OLS-34V2
OLS-35V2
OLS-36V2
OLS-38V2

SmartPocket™
Optical Laser Sources

Operating Manual

BN 2334/98.11

2021.01

English

Please direct all inquiries to your local Viavi sales company. The addresses can be found at:
www.viavisolutions.com/en-us/contact-sales-expert

A description of additional instrument features can be found at:
www.viavisolutions.com/en-us/products/network-test-and-certification

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Notes:

Changes may be made to specifications, designations and delivery information.

CONTENTS

1 INTRODUCTION

OLS-3xV2 Optical Light Sources

The Test Sets are specially designed for high performance testing of all systems, i.e. broadband, PONs, and Gigabit Ethernet.

Battery operation from two AA batteries and the robust, shock-proof design provide long operating time in the field even under tough conditions. AC line operation via a separate AC adapter and the USB interface ensure ease of use in the laboratory or production environment.

Differences between the devices

The OLS-3xV2 family covers all the modes, wavelengths and fiber types needed. The table below lists the differences between the devices:

Model	BN...	Fiber type	Wavelengths	Mount type
OLS-34V2	2334/01	MM 9/125	850/1300 nm	SC
OLS-35V2	2334/11	SM 9/125	1310/1550 nm	SC
OLS-36V2	2334/21	MM 50/125 SM 9/125	850/1300 nm 1310/1550 nm	SC
OLS-38V2	2334/51	SM 9/125	1310/1550/1625 nm	SC

Test adapters

The OLS-3xV2 are delivered with SC adapters. Test adapters for all common connector systems (e.g. FC, ST) can be ordered from Viavi.

Operating manual update

If the operating instructions about features provided by your device are missing, please visit the Viavi web site to check if additional information is available.

To download the latest operating instructions:

1. Visit the Viavi web site at *www.viavisolutions.com*.
2. Search for **SmartPocket V2**.
3. Open the download area and download the operating instructions if available.

Symbols used in this operating manual

Various elements are used in this operating manual to draw attention to special meanings or important points in the text.

Symbols and terms used in warnings

The following warnings, symbols and terms are used in this document in compliance with the American National Standard ANSI Z535.6-2011:

NOTICE

Follow the instructions carefully to avoid **damage to or destruction of the instrument.**

⚠ CAUTION

Follow the instructions carefully to avoid a low or medium risk of **injury to persons.**

⚠ WARNING

Follow the instructions carefully to avoid **potential death** or **severe injury** to persons.

⚠ DANGER

Follow the instructions carefully to avoid **death** or **severe injury** to persons.

High Voltage

Follow the instructions carefully to avoid **damage** to the instrument or **severe injury** to persons.

This safety instruction is given if the danger is due to **high voltage**.

Laser

Follow the instructions carefully to avoid **damage** to the instrument or **severe injury** to persons.

This safety instruction is given if the danger is due to **laser radiation**. Information specifying the laser class is also given.

Warning format

All warnings have the following format:

⚠ WARNING

Type and source of danger

Consequences of ignoring the warning

- ▶ Action needed to avoid danger.

The following character formats are used in this operating manual:

✓	**Requirement** This requirement must be met first; e.g. ✓ The system is switched on.
▶ 1. 2.	**Instruction** Follow the instructions given (the numbers indicate the order in which the instructions should be followed); e.g. ▶ Select mode.
Italics	**Result** Indicates the result of following an instruction; e.g. *The page opens.*
Bold type face	**Pages, controls, and display elements** Screen pages, controls, and display elements are indicated in **bold type.**
Text in blue	**Cross references** Cross references are indicated in blue type. When using the PDF version, just click on the blue text to skip to the cross reference.
[STORE]	**Device keys** Device keys are indicated within square brackets.

2 Safety Information

Warning symbols on the device

Warning symbols indicating a potential hazard

- A warning symbol on the device indicates a potential hazard. In all cases where the a warning symbol is shown on the display or labeled on the device, the operating manual must be consulted to learn more about the nature of the potential hazard and any actions that have to be taken.

Proper use

This instrument is intended for measurements on optical fiber devices and systems.

- Please make sure the device is not operated outside the permitted conditions or for a purpose other than the one it was developed for.
- Always make sure that the device is in good condition before switching it on.

Laser safety

⚠ WARNING

Dangerous laser radiation

Laser radiation can cause irreparable damage to the eyes and skin.

This device is a Class 1 laser product according to DIN EN 60825-1:2014.

Observe the following instructions when working with this device and laser systems in general:

- Connect all optical fibers before switching on the radiation source.
- Switch off the laser source before disconnecting the optical fibers.
- Never look directly into the output of a laser source or into an optical fiber connected to it.
- Always cover unused ports.
- Observe the normal precautions for working with laser radiation and follow any local regulations.

Battery operation

⚠ WARNING

Explosion danger

Short-circuiting the batteries can result in overheating, explosion or ignition of the batteries and their surroundings.

- Never short-circuit the battery contacts by touching both contacts simultaneously with an electrically conductive object.
- Only use AA size dry batteries or rechargeable batteries.
- Take care to insert the batteries correctly.
- Never use batteries based on lithium.

⚠ WARNING

Explosion danger

Dry batteries must not be recharged.

- The OLS-34V2/-35V2/-36V2/-38V2 does not have a recharge function for rechargeable batteries, so there is no danger when using dry batteries.
- Read the manual of the external charging device.

Ventilation

NOTICE

Insufficient ventilation

Insufficient ventilation can damage the instrument or adversely affect its function and safety.

- Ensure adequate ventilation when operating the instrument.

3 GETTING STARTED

Unpacking the device

Packing material

We suggest that you keep the original packing material. It is designed for reuse (unless it is damaged during shipping). Using the original packing material ensures that the device is properly protected during shipping.

Checking the package contents

Your device is shipped with the following accessories:

- 2 dry batteries AA
- Operating manual
- Belt bag

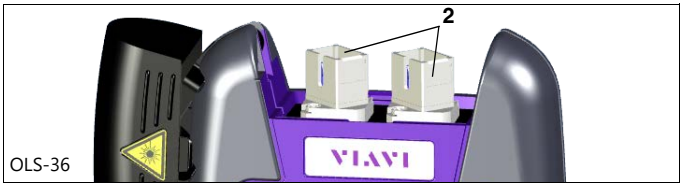
Checking for shipping damage

After you unpack the device, check to see if it has been damaged during shipping. This is particularly likely if the packaging is visibly damaged. If there is damage, do not attempt to operate the device. Doing so can cause further damage. In case of damage, please contact your local Viavi Sales Company. Addresses can be found at www.viavisolutions.com.

Recovery following storage/shipping

Condensation can occur if a device that is stored or shipped at a low temperature is brought into a warm room. To prevent damage, wait until no more condensation is visible on the surface of the device before powering it up. Do not operate the device until it has reached its specified temperature range and wait until it has cooled down if the device was stored at a high temperature (see "Enviromental conditions" on page 26).

Device overview



1	**Test head cover**
2	**SC adapter. OLS-36:** Port A (SM, left), Port B (MM, right)
3	**Display**
4	**Key pad** Representation in the user manual: **[■□□]** Context sensitive keys (here left key is selected) **[MODE]** Mode/Settings key **[ON/OFF]** Laser on/off **[⏻]** Power key
5	**USB interface** For power supply and measurement data downloads and updates.
6	**Battery compartment** (on rear of the device)

Keys

The key pad contains two types of keys:

- **Context sensitive keys:** The functions of these keys depend on the selected mode or menu and is shown in the display above the key.
- **Function keys:** The functions of these keys are always the same and shown on the key itself.

	Press to switch the device on/off.
Context keys 	**Left key:** Select a wavelength **Center key:** Select SM/MM (OLS-36V2 only) **Right key:** Select modulation frequency
MODE key 	**Short press:** Select mode and return from Settings menu. **Long press:** Open Settings menu.
Laser ON/OFF key 	Switch laser on/off.

Power supply

NOTE: The devices are not designed for batteries based on lithium.

The following power sources can be used to operate the OLS-3xV2:

- two 1.5 V dry batteries (Mignon AA size, alkaline type recommended)
- two 1.2 V NiMH rechargeable batteries (Mignon AA size)
- via the AC adapter over USB interface

Battery operation

⚠ WARNING

Dangers when handling batteries

Handling batteries may be dangerous. Please note the following safety instructions.

- Please note the battery operation safety information in the section "Battery operation" on page 9.

Replacing the batteries

- Do not replace individual batteries. Always change both batteries at the same time.
- Always use batteries of the same type; i.e. do not mix rechargeable and non-rechargeable batteries.

Replacing batteries

The battery compartment is on the back of the device.

1. Pull down the lid to open the battery compartment.

NOTICE: Take care to insert the batteries correctly. The correct polarity is indicated by a diagram inside the battery compartment.

2. Insert new batteries or replace dead ones.
3. Close the battery compartment.
4. Press **[⏻]** to switch on.

NOTE: The batteries cannot be recharged with the OLS-3xV2.

General tips on using batteries

- Never use batteries based on lithium.
- Always handle batteries with care.
- Do not drop or damage the batteries or expose them to excessively high temperatures.
- Do not store rechargeable batteries for more than one or two days at very high temperatures (e.g. in a vehicle), either separately or fitted in the device.
- Do not leave discharged batteries in the instrument for a long time if it is not being used.
- Do not store rechargeable batteries for more than 6 months without recharging them at intervals.
- Avoid deep discharging of the batteries as this can cause the cell polarity to reverse and make the battery useless.

Protecting the environment

Please dispose of any unwanted dry batteries and rechargeable batteries carefully. They should also be removed from the instrument if it is to be scrapped. If facilities in your country exist for collecting waste or for recycling, please make use of them rather than throwing the batteries in the normal trash. You will often be able to return used batteries to the store where you purchase new ones. Any dry or rechargeable batteries that you purchased from Viavi can be returned to one of our Service Centers for disposal.

Operation from AC power

To fit one of the mains plug adapters:

- See figure below and follow the instructions which are shown on the packaging of the mains plug adapter.

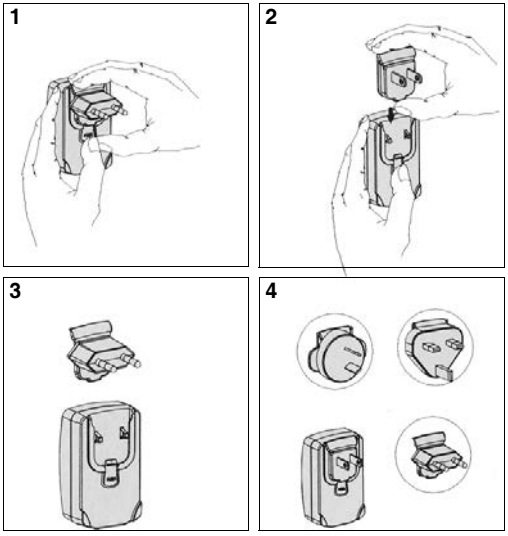


Fig. 1 Fitting the mains plug adapter

To operate the OLS-3xV2 from AC power:

1. Connect the USB-C connector power cord to the OLS-3xV2.
2. Plug the mains plug adapter into the AC receptacle.

4 OPERATION

Switching the device on/off

The OLS-3xV2 has two battery power modes:

Mode	Icon	Description
Permanent ON (PERM)		The device is switched on permanently.
Automatic OFF (ECON)		The device switches off 20 minutes after the last operation. This function is only available when the device is powered from batteries.

To switch the device on/off:

- Press **[⏻]** to switch the device on/off.

Selecting a power mode

To change the power mode:

✓ The device is switched on.

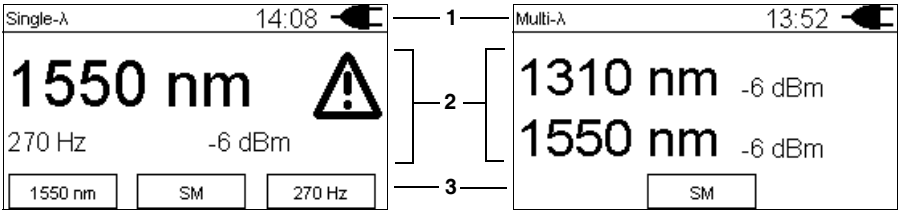
1. Long press **[MODE]** to open the settings menu.
2. Use **[⬆⬇]** to select **ECON**.
3. Press **[▭]** to select power mode:
   ON = ECON
   OFF = PERM
4. Press **[MODE]** to close the menu.

Switching the laser on/off

- Press **[ON/OFF]** to switch the laser on/off.

Display elements

The following elements can be found in the display.



Display of one power level in Single-λ mode.

Display of two power levels in Multi-λ mode.

1 – Status bar	
Auto-λ Multi-λ Single-λ	Selected/active mode The mode can be changed via the **[MODE]** key.
7:15	Real Time Clock Time can be changed via the settings menu.
	Battery status in **PERM** power mode: The device remains switched on.
	Battery status in **ECON** power mode: The device switches off 20 minutes after the last operation.
	The device is powered via USB
2 – Center of display	
... nm	Display of selected wavelength (displayed wavelength depends on settings and model).
... db/dBm	Shows the power level in dBm.
270 Hz	Shows selected modulation frequency or CW
	Laser is switched on
3 – Context sensitive key functions	
1550 nm	Press to select the wavelength.
SM	Press to select the fiber mode: SM, MM.
270 Hz	Press to select the modulation frequency,

The Settings menu

The following settings can be changed in the settings menu.

▶ To open the settings menu long press **[MENU]**.

Item	Settings	Description
Hour	1...12	▶ Press **[□□■]** to change setting: – Press once to change one step at a time. – Hold down the key to increase the step change rate.
Minute	1...59	
Year	2020...2030	
Month	01...12	
Day	01...31	
About	Show device data including last calibration date	▶ Press **[✓]** to confirm setting. ▶ Press **[⏎]** to return to the settings menu.
Factory Reset	Reset	
ECON	ON/OFF ON = ECON OFF = PERM	Press **[▬]** (right context key to toggle ON/OFF

Selecting Single-/Multimode (OLS-36 only)

▶ Press **[□■□]** to toggle between SM and MM.
According to the selected mode port 1 or port 2 is active.

Selecting a wavelength

Selectable wavelengths:

- OLS-34: 850/1300 nm
- OLS-35: 1310/1550 nm
- OLS-36: 850/1310 nm (SM), 1310/1550 nm (MM)
- OLS-38: 1310/1550/1625 nm

To select a wavelength:

✓ OLS-36: SM or MM is selected

1. Press **[MODE]** to skip through the modes and select Single-λ.
2. Press **[■□□]** to select a wavelength.

Enabling signal modulation

Modulation frequencies provided by the OLS-3xV2:
CW (continuous wave), 270 Hz, 330 Hz, 1 kHz, 2 kHz

NOTE: Signal modulation is available in Single-λ (all models) and Singlemode (OLS-36) only.

To select a modulation frequency:

✓ Single-λ is selected.

▶ Press **[□□■]** to skip through the list: CW → 270 Hz → 330 Hz→ 1000 Hz → 2000 Hz → CW→ ...

Selecting Auto-Lambda mode

Auto-λ is a special feature developed by Viavi that allows you to identify wavelengths automatically. To do this, the signal is modulated at a certain frequency, which can be detected by an Auto-λ equipped power meter (such as the Viavi OLP-3x series).

To activate Auto-λ:

▶ Press **[MODE]** to skip through the modes and select Auto-λ.
The status bar shows Auto-λ.

NOTE: Signal modulation cannot be selected when Auto-λ is enabled.

Selecting Multi-Lambda mode

When Multi-λ mode is activated, the signal of the available wavelengths are sent in parallel.

Fig. 2 Example of Multi-λ at OLS-36 with SM selected.

To activate Multi-λ:

▶ Press **[MODE]** to skip through the modes and select Multi-λ.
The display shows Multi-λ.

NOTE: Signal modulation cannot be selected when Multi-λ is enabled.

5 Data Export and Firmware Update

The USB interface or the Bluetooth® interface (OLP-3x only) can be used for data export and firmware update.

USB and SmartReporter

When using the USB interface the SmartReporter allows you to easily transfer stored measurement data to a PC and to update the firmware.

The SmartReporter reporting tool is offered by Viavi for free and can be download from:
https://updatemyunit.net/ > Application Software.

- For more information about data export and firmware update via USB and the SmartReporter please refer to the SmartReporter user manual.

Bluetooth® and MobileTech app / StrataSync cloud (OLP-3x only)

Using the OLP-3x you have also the choice to upload the saved data and to update the firmware using Bluetooth® via Viavi's MobileTech App into the StrataSync cloud.

- Please contact your Viavi representive for more information.

6 MAINTENANCE

⚠ WARNING

Invisible laser radiation

Maintenance or cleaning of the instrument while it is connected or operating may damage the instrument or injure you.

- Make sure that the instrument is switched off and disconnected from all power sources and optical radiation sources before maintenance or cleaning.
- Do not open the instrument for maintenance or service. Service shall be performed by Viavi trained personnel only.

Cleaning the test port

It is a good idea to check that the optical connections are clean and to clean them if necessary before starting measurements. Even very small dust particles on the end surfaces of the plugs or in the test adapters can adversely affect the accuracy of the measurement.

For daily use, clean the optical interface of the instrument using Viavi IBC cleaning tool 2.5 mm (see "Cleaning materials, power supplies" on page 27).

To clean the test port in case of severe contamination:

1. Switch off the device.
2. Remove the test adapter from the optical connection. The connection surface is now accessible.
3. Wipe off the connection surface using a cotton bud soaked in isopropanol. This cleaning method is very effective and leaves no residues.
4. Blow out the test adapter with clean compressed air (also available in spray cans, e.g. Anti Dust Spray).

NOTE: Cover the optical connections with the dust cap whenever they are not in use. This prevents them from getting dirty.

Cleaning the instrument

If the device gets dirty through use, you can clean it using a soft cloth moistened with a mild solution of detergent.

NOTICE

Water and cleaning fluids

The instrument may be damaged or destroyed if water or cleaning fluids penetrate it.

- Make sure that water or cleaning fluids do not get inside the device.

7 SPECIFICATIONS

OLS-34

Source type	LED
Fiber type	Multimode (MM) 50/125
Optical interface	SC adapter
Auto-λ mode	yes
Modulation frequencies	CW, 270 Hz, 330Hz, 1 kHz, 2 kHz
Multi-λ mode	yes
Wavelength(s)	850 nm (±20 nm) 1300 nm (-20/+40 nm)
Spectral width (FWHM)	< 170 nm
Output power (CW, typical)	-20 dBm
Stability[1)]	
• Short term (15 min)	±0.02 dB
• Long term (8 h)	±0.05 dB

1) after 20 min. warm-up, at ambient temperature -10 °C to +55 °C, ΔT = ±0.3 K

OLS-35

Source type	LASER
Fiber type	Singlemode (SM) 9/125
Optical interface	SC adapter
Auto-λ mode	yes
Modulation frequencies	CW, 270 Hz, 330 Hz, 1 kHz, 2 kHz
Multi-λ mode	yes
Wavelength(s)	1310 nm (±20 nm), 1550 nm (±20 nm)
Spectral width (FWHM)	< 5 nm
Output power (CW, typical)	-3 dBm
Stability[1)]	
• Short term (15 min)	±0.02 dB
• Long term (8 h)	±0.05 dB

1) after 20 min. warm-up, at ambient temperature -10 °C to +55 °C, ΔT = ±0.3 K

OLS-36

Source type	
• Port A	LASER
• Port B	LED
Fiber type	
• Port A	Singlemode (SM) 9/125
• Port B	Multimode (MM) 50/125
Optical interface	2 SC adapters
Auto-λ mode	yes
Modulation frequencies	CW, 270 Hz, 330 Hz, 1 kHz, 2 kHz
Multi-λ mode	yes
Wavelength(s)	
• Port A	1310 nm (±20 nm) 1550 nm (±20 nm)
• Port B	850 nm (±20 nm) 1300 nm (-20/+40 nm)
Spectral width (FWHM)	
• Port A	< 5 nm
• Port B	<170 nm
Output power (CW, typical)	
• Port A	-3 dBm
• Port B	-20 dBm
Stability[1)]	
• Short term (15 min)	±0.02 dB
• Long term (8 h)	±0.05 dB

1) after 20 min. warm-up,
at ambient temperature -10 °C to +55 °C, $\Delta T = \pm 0.3$ K

OLS-38

Source type	LASER
Fiber type	Singlemode (SM) 9/125
Optical interface	SC adapter
Auto-λ mode	yes
Modulation frequencies	CW, 270 Hz, 330 Hz, 1 kHz, 2 kHz
Multi-λ mode	yes
Wavelength(s)	1310 nm (±20 nm), 1550 nm (±20 nm), 1625 nm (±5 nm)
Spectral width (FWHM)	< 5 nm
Output power (CW, typical)	-6 dBm
Stability[1)]	
• Short term (15 min)	±0.02 dB
• Long term (8 h)	±0.05 dB

1) after 20 min. warm-up, at ambient temperature -10 °C to +55 °C, $\Delta T = \pm 0.3$ K

General specifications

Calibration interval

Recommended recalibration interval	3 years

Power Supply

Dry batteries	2 x AA, 1.5 V (never use batteries based on lithium)
Rechargeable batteries	NiMH, 2 x AA, 1.2 V
Power consumption	2.5 W max.
AC line operation	With separate 5 V DC USB adapter. Use EMC and Safety certified low energy adapters only.
Power saving	Auto power-off after approx. 20 min (can be disabled)
Maximum battery run time[1)]	
• OLS-34:	35 h
• OLS-35:	45 h
• OLS-36:	MM: 35 h, SM: 45 h
• OLS-38:	45 h

1) CW, Bluetooth® off, Auto-λ or Multi-λ mode

EMC and safety

Electromagnetic compatibility (EMC)	EN 61326-1:2013
Device safety	EN 61010-1:2010
Laser safety	DIN EN 60825-1:2014 EN 60825-1:2007

Enviromental conditions

Operating temperature range	-10 to +55 °C (14 to 131 °F)
Storage and shipping	-40 to +70 °C (-40 to 158 °F)
Altitude	2.000 m max. (6500 ft. max.)
Pollution Degree	2

Humidity

Relative humidity up to +31 °C	15 to 85 %
Absolute humidity > +31 °C	1 to 29 g/m^3

Occasional condensation is permissible.

Dimensions and weight

Dimensions (H x W x D)	30 x 80 x 150 mm (1.18 x 3.15 x 5.90 in)
Weight (incl. Batteries)	200 g (0.44 lb)

8 ORDERING INFORMATION

Devices

OLS-34

LED Source, 850/1300 nm, MM 50/125

SC adapter	**OLS-34V2**

OLS-35

Laser Source, 1310/1550 nm, SM 9/125

SC adapter	**OLS-35V2**

OLS-36

LED Source, 850/1300 nm, MM 50/125
Laser Source, 1310/1550 nm, SM 9/125

SC adapter	**OLS-36V2**

OLS-38

Laser Source, 1310/1550/1625 nm, SM 9/125

SC adapter	**OLS-38V2**

Calibration report

OLS-34V2, OLS-35V2, OLS-36V2, OLS-38V2	**BN 2303/90.01**

Accessories

Cleaning materials, power supplies

OCK-10 Optical cleaning kit	BN 2229/90.21
IBC cleaning tool 2.5 mm	ZP-FCL-0275
Cleaning tape for optical connectors	BN 2229/90.07
Spare optical cleaning tape	BN 2229/90.08
NiMH rechargeable batteries, Mignon AA, 1.2 V (2 batteries required)	BN 2237/90.02
AC adapter	BN 2302/90.01
Interchangeable adapter	BN 2150/00.xx

PRODUCT REGULATORY COMPLIANCE

Viavi Environmental Management Program

Superb performance and high quality have always characterized Viavi datacom and telecom measurement technology products. In this same world-class tradition, Viavi has an established, proactive program of environmental management.

Environmental management is an integral part of Viavi's business philosophy and strategy requiring the development of long-term, productive solutions to problems in the key areas of economics, technology, and ecology.

A systematic environmental management program at Viavi is essential in regard to environmental policy and enhances cooperation between ourselves and our business partners.

The Viavi Environmental Management Program considers:

Product design and manufacture

Environmental restrictions and requirements are taken into account during planning and manufacture of Viavi products. This attention ranges from the raw materials and finished components selected for use and the manufacturing processes employed, through to the use of energy in the factory, and right on up to the final stages in the life of a product, including dismantling.

Hazardous materials

Viavi avoids or uses with care any hazardous or dangerous material in the manufacturing process or the end product. If the use of a dangerous material cannot be avoided, it is identified in product documentation and clearly labeled on the product itself.

Packaging materials

Preference is given to reusable or biodegradable single-substance packaging materials whenever possible.

Environmental management partnerships

Viavi encourages our customers and suppliers who take this responsibility seriously to join Viavi in establishing their own environmental management programs.

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 process 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** (https://www.viavisolutions.com/en-us/corporate/legal/policies-standards#sustain).

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 certified by TÜV SÜD; EMC, RoHS, RE)

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

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**.

"中国RoHS"

《电子信息产品污染控制管理办法》（信息产业部，第39号）
附录

本附录按照"中国RoHS"的要求说明了有关电子信息产品环保使用期限的情况，并列出了产品中含有的有毒、有害物质的种类和所在部件。本附录适用于产品主体和所有配件。

环保使用期限：

本标识标注于产品主体之上，表明该产品或其配件含有有毒、有害物质（详情见下表）。

其中的数字代表在正常操作条件下至少在产品生产日期之后数年内该产品或其配件内含有的有毒、有害物质不会变异或泄漏。该期限不适用于诸如电池等易耗品。

有关正常操作条件，请参见产品用户手册。

产品生产日期请参见产品的原始校准证书。

有毒、有害物质的类型和所在部件

元器件 (Component)	有毒、有害物质和元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (CR^{6+})	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
产品主体 (Main Product)						
印刷电路板组件 (PCB Assemblies)	X	O	O	O	O	O
内部配线 (Internal wiring)	O	O	O	O	O	O
显示器 (Display)	O	O	O	O	O	O
键盘 (Keyboard)	O	O	O	O	O	O
塑料外壳零件 (Plastic case parts)	O	O	O	O	O	O
配件 (Accessories)	O	O	O	O	O	O

O：代表该部分中所有均质材料含有的该有毒、有害物质含量低于SJ/T11363-2006标准的限值。
X：代表该部分中所有均质材料含有的该有毒、有害物质含量高于SJ/T11363-2006标准的限值。