VIAVI

OLP-35V2
OLP-35SC
OLP-38V2

SmartPocket™ V2
Optical Power Meters

User manual
BN 2333/98.11
2021.07
English

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

The description of additional features of the device 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

OLP-35V2/-35SC/-38V2
Optical Power Meters

The handheld Optical Power Meters
• OLP-35V2 (BN 2333/12)
• OLP-35SC (BN 2333/13)
• OLP-38V2 (BN 2333/14)

measure power levels on fiber optical systems.

The Test Sets are specially designed for high performance testing of all optical signals and 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.

Common features

All OLP-3xV2 power meters can connect to single-mode and multi-mode fibers with a max. core diameter of 50 µm.

Tests on systems from different manufacturers with different connector types are easy to handle due to the UPP adapter for 1.25 and 2.5 mm ferrules (OLP-35V2/-38V2 only).

A suitable optical source is required for measuring attenuation. The Viavi OLS-3x and OLS-3xV2 Optical Light Sources are ideal for this application.

Both modulated and unmodulated light signals can be measured. The average power of modulated light signals is displayed.

Modulated signal mode, which uses different fixed frequencies, can be used to identify fibers in a fiber bundle, for example.

The "Auto-λ" function provided by the OLP-3xV2 Optical Power Meters allows automatic wavelength detection. This application requires a wavelength encoding light source, e.g. one of the Viavi OLS-3x or OLS-3xV2 Optical Light Sources.

Differences between the models

All the power meters are calibrated at 850 nm, 980 nm, 1310 nm, 1490 nm, 1550 nm, 1577 nm, 1625 nm and 1650 nm. The differences between the devices are the diode types and the maximum permitted power levels:

Model	BN...	Diode type	Adapter	Display range
OLP-35V2	2333/12	InGaAs	UPP	+10 dBm
OLP-35SC	2333/13	InGaAs	fixed SC	+10 dBm
OLP-38V2	2333/14	filtered InGaAs	UPP	+26 dBm

User manual update

If features provided by your device are missing in this user manual, 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 user manual

Various elements are used in this user 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 user manual:

✓	**Requirement** This requirement must be met first; e.g. ✓ The device 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.
[MODE]	**Device keys** Device keys are indicated within square brackets.

2   SAFETY INFORMATION

▶ **All safety information for your device can be found in the printed booklett "Safety, Disposal and Environmental Protection" provided with your device.**
▶ **Carefully read and follow all instructions given there.**

▶ **The booklett "Safety, Disposal and Environmental Protection" is attached to this pdf. You can open it from the attachment window or by klicking the thumbnail on the left.**

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:

- 2.5 mm universal adapter
- 2 dry batteries AA
- User manual
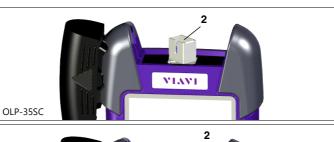- Belt bag

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 environment. To prevent damage, wait until no more condensation is visible on the surface of the device before powering it up. Do not operate the instrument until it has reached its specified temperature range and wait until it has cooled down if the instrument was stored at a high temperature (see).

Device overview

OLP-35SC

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OLP-35V2

1	**Test head cover**
2	**UPP** (OLP-35V2/38V2), **SC Adapter** (OLP-35SC)
3	**Display**
4	**Key pad**
	Representation in the user manual:
	[■□□] Context sensitive keys (here left key is selected)
	[MODE] Mode/Settings key
	[⊟] Save/Results key
	[⏻] 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.

Key usage (first and second function levels)

The function keys and the context sensitive keys in certain modes have two function levels.

A second function level is indicated by two cascading frames.

• **Short press:** Select the first level function.

• **Long press:** Holding the key for at least 2 sec. opens the second level. You then have access to additional functions or a menu to change settings.

	Short press	**Long press**
	Press to switch the device on/off.	
Context keys	Select/show Left key always: Select a wavelength out of 6 predefined values.	Change Left key always: Change the predefined wavelength.
MODE key	Switch between Expert and OptiChek mode. Return from Settings menu.	Open the settings menu.
Save/Result key	Store the current measurement.	Open the list of saved measurements.

Power Supply

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

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

• Two 1.5 V dry batteries (Mignon AA size, alkaline type recommended)

• Two 1.2 V NiMH rechargeable batteries (Mignon AA size)

• via AC adapter over USB interface

Battery operation

⚠ **WARNING**

Dangers in handling batteries

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

▶ Please note the battery operation safety information in the booklett "Saftey, Disposal and Environmental Protection".

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 the 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 OLP-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 device 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 place 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 Fig. 1 and follow the instructions which are shown on the packaging of the mains plug adapter.
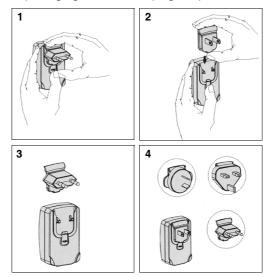

Fig. 1   Fitting the mains plug adapter

To operate the OLP-3xV2 from AC power:

1. Connect the USB-C connector power cord to the OLP-3xV2.

2. Plug the mains plug adapter into the AC receptacle.

4 OPERATION

Switching the device on/off

The OLP-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:

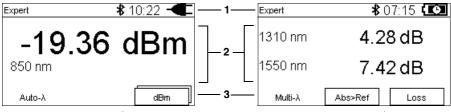▶ Press **[ ]** to switch the device on/off.

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.

Display elements

The following elements can be found in the display.

Display of one value in Auto-λ mode.   Display of two values in Multi-λ mode.

1 – Status bar	
Expert/ OptiChek	Selected/active mode The mode can be changed via the **[MODE]** key.
(Bluetooth icon)	Bluetooth® is active Bluetooth connction allows for data transfer via the MobileTech app (for future use).
7:15	Real Time Clock Time can be changed via the settings menu.
(battery icon)	Battery status in **PERM** power mode: Device remains switched on.
(battery icon)	Battery status in **ECON** power mode: Device switches off 20 minutes after the last operation.
(USB icon)	The device is powered via USB
2 – Center of display	
... db/dBm	Shows the measurement results in dBm, dB or W.
... nm	Display of selected wavelength (displayed wavelength depends on settings and model).
3 – Context sensitive key functions	
Auto-λ Multi-λ	Detected operating mode (when Auto-λ is set to ON in the settings menu).
Abs>Ref	Function is selected by pressing the context key.
dBm	Function is selected by pressing the context key. Long press will provide additional functions/settings.

Settings menu

The following settings can be changed in the settings menu.

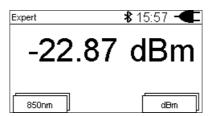▶ To open the settings menu long press **[MENU]**.

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	
Auto Lambda	ON/OFF	Press **[▭▬▭]** (right context key to toggle ON/OFF
Bluetooth LE	ON/OFF	
ECON	ON/OFF ON = ECON OFF = PERM	

Selecting a wavelength

The sensitivity of the photo diode depends on the wavelength. The wavelength setting of the device must match the wavelength of the incoming signal to ensure a correct reading.

To select a wavelength:

▶ Press **[■☐☐]** to select a new wavelength.
The current value is shown in the lower left corner:

The wavelengths that can be selected by pressing this key are an extract of those contained in the internal wavelength table.
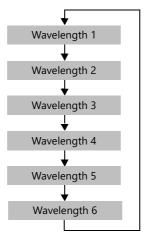

Fig. 2   Wavelength entries

Editing the wavelength table

The wavelength table supports the definition of up to 6 wavelengths.

To edit the wavelength table:

✓ Auto-λ is switched off.

1. Press **[■□□]** to select a wavelength.

2. Long press **[■□□]**.
   The wavelength table is in edit mode and the selected wavelength position is shown (in a box) on the right.

3. Use **[+]/[−]** to change the wavelength value.
   - Press once to change stepwise.
   - Hold down the key to increase the step change rate.

4. Press **[✓]** to save the new wavelength.

Selecting Expert/OptiChek mode

The OLP-3xV2 provides two operating modes:

Expert

All functions are available, like selecting a wavelength and loss measurement. Use this mode for in depth evaluation of your test environment. All following described functions are available in Expert mode only.

OptiChek

This mode is meant for quick and easy test procedures. Only the absolute power level can be measured and you can not select a wavelength (range from 1300 to 1600 nm is used).

To select an operating mode:

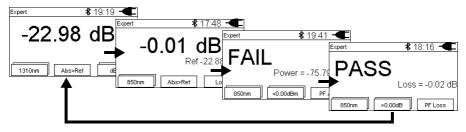▶ Tap **[MODE]** to toggle between **Expert** and **OptiChek** mode.

Selecting a display mode

The OLP-3xV2 provides following display modes:

• **dBm/Watt:** Display of absolute power level
• **Loss:** Display of power level relative to a reference value
• **PF Abs:** Pass/Fail indication based on an absolute power threshold
• **PF Loss:** Pass/Fail indication based on a relative power threshold

To select a display mode:

▶ Press **[□□■]** to toggle between the displays modes.

4 OPERATION
ABSOLUTE POWER LEVEL MODE

Absolute power level mode

The power level is displayed in dBm or Watts (nW, µW, mW).

▶ Long press **[□□■]** to toggle dBm/Watts.

NOTE: The context sensitive field shows the selected unit.

Display range

Model	BN...	dBm	Watt
OLP-35V2	2333/12	-65 to +10 dBm	1 nW to 10 mW
OLP-35SC	2333/13	-50 to +26 dBm	10 nW to 400 mW
OLP-38V2	2333/14	-65 to +10 dBm	1 nW to 10 mW

Loss mode

In **Loss** mode the power level relative to a reference value is displayed. The reference value can be set by defining the current power level as the reference value **[Abs>Ref]**.

▶ Press **[□□■]** to display relative power level.

Setting the reference level

✓ **Loss** mode is selected.

▶ Press **[Abs>Ref]**.
The current power level is set as the new reference level.

NOTE: The reference level must be stored for each individual wavelength separately.

Pass/Fail mode

An integrated pass/fail analysis feature simplifies standard
conformity testing and provides unambiguous measurement
result presentation.

The OLP-3xV2 provides two Pass/Fail modes:

- **PF Abs:** Pass/Fail indication based on a absolute power
  threshold
- **PF Loss:** Pass/Fail indication based on a loss threshold

To select a Pass/Fail mode:

▶ Press **[□□■]** until **PF Abs** or **PF Loss** is displayed.

NOTE: When **PF Abs** or **PF Loss** is selected the two modes can also be
toggled by pressing **[□■□]**.

Setting the fail threshold

Setting the fail threshold is identical for both Pass/Fail modes.

✓ **PF Abs** or **PF Loss** mode is selected. Press **[□■□]** to toggle
between both modes.

1. Press **[■□□]** to select a wavelength (see also page 17).

2. Long press **[□■□]**.
   The Set Fail Threshold screen opens.

3. Use **[+]/[−]** to change the threshold.

4. Press **[✓]** to save the new threshold.

NOTE: When Multi-λ is active, the fail threshold can not be set.
To deactivate Multi-λ e.g. switch of the laser or disable Multi-λ at
the transmitter side temporarily.

Displaying modulated signals

The OLP-3xV2 automatically detects the modulation frequency of light signals modulated at the fixed frequencies (270 Hz, 330 Hz, 1 kHz, 2 kHz) and CW (constant wave). The detected frequency is shown in the lower center display pane.

NOTE: The OLP-3xV2 can automatically detect the modulation frequency only if **no** Auto-λ was detected (see "Enabling Auto-Lambda mode" on page 22).

Enabling 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 (by a light source equipped with Auto-λ such as a Viavi OLS-3xV2), which can be detected by a Viavi OLP-3xV2.

Wavelengths may not be reliably detected in following situations:

• The received level is too low.

• Due to interferences.

• You are measuring the absolute level of a system that does not have wavelength encoding that matches Viavi power sources.

NOTE: The Auto-λ function can be disabled in order to prevent an incorrect wavelength detection while measuring "In-Service" systems.

To switch Auto-λ mode on/off:

1. Long press **[MODE]** to open the settings menu.

2. Use **[⬆]**/**[⬇]** to select Auto-λ.

3. Press **[   ]** to switch Auto-λ on/off.

If Auto-λ mode is activated and an optical source supporting Auto-λ is connected, **AUTO-**λ is shown in the lower left display.

Display in Auto-λ mode

When an **Auto-**λ signal is detected (Auto-λ mode needs to be activated), the wavelength setting switches automatically to the applied wavelength and can't be changed manually.

Fig. 3   Display in **Auto**-λ mode showing one detected wavelength and the power level.

Multi-Lambda mode

The OLP-3xV2 can receive Multi-λ signals and display up to three wavelengths simultaneously. To enable Multi-λ it has to be activated on the optical source, connected with the OLP-3xV2 (e.g. Viavi OLS-34/35/38) and Auto-λ must be switched on at the OLP-3xV2.

Fig. 4   Multi-λ mode

► To switch on Auto-λ:
See .

5 MEMORY MANAGEMENT

General information

The OLP-3xV2 allows you to save the measured power level values in a data memory and recall them as required. **Up to 1000 results can be stored.**

NOTE: See also "Specifications" on page 29 for additional data management tools.

Storing measurements

▶ Press **[⊞]** to save the current result.
The result is saved when "Saving ..." appears on the display and below the name of the currently saved data.
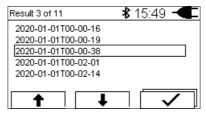*The results are always stored with the current date-/ timestamp (e.g. 2021-01-13T16-05-52, corresponding to January 13'th 2021 at 16h:05min:52s)*

The new results are always appended successively at the last memory location, even if you clear a previously assigned memory location with a lower number.

Recalling measurements

1. Long press **[⊞]**.
The device shows the list of saved measurements.

2. Press **[▲]/[▼]** to browse through the list.
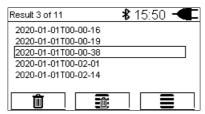
3. Press **[✓]** to open the highlighted entry.
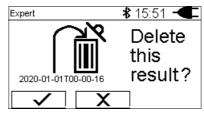*The selected measurement data is displayed.*

4. Press **[☰]** to return to the list or, press **[⬆]/[⬇]** to show next/previous result or press **[MODE]** to exit.

Deleting measurements

✓ The device shows the list of saved measurements.
1. If you want to delete a single entry, use **[⬆]/[⬇]** to select it.
2. Long press **[✓]** to open the sub menu.

3. Press **[🗑]** to delete the selected entry.
or press **[🗑]** to delete all results.
A dialog will ask you to confirm the deletion.

4. Press **[✓]** to accept or press **[X]** to cancel.

5. Press **[☰]** to close the sub menu and to show the list of saved measurements or press **[MODE]** to exit.

NOTE: You cannot select and overwrite empty memory locations.

6 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 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.

7 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.

NOTICE

Damage to the photo diode

Touching the photo diode could scratch the glass surface.

▶ Be careful when cleaning the photo diode and do not use any rough cleaning materials.

1. Switch off the device.

2. Blow into the test adapter with compressed and clean air to remove dust.

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 instrument.

8 SPECIFICATIONS

OLP-35V2/-35SC

Adjustable wavelength range	800 to 1650 nm (1 nm incr.)
Calibrated wavelengths	850 nm, 980 nm, 1310 nm, 1490 nm, 1550 nm, 1577 nm, 1625 nm, 1650 nm
Photo diode	InGaAs
Fiber type	9/125 to 50/125
Display range	-65 to +10 dBm
Resolution	0.01 dB, 0.001 µW
Max. power level	+16 dBm
Intrinsic uncertainty[1]	Expert mode: ±0.2 dB (±5%) OptiChek: ±0.8 dB (±5%)
Linearity[2]	±0.06 dB
Overall measurement uncertainty[2]	
850 nm, 980 nm	±0.35 dB ±0.8 nW
1310 nm, 1550 nm	±0.25 dB ±0.1 nW
1490 nm, 1625 nm	±0.35 dB ±0.1 nW
1650 nm	±0.45 dB ±0.1 nW

1) Under reference conditions: -11 dBm (CW), 1310 nm ±1 nm, 23 °C ±3K, 45 to 75% relative humidity, 9 µm test fiber, 9° angeled ceramic end face
2) -50 to +5 dBm from 0 to +45 °C

OLP-38V2

Adjustable wavelength range	800 to 1650 nm (1 nm incr.)
Calibrated wavelengths	850 nm, 980 nm, 1300 nm, 1310 nm, 1490 nm, 1550 nm, 1625 nm
Photo diode	filtered InGaAs
Fiber type	9/125 to 50/125
Display range	-50 to +26 dBm
Resolution	0.01 dB, 0.001 µW
Max. power level	+27 dBm
Intrinsic uncertainty[1]	Expert mode: ±0.5 dB (±12%) OptiChek: ±0.8 dB (±12%)
Linearity[2]	±0.06 dB
Overall measurement uncertainty[2]	
850 nm, 980 nm	±0.60 dB ±30 nW
1300 nm, 1310 nm, 1550 nm, 1625 nm	±0.55 dB ±10 nW
1490 nm	±0.65 dB ±10 nW

1) Under reference conditions: -11 dBm (CW), 1310 nm ±1 nm, 23 °C ±3K, 45 to 75% relative humidity, 9 µm test fiber, 9° angeled ceramic end face
2) -32 to +20 dBm from 0 to +45 °C

General specifications

Wavelength detection[1)2)]	Automatic switching and displaying wavelengths
Modulation detection[2)]	CW, 270 Hz, 330 Hz, 1 kHz, 2 kHz
Optical adapter system	
OLS-35V2/-38V2	UPP 2.5 mm (1.25 mm optional)
OLS-35SC	Fixed SC
	both suitable for PC and APC systems

1) Only in conjunction with Viavi OLS-3x Optical Light Sources.
2) BN 2333/12/14 for levels > -50 dBm
    BN 2333/13 for levels > -35 dBm

Memory

Memory capacity	1000 measurement results
Data readout	via USB-C interface

Calibration interval

Recommended calibration 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.
Operating life with dry/ rechargeable batteries	typ. 80 h (Bluetooth ® off)
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)

EMC and safety

Electromagnetic compatibility (EMC)	EN 61326-1:2013
Device safety	EN 61010-1:2010

Environmental conditions

Operating temperature range	-10 to +55 °C (14 to 131 °F)
Storage and transport	-40 to +70 °C (-40 to 158 °F)
Altitude	2000 m max. (6500 ft. max.)
Pollution degree	2
Ingress protection	IP44
Relative humidity up to +31 °C	15 to 85 %
Absolute humidity > +31 °C	1 to 29 g/m^3

Occasional condensation is tolerable as a limit condition.

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)

9 ORDERING INFORMATION

Devices

OLP-35V2

Optical Power Meter

InGaAs	**OLP-35V2**

OLP-35SC

Optical Power Meter with fixed SC Adapter

InGaAs	**OLP-35SC**

OLP-38V2

Optical Power Meter, High Power

InGaAs (coated)	**OLP-38V2**

Calibration report

OLP-35V2, OLP-35SC, OLP-38V2	BN 2333/90.03

Accessories

Cleaning materials, power supplies

OCK-10 Optical cleaning kit	BN 2229/90.21
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
UPP adapter 1.25 mm	VPP-UPP12

10 PRODUCT REGULATORY COMPLIANCE

▶ **All information about the product regulatory compliance can be found in the printed booklett "Safety, Disposal and Environmental Protection" provided with your device.**