cet équipement est utilisé d'une manière non recommandée par Viavi, la protection intrinsèque pourra être mise en défaut.
3. Utilisez uniquement l'adaptateur/chargeur CA et les câbles livrés avec le produit. Ne remplacez pas le cordon de circuits d'alimentation par un cordon électrique mal calibré.
4. N'utilisez pas cet accessoire à l'extérieur ou dans des locaux humides.
5. Raccordez-le à la tension de ligne CA correcte, conformément aux indications de l'étiquette signalétique.
6. Ne posez pas d'objet sur le cordon d'alimentation et évitez de placer le produit dans des endroits à fort passage.
7. Ce produit est conçu pour être utilisé avec une prise équipée de la terre (trois fils). Cette sécurité est indispensable pour une utilisation sans danger de l'appareil. Ne pas supprimer cette sécurité en modifiant la prise ou en utilisant un adaptateur.
8. Ne positionnez pas l'équipement de manière à ce qu'il soit difficile de débrancher le cordon d'alimentation de l'entrée CA afin de couper l'alimentation CA de l'équipement.
9. N'utilisez pas l'équipement téléphonique (autres que sans fil) pendant un orage car il existe un risque de coup de foudre qui pourrait dépasser la capacité des dispositifs de protection du réseau téléphonique et vous blesser.
10. N'utilisez pas de téléphone à proximité d'une fuite de gaz ou dans un environnement explosif car en fonctionnement normal, ce testeur pourrait, ainsi que la plupart des équipements téléphoniques, produire une étincelle qui suffirait à déclencher un incendie ou une explosion.
11. Ne touchez pas ou n'entrez pas en contact avec des conducteurs téléphoniques susceptibles d'être exposés à la foudre ou à un raccordement accidentel à des circuits d'alimentation électrique, sans les avoir préalablement isolés du réseau téléphonique.
12. N'installez pas l'équipement téléphonique ou ses connecteurs dans des endroits humides, sauf si ceux-ci ont été spécifiquement conçus pour des environnements de ce type.

13. Ne faites pas contacter ou ne laissez pas le téléphone ou les circuits de télécommunication des circuits de puissance (secteur).
14. ATTENTION : Ne tentez pas de réparer ce produit par vos propres moyens car l’ouverture ou le retrait de couvercles peut vous exposer à des points de haute tension dangereux et à d’autres risques. Pour toute réparation, faites appel à un spécialiste qualifié de VIAVI.
15. L'ONA-800 est conforme aux limites d'exposition RF de la FCC et d'Industrie Canada établies pour un environnement non contrôlé. Pour des opérations avec l'appareil porté sur corps, les instruments respectent les limites d'exposition RF FCC quand ils sont utilisés avec un accessoire qui ne contient pas de métal et qui positionne l'appareil à une distance minimale de 0 cm du corps. PRUDENCE: Ce transmetteur ne doit pas être colocalisé ou utilisé en conjonction avec un autre transmetteur ou une autre antenne.
16. Employez les câbles appropriés en se reliant aux circuits de télécommunications. La mise d'un connecteur RJ-11 dans un port RJ-45 peut endommager le port RJ45.
17. ATTENTION : Si vous tentez d’ouvrir la batterie, une situation dangereuse peut appa raître (dégagement de chaleur extrême, incendie ou explosion). Remplacez seulement par la batterie de Li-ION approuvée par Viavi. Eliminez les batteries usagées conformément aux instructions fournies par le fabricant.
18. ATTENTION :Chargez une batterie de type lithium-ion en utilisant uniquement le chargeur Viavi ou instrument Viavi fournis. Cette batterie doit être exclusivement utilisée avec les produits Viavi.
19. Ce testeur doit uniquement être utilisé par des techniciens en télécommunication qualifiés, conscients des risques liés aux lignes TNV et appliquant les procédures correctes pour les tensions TNV.
20. Vérifiez qu’aucun signal TNV n’est transmis aux ports SELV. Si vous devez accéder à une ligne susceptible de véhiculer une tension TNV ou supérieure en utilisant un port SELV, vous devez intercaler un équipement d’interface certifié pour fournir un point de raccordement SELV.
21. PRUDENCE : Quand cet instrument est équipé de modules laser fournis par Viavi, il devient PRODUIT DE LASER DE LA CLASSE 1. Les lasers de la classe 1 peuvent provoquer dazzle, flash-cécité et rétinienne. Éviter de regarder en sortie laser tout en effectuant des opérations critiques de sécurité, tels que grimper sur une échelle ou d'opérer de la machinerie. N'utilisez pas de modules laser d'autres classes.
22. Voir "Symboles de sécurité" pour les symboles de sécurité. Lorsque l'appareil est muni d'un symbole d'avertissement, le manuel d'utilisation doit être consulté pour en savoir plus sur la nature du danger potentiel et sur les mesures à prendre.

Mémorisez ces instructions

⚠ Wichtige Sicherheitsinformationen

Diese Anweisungen enthalten eine Erklärung der Sicherheitssymbole, Definitionen für Begriffe Sicherheit und Vorkehrungen, die Sie befolgen sollten, wenn Sie verwenden die Sie bei der Verwendung der ONA-800-Produktfamilie beachten sollten.

Sicherheitssymbole

Zu den Instrumenten, die von diesen Anweisungen unterstützt werden die folgenden Sicherheitssymbole verwendet. Alle Sicherheitsvorkehrungen müssen beachtet werden, beim Betrieb, Wartung oder Reparatur der Instrumente. Die Nichteinhaltung mit die folgenden Sicherheitsvorkehrungen oder Gefahren, Gefahrenhinweise verwendet in diesem Dokument oder Verwandte Handbücher verstößt gegen die beabsichtigte Verwendung dieses Instruments.

	Dieses Symbol stellt eine allgemeine Gefahr dar. Es kann eine GEFAHR, WARNUNG oder VORSICHT Nachricht zugeordnet werden. Finden Sie unter Sicherheit Begriffe für weitere Informationen.
	Symbol für gefährlichen Spannungen. Es kann eine GEFAHR, WARNUNG oder VOR-SICHT Nachricht zugeordnet werden. Finden Sie unter Sicherheit Begriffe für weitere Informationen.
	Dieses Symbol stellt ein Risiko von einer heißen Oberfläche hin. Es kann einer GEFAHR, WARNUNG, VORSICHT oder ALARM Nachricht zugeordnet werden. Finden Sie unter Sicherheit Begriffe für weitere informationen.
	Dieses Symbol stellt ein Risiko im Zusammenhang mit Faserlaser-Optik. Es kann eine GEFAHR, WARNUNG oder VORSICHT Nachricht zugeordnet werden. Finden Sie un-ter Sicherheit Begriffe für weitere Informationen.

Definition der Sicherheitshinweise

Tabelle 3 definiert die in der Produktdokumentation enthaltenen Sicherheitshinweise. Bei Nichtbeachtung dieser Vorsichtsmaßnahmen beim Einsatz der Instrumente verstößt gegen die beabsichtigte Verwendung der Produkte.

Tabelle 3 Definition der Sicherheitshinweise

Begriff	Beschreibung
GEFAHR	Zeigt eine unmittelbar gefährliche Situation an, die bei Nichtbeach- tung zu schweren Verletzungen oder zum Tod führt.

WARNUNG	Signalisiert eine potenziell gefährliche Situation, die bei Nichtbeach- tung zu schweren Verletzungen oder zum Tod führen könnte.
VORSICHT	Informiert über eine potenziell gefährliche Situation, die bei Nicht- beachtung zu leichten oder mittleren Verletzungen oder zu einem Geräteschaden füh- ren könnte.

Die Instrumente, die von diesen Anweisungen unterstützt sollen verwendet werden, zu ungefΣhrlich Schaltungen mit Spannungen kleiner als 42,4 V Spitze und 60 VDC zu testen.

Daher müssen Sie auf Ihre eigene Sicherheit achten, indem Sie angemessene Sicherheitsverfahren zur Minimierung des Risikos eines elektrischen Stromschlages einsetzen. Eine umfassende Schulung zu Sicherheitsmaßnahmen würde den Rahmen dieser Broschüre sprengen. Trotzdem sollten Sie vor der Ar- beit mit dem Produkt alle hierin enthaltenen Sicherheitshinweise aufmerksam lesen und verstehen.

Zur Verringerung von Brandgefahren, zur Vermeidung eines elektrischen Schlages und von Verletzungen sind alle grundlegenden Sicherheitsvorkehrungen einzuhalten. Dazu zählen auch die folgenden Maßnah- men:

1. Lesen Sie und beachten Sie alle Warnhinweise und Anweisungen, die auf dem Produkt angegeben und in der Bedienungsanleitung enthalten sind.
2. VORSICHT: Der Einsatz des Gerätes für andere als von Viavi angegebene Zwecke kann die vom Gerät gewährleisteten Schutzfunktionen beeinträchtigen.
3. Verwenden Sie nur das mitgelieferte Netzteil/Ladegerät und das Netzkabel. Ersetzen Sie das Netzkabel nicht durch ein nicht ausreichend dimensioniertes Kabel.
4. Verwenden Sie das Netzteil/Ladegerät nicht im Freien oder in feuchten Räumen.
5. Schließen Sie das Netzteil/Ladegerät an die richtige Netzspannung an, wie auf dem Typenschild angegeben.
6. Stellen Sie keine Gegenstände auf das Netzkabel und stellen Sie das Produkt nicht an Orten auf, an denen Personen auf das Netzkabel treten können.
7. Dieses Produkt ist für den Betrieb mit einem Schutzkontaktstecker vorgesehen. Diese Sicherheitsmaßnahme ist eine Voraussetzung für den sicheren Betrieb des Gerätes. Jede Manipulation am Stecker oder der Einsatz eines Adapters beein- trächtigt die vom Schutzkontakt gewährleistete Sicherheit.
8. Stellen Sie das Gerät nicht so auf, dass es schwierig ist, das Netzkabel aus der Steckdose zu ziehen, um das Gerät vom Netz zu trennen.
9. Verwenden Sie während eines Gewitters keine Fernsprecheinrichtungen (ausgenommen: schnurlose Telefone). Es besteht die Möglichkeit eines nahen Blit- zeinschlages, der die Kapazität der Schutzvorrichtungen der Telefonnetzes übersch- reiten und Sie verletzen könnte.
10. Verwenden Sie Fernsprecheinrichtungen nicht in Nähe von ausströmendem Gas oder in einer explosionsgefährdeten Umgebung. Dieser Tester und die meisten anderen Fernsprecheinrichtungen könnten im normalen Betrieb einen Funken erze- ugen, der so kräftig ist, dass er einen Brand oder eine Explosion auslösen kann.

11. Berühren Sie weder direkt noch indirekt Telefonadern, die durch Blitzschlag gefährdet sind oder bei denen ein versehentlicher Anschluss an Hochspannungslei- tungen möglich ist, ohne diese zuvor vom Telefonnetz getrennt zu haben.
12. Installieren Sie Fernsprecheinrichtungen oder Anschlüsse (Buchsen) nur dann in Feuchträumen, wenn diese speziell für die Installation an diesen Orten vorgesehen sind.
13. Veranlassen Sie nicht oder lassen Sie Telefon oder Fernmeldeleitungen, mit Energie Stromkreise (Hauptleitungen) in Berührung zu kommen.
14. WARNUNG: Versuchen Sie nicht, dieses Produkt selbst zu warten. Beim Öffnen bzw. Abnehmen der Abdeckung besteht die Gefahr des Kontaktes mit gefährlichen Spannungss- pitzen und anderer gesundheitlicher Risiken. Die Wartung des Produktes darf nur von VIAVI entsprechend qualifizierten Fachkräften ausgeführt werden.
15. Die ONA-800-Geräte erfüllen die von der FCC und Industry Canada (ISED, Innovation, Wissenschaft und wirtschaftliche Entwicklung Kanada) festgelegten Grenzwerte für HF-Strahlung für eine unkontrollierte Umgebung. Werden die Instrumente am Körper getragen, so halten sie die FCC Grenzwerte für HF Abstrahlung ein, wenn sie mittels metallfreier Vorrichtung mit minimalem Abstand von 0cm zum Körper gehalten werden. VORSICH: Dieser Sender darf nicht zusammen mit anderen Antennen oder Sendern eingesetzt oder betrieben werden.
16. Benutzen Sie passende Kabel beim Anschließen an Fernmeldeleitungen. Das Einsetzen eines Steckers RJ-11 in ein Tor RJ-45 kann das Tor RJ45 beschädigen.
17. WARNUNG: Bei Manipulationen an der Batterie (Akku) besteht die Gefahr einer starken Erhitzung, eines Brandes oder einer Explosion. Ersetzen Sie nur durch Viavi genehmigte Li-IONbatterie. Entsorgen Sie gebrauchte Batterien (Akkus) entsprechend den Anweisungen des Herstellers.
18. WARNUNG: Laden Sie den Lithium-Ionen-Akku nur mit dem von Viavi gelieferten Ladegerät oder Viavi Instrument. Der Akku darf nur mit Testsprodukten von Viavi eingesetzt werden.
19. Nur entsprechend ausgebildete Telekommunikationstechniker, die sich der mit TNV- Leitungen verbundenen Gefahren bewusst sind, und die bei der Arbeit an TNV- Leitungen alle geltenden Arbeitsvorschriften einhalten, dürfen diesen Tester verwenden.
20. Achten Sie darauf, dass TNV-Signale nicht an SELV-Anschlüsse angeschlossen werden. Wenn Sie auf eine Leitung, an der TNV-Spannung oder höhere Spannungen anliegen können, über einen SELV-Anschluss zugreifen, dann müssen Sie hierfür ein Schnittstellengerät verwenden, das nachweislich einen SELV-Anschlusspunkt bereit- stellt.
21. VORSICHT: Wenn Sie mit Lasermodulen von Viavi ausgestattet sind, wird dieses Instrument KATEGORIE 1 Laser PRODUKT. Klasse 1-Laser können Blendungen, Blitz-Blindheit und Nachbilder verursachen. Vermeiden Sie, sah in Laser-Ausgabe während der Durchführung Sicherheit kritische Vorgänge, z. B. auf eine Leiter klettern oder bedienen von Maschinen. Verwenden Sie keine Lasermodule anderer Klassen.
22. Sehen Sie bitte “Sicherheitssymbole” für Sicherheitsymbole. Wo die Maßeinheit mit einem Warnsymbol beschriftet wird, muß das operating manual beraten werden, um mehr über die Natur der möglichen Gefahr und aller möglicher Maßnahmen zu erlernen, die ergriffen werden müssen.

Bewahren Sie diese Hinweise auf

⚠ Importanti istruzioni di sicurezza

Queste istruzioni forniscono una spiegazione dei simboli di sicurezza, le definizioni per i termini di sicurezza e precauzioni da che seguire quando si utilizza la famiglia di prodotti ONA-800.

Simboli di sicurezza

Sugli strumenti supportati da queste istruzioni vengono utilizzati i seguenti simboli di sicurezza. Tutte le precauzioni di sicurezza devono essere osservate quando uso, la manutenzione o la riparazione degli strumenti. In caso di mancato rispetto con le seguenti precauzioni di sicurezza o con pericoli, avvertenze e precauzioni utilizzati nel presente documento o relativi manuali violi l'uso di questo strumento.

	Questo simbolo rappresenta un pericolo generale. Può essere associata con un messaggio di PERICOLO, AVVERTENZA, o ATTENZIONE. Vedere le condizioni di sicurezza per ulteriori informazioni.
	Questo simbolo rappresenta tensioni pericolose. Può essere associata con un messaggio di PERICOLO, AVVERTENZA, o ATTENZIONE. Vedere le condizioni di sicurezza per ulteriori informazioni.
	Questo simbolo rappresenta un rischio di una superficie calda. Può essere associato con un messaggio di PERICOLO, AVVERTENZA, ATTENZIONE o AVVISO. Vedere le condizioni di sicurezza per ulteriori informazioni.
	Questo simbolo rappresenta un rischio connesso con i laser a fibra ottica**.** Può essere associata con un messaggio di PERICOLO, AVVERTENZA, o ATTENZIONE. Vedere le condizioni di sicurezza per ulteriori informazioni.

Definizioni di sicurezza

La Tabella 4 riporta le definizioni dei termini riguardanti la sicurezza utilizzati nella docu- mentazione dei prodotti. La mancata osservanza di queste precauzioni durante l'utilizzo degli strumenti violi l'uso previsto dei prodotti.

Tabella 4 Definizioni di sicurezza

Termine	Descrizione
PERICOLO	Indica una situazione di pericolo imminente che, se non evitata, provocherà la morte o gravi lesioni.

Tabella 4 Definizioni di sicurezza

AVVERTENZA	Indica una situazione di pericolo potenziale che, se non evitata, potrebbe provocare la morte o gravi lesioni.
ATTENZIONE	Indica una situazione di pericolo potenziale che, se non evitata, potrebbe provocare lesioni di lieve o moderata entità oppure danni all'attrezzatura.

Gli strumenti supportati da queste istruzioni sono progettati per essere utilizzati per testare non pericolosi circuiti con tensioni inferiore a 42,4 V e 60 VDC.

L'utente è responsabile della propria sicurezza ed è quindi tenuto ad adottare procedure idonee per ridurre al minimo il rischio di scosse elettriche. Un addestramento completo in materia di sicurezza esula dagli scopi della presente guida. È però necessario che l'utente legga e comprenda tutte le infor- mazioni relative alla sicurezza contenute nella presente guida prima di utilizzare il prodotto.

Quando utilizza il prodotto, l'utente dovrà sempre adottare precauzioni di base per ridurre il rischio di incendi, scosse elettriche e lesioni a terzi. Le precauzioni comprendono quanto riportato di seguito.

1. Leggere e osservare tutte le avvertenze e istruzioni riportate sul prodotto e contenute nel manuale.
2. ATTENZIONE: se l'impianto viene utilizzato in modo diverso da quello specificato da Viavi, ciò potrebbe compromettere la protezione fornita.
3. Utilizzare esclusivamente l'adattatore AC/caricabatterie e cavi di rete forniti insieme al prodotto. Non sostituire il cavo di alimentazione con un cavo di sezione inadeguata.
4. Non utilizzare l'adattatore AC/caricabatterie in esterni oppure in luoghi umidi o bagnati.
5. Collegare l'adattatore AC/caricabatterie alla tensione di rete corretta secondo quanto riportato sull'apposita etichetta.
6. Non appoggiare alcun oggetto al cavo di alimentazione e non collocare il prodotto in punti in cui il cavo potrebbe venir calpestato.
7. Questo prodotto è progettato per essere usato con cavo di alimentazione a tre fili che includa il collegamento di terra (munito di spina con collegamento di terra). Questa modalità di collegamento è vitale per operare in sicurezza con lo strumento. Non vanificare l'efficacia del collegamento di terra modificandolo od utilizzando un colle- gamento diverso da quello fornito con lo strumento.
8. Non posizionare l'apparecchiatura in modo tale da rendere difficile lo scollegamento del cavo di alimentazione dalla presa CA, al fine di rimuovere l'alimentazione CA dall'apparecchiatura.
9. Non utilizzare l'apparecchio telefonico (tranne che nel caso di cordless) durante un temporale elettrico. Esiste la possibilità di colpi di fulmine che superano la capacità dei dispositivi di protezione della rete telefonica.
10. Non utilizzare l'impianto telefonico in prossimità di perdite di gas o in ambienti con esplosivi. In condizioni di funzionamento normale, questo dispositivo di testing, e la maggior parte degli altri apparecchi telefonici, possono generare scintille sufficienti a provocare fiamme o esplosioni.
11. Non toccare né entrare in altro modo in contatto con conduttori telefonici che possono essere stati colpiti da fulmini o collegati accidentalmente a circuiti di potenza senza aver prima provveduto a isolarli dalla rete telefonica.

12. Non installare l'impianto o le terminazioni (jack) telefonici in luoghi umidi a meno che non siano stati appositamente progettati per ubicazioni di tale tipo.
13. Non induca o che non lasci che il telefono o i circuiti di telecomunicazione contatti i circuiti di alimentazione (condutture).
14. AVVERTENZA: Non cercare di riparare da soli il prodotto; l'apertura o la rimozione dei coperchi potrebbero esporre l'utente a tensione pericolosa e ad altri rischi. Rivolgersi a personale qualificato VIAVI per tutte le operazioni di manutenzione.
15. Gli strumenti ONA-800 sono conformi ai limiti di esposizione stabiliti per un ambiente non controllato da FCC e Industry Canada RF. Per un suo uso vicino al corpo, gli strumenti soddisfano i limiti di esposizione FCC RF quando utilizzato con un accessorio che non contiene metallo e che posiziona lo strumento un minimo di 0 centimetri dal corpo. ATTENZIONE: Questo trasmettitore non deve essere co-locato o funzionare insieme ad altre antenne o trasmettitori.
16. Usi i cavi adatti quando collegano ai circuiti di telecomunicazioni. Mettendo un connettore RJ-11 in un orificio RJ-45 può danneggiare l'orificio RJ45.
17. AVVERTENZA: pericolo di estremo calore, incendio o esplosione in caso di manomis- sione della batteria. Sostituisca soltanto con la batteria dello Li-IONE approvata Viavi. Smaltire le batterie usate secondo le istruzioni della casa produttrice.
18. AVVERTENZA: Per ricaricare la batteria agli ioni di litio, utilizzare esclusivamente il caricabatterie Viavi. La batteria va utilizzata esclusivamente con i prodotti Viavi.
19. L'uso di questo dispositivo di testing è riservato a tecnici delle telecomunicazioni opportunamente addestrati in grado di comprendere i rischi associati ai circuiti TNV e di gestire in modo idoneo la tensione TNV.
20. Verificare che i segnali TNV non siano collegati a porte SELV. Nel caso in cui sia necessario accedere a una linea nella quale sono presenti tensioni TNV o alte tensioni di altro tipo utilizzando una porta SELV, utilizzare un dispositivo di interfaccia omologato per la fornitura di un punto di collegamento SELV.
21. ATTENZIONE: Se equipaggiato con moduli laser forniti da Viavi, questo strumento sarà un prodotto LASER di classe 1. I laser di classe 1 possono causare abbagliamento, flash-cecità e immagini residue. Evitare di guardare in uscita del laser durante l'esecuzione di operazioni critiche di sicurezza, come arrampicata su una scaletta o di usare macchinari. Non utilizzare moduli laser di altre classi.
22. Veda prego “Simboli di sicurezza” per i simboli di sicurezza. Dove l'unità è identificata con un simbolo d'avvertimento, il operating manual deve essere consultato per imparare più circa la natura del rischio potenziale e di tutta l'azione che devono essere intra- presi.

Conservare queste istruzioni

⚠ Instrucciones de seguridad

Estas instrucciones proporcionan una explicación de los símbolos de seguridad, definiciones de términos de seguridad y precauciones a seguir cuando se utiliza la familia de productos ONA-800.

Símbolos de seguridad

Se utilizan los siguientes símbolos de seguridad en los instrumentos de apoyo de estas instrucciones. Deben observarse las precauciones de seguridad al funcionamiento, mantenimiento o reparación de los instrumentos. No cumplir con las siguientes precauciones de seguridad o con peligros, advertencias y precauciones se utiliza a lo largo de este documento o manuales relacionados con viola el uso de este instrumento.

	Este símbolo representa un peligro general. Puede estar asociada con un mensaje de PELIGRO, ATENCIÓN o PRECAUCIÓN. Ver definiciones de seguridad para obtener más información.
	Este símbolo representa a voltajes peligrosos. Puede estar asociada con un mensaje de PELIGRO, ATENCIÓN o PRECAUCIÓN. Ver definiciones de seguridad para obtener más información.
	Questo simbolo rappresenta un rischio di una superficie calda. Può essere associato con un messaggio di PERICOLO, AVVERTENZA, ATTENZIONE o AVVISO. Vedere le condizioni di sicurezza per ulteriori informazioni.
	Este símbolo representa un riesgo de una superficie caliente. Puede estar asociado con un mensaje de PELIGRO, ATENCIÓN, PRECAUCIÓN o ALERTA. Ver definiciones de seguridad para obtener más información.

Definiciones de seguridad

La Tabla 5 define los términos de seguridad empleados en la documentación del producto. La inobservancia de estas precauciones viola las condiciones de uso de este producto.

Tabla 5 Definiciones de seguridad

Término	Descripción
PELIGRO	Indica una situación peligrosa inminente que, si no se evita, puede resultar mortal o causar lesiones graves.

Tabla 5 Definiciones de seguridad

ATENCIÓN	Indica una situación potencialmente peligrosa que, si no se evita, puede resultar mortal o causar lesiones graves.
PRECAUCIÓN	Indica una situación potencialmente peligrosa que, si no se evita, puede causar lesiones leves o moderadas.

Los instrumentos de apoyo de estas instrucciones están diseñados para utilizarse para no peligrosos circuitos con voltajes de prueba menos de 42,4 V pico y 60 VCC.

La explicación de los procedimientos de seguridad es un tema que queda fuera del ámbito de este folleto. Aún así, es importante que usted lea y comprenda toda la información de seguridad antes de utilizar este equipo.

Cuando use este producto, observe en todo momento ciertas precauciones básicas para reducir el peligro de incendios, golpes y lesiones personales, incluyendo:

1. Lea y observe todas las notas de seguridad indicadas en el producto, así como las incluidas en este folleto y en la guía del usuario.
2. PRECAUCIÓN: Si este equipo se utiliza de forma distinta a lo especificado por Viavi, los mecanismos de protección previstos pueden dejar de funcionar u operar inadecuadamente.
3. Utilice únicamente el adaptador de CA/cargador y los cables de alimentación suministrados con el producto. No sustituya el cable de alimentación con un cable de un valor nominal inadecuado.
4. No lo emplee en exteriores ni en lugares mojados o muy húmedos.
5. Conecte el adaptador/cargador de alterna a la tensión de red correcta, indicada en la etiqueta del instrumento.
6. No aplaste el cable de alimentación. No coloque el instrumento de forma que alguien pueda pisar accidentalmente el cable de alimentación.
7. Este producto está diseñado para ser utilizado con cable con conexión a tierra (cable con banana/pin tierra). Esta protección es vital para la operación segura del equipo. No obstaculicen el propósito de la conexión a tierra modificando el cable o utilizando un adaptador.
8. No coloque el equipo en una posición que dificulte la desconexión del cable de alimentación de la entrada de CA para desconectar la alimentación de CA del equipo.
9. Evite el uso de equipos telefónicos fijos durante las tormentas con aparato eléctrico. Cualquier rayo caído en las proximidades podría exceder la capacidad de los dispos- itivos de protección de la red telefónica y causar daños personales.
10. No utilice equipos telefónicos en las proximidades de lugares con pérdidas de gas o en entornos relacionados con atmósferas explosivas. Este instrumento, como la mayoría de equipos telefónicos, podría generar una chispa capaz de iniciar un incendio o provocar una explosión.
11. No toque conductores telefónicos que pudieran estar expuestos a rayos o a conex- iones accidentales con circuitos de alimentación, sin aislarlos previamente de la red telefónica.
12. No instale equipos telefónicos ni terminaciones (tomas de red) en lugares húmedos, a menos que los equipos o terminaciones hayan sido diseñados específicamente para dichos lugares.

13. No haga ni permita que el teléfono o los circuitos de telecomunicación venga en contacto con los circuitos de la energía (cañerías).
14. ATENCIÓN: No trate de reparar este producto. Al abrir o quitar las cubiertas pueden quedar al descubierto elementos con tensiones elevadas. Consulte a un técnico de asistencia cualificado Viavi.
15. El equipo ONA-800 cumple con los límites de exposición establecidos para un entorno no controlado por la FCC y Industry Canada RF. Para la operación con el cuerpo, el instrumento cumple con los límites de exposición cuando es utilizado con un accesorio que no contiene metal y que posiciona al instrumento a una distancia mínima de 0cm del cuerpo. PRECAUCIÓN: Este transmisor no debe colocarse ni funcionar en conjunto con alguna otra antena o transmisor.
16. Utilice los cables apropiados al conectar con los circuitos de telecomunicaciones. Poner un conectador RJ-11 en un puerto RJ-45 puede dañar el puerto RJ45.
17. ATENCIÓN: Existe riesgo de incendio o explosión si se sustituye la batería por una batería no adecuada. Substituya solamente por la batería aprobada Viavi del Li ION. Para desechar las baterías siga las instrucciones del fabricante.
18. ATENCIÓN: Para cargar la batería litio-ion, utilice sólo el instrumento Viavi o el cargador recomendado por Viavi. La batería debe usarse exclusivamente en equipos de Viavi.
19. Este instrumento debe ser utilizado por técnicos experimentados que conozcan los riesgos asociados a las líneas TNV y empleen los procedimientos de seguridad apropiados.
20. Las señales TNV no deben conectarse a los puertos SELV. Si necesita acceder con un puerto SELV a una línea que pueda tener tensiones TNV o superiores, use un dispositivo de interfaz capaz de proporcionar un puerto SELV.
21. Vea por favor los “Símbolos de seguridad” para los símbolos de seguridad. Donde la unidad se etiqueta con un símbolo amonestador, el operating manual se debe consultar para aprender más sobre la naturaleza del peligro potencial y de cualquier acción que deban ser tomados.
22. Vea por favor los “Símbolos de seguridad” para los símbolos de seguridad. Donde la unidad se etiqueta con un símbolo amonestador, el operating manual se debe consultar para aprender más sobre la naturaleza del peligro potencial y de cualquier acción que deban ser tomados.

Guarde estas instrucciones

Interfaces and Safety Classifications

Table 2: ONA-800A-MF interfaces and safety classifications

Interface	Port Designation	Safety Classification	Working Voltage Maximum
Ethernet	LAN	SELV	48 V DC ± 5 V balanced
USB	USB1, USB2, USB-C	SELV	5 V
Power	AC/DC Power Adapter	SELV	27 V
Micro SD	Micro SD	SELV	3.3 V

Safety Standards

This section lists the safety standards that apply to VIAVI instruments.

The ONA-800 Mainframe and Solution Modules meet the following standards:

- UL 61010 -1/ CSA C22.2 No. 61010-1, Electrical Equipment For Measurement, Control, and Laboratory Use; 3rd edition, Rev 5/11/2012
- EN 61010-1/ IEC 61010-1:2010, Safety requirements for electrical equipment for Measurement, Control, and Laboratory Use; Part 1, Rev 10/1/2010