

Data Sheet

## Specifications for SmartPocket V2™



### Light Sources

	OLS-34V2	OLS-35V2	OLS-36V2		OLS-38V2
Type	Class 1 Laser Product (IEC 60825-1:2007)				
Wavelengths	850, 1300 nm	1310, 1550 nm	850, 1300 nm	1310, 1550 nm	1310, 1550, 1625 nm
Wavelength Accuracy	- 23 / + 40 nm	±23 nm	-20 / + 40 nm	±20 nm	±20 nm
FWHM Spectral Width	< 170 nm	< 5 nm	< 170 nm	< 5 nm	< 5 nm
Output Level (CW)	Typ. - 20 dBm	Typ. -3 dBm	Typ. -20 dBm	Typ. -3 dBm	Typ. - 6 dBm
Short Term Stability	±0.02 dB within 15 min	±0.02 dB within 15 min	±0.02 dB within 15 min		±0.02 dB within 15 min
Long Term Stability <sup>1</sup>	±0.05 dB within 8 hrs.	±0.05 dB within 8 hrs.	±0.05 dB within 8 hrs.		±0.05 dB within 8 hrs.
Optical Connectors	1x SC/PC	1x SC/PC	2x SC/PC		1x SC/PC

<sup>1</sup>requires a warm-up time of 20 minutes and applies to a constant temperature

## Power Meters and selective PON Power Meter

	<b>OLP-35V2</b>	<b>OLP-35SC</b>	<b>OLP-38V2</b>	<b>OLP-37XV2</b>
Photo Diode	InGaAs	InGaAs	InGaAs (coated)	InGaAs
Spectral Range	Broadband (800...1650 nm)			Passband (1260...1500 nm, 1540...1650 nm)
Wavelength Setting	800...1650 nm, step size 1 nm			1490 nm, 1577 nm, Dual Broadband: 1270...1650 nm, step size 1 nm <sup>3</sup>
Resolution	0.01 dB, 0.001 $\mu$ W			
Measurement Range for Power Level	-65...+10 dBm		-50...+26 dBm	-45...+13 dBm
Max. Power Level (before damage)	+16 dBm		+27 dBm	+15 dBm
Measurement Uncertainty	Expert Mode: $\pm 0.2$ dB / $\pm 5$ % (intrinsic) <sup>1</sup> OptiChek Mode: $\pm 0.8$ dB / $\pm 5$ % (intrinsic) <sup>1</sup>			1490 nm: $\pm 0.5$ dB / $\pm 12$ % <sup>2</sup> 1577 nm: $\pm 0.5$ dB / $\pm 12$ % <sup>2</sup> Broadband: $\pm 0.5$ dB / $\pm 5$ % <sup>2,3</sup>
	850, 980 nm: $\pm 0.35$ dB 1300, 1310, 1550 nm: $\pm 0.25$ dB 1490, 1625 nm: $\pm 0.35$ dB 1650 nm: $\pm 0.45$ dB	850, 980 nm: $\pm 0.60$ dB 1300, 1310, 1550, 1625 nm: $\pm 0.55$ dB 1490 nm: $\pm 0.65$ dB		
Linearity	$\pm 0.06$ dB <sup>4</sup>			
Number of Calibrated Wavelengths	8 (850, 980, 1310, 1490, 1550, 1577, 1625, 1650 nm)			2 (1490, 1577 nm)
Tone Detection	CW, 270 Hz, 330 Hz, 1 kHz, 2 kHz, <sup>5,6</sup>			
Auto functions	Auto- $\lambda$ / Multi- $\lambda$ <sup>6</sup>			
Optical Connectors	1x UPP 2.5 mm	1x SC/PC	1x UPP 2.5 mm	1x SC/APC

<sup>1</sup>under reference conditions: -11 dBm (CW), 1310 nm  $\pm 1$  nm, 23 °C  $\pm 3$  K, 45 to 75 % relative humidity, SM test fiber (Single Mode, 9  $\mu$ m core, 8° APC), when used with SC/PC connectors – for OLP-38V2: Expert Mode:  $\pm 0.5$  dB

<sup>2</sup>under reference conditions: -2 dBm (CW), nominal wavelength, 23 °C  $\pm 3$  K, 45 to 75 % relative humidity, SM test fiber (Single Mode, 9  $\mu$ m core, 8° APC), when used with SC/APC connectors

<sup>3</sup>in Broadband Mode (activated SW option required)

<sup>4</sup>under the following conditions: -50...+ 5 dBm, 0...+45 °C – for OLP-35V2: when used at 850 nm the following applies:  $\pm 0.15$  dB – for OLP-37XV2: in Broadband Mode (activated SW option required)

<sup>5</sup>for OLP-35V2/-38V2: received optical power level  $\geq -50$  dBm – for OLP-35SC: optical power level  $\geq -35$  dBm – for OLP-37XV2: in Broadband Mode (activated SW option required)

<sup>6</sup>when used with VIAVI Light Source and received optical power level  $> -50$  dBm – for OLP-37XV2: in Broadband Mode (activated SW option required)

## TruePON Testers

	OLP-39G	OLP-39X
Photo Diode	InGaAs	
Spectral Range	Passband (1480...1500 nm)	Passband (1480...1500 nm, 1575...1580 nm)
Wavelength Setting	1490 nm	1490 nm, 1577 nm
Resolution	0.01 dB, 0.001 $\mu$ W	
Measurement Range for Power Level	-35...+10 dBm	
Measurement Range for PON-ID	GPON: -30...0 dBm	GPON: -30...0 dBm XGS-PON: -25...0 dBm
Max. Power Level (before damage)	+ 15 dBm	
Measurement Uncertainty	1490 nm: $\pm 0.5$ dB / $\pm 12$ % <sup>1</sup>	1490 nm: $\pm 0.5$ dB / $\pm 12$ % <sup>1</sup> 1577 nm: $\pm 0.5$ dB / $\pm 12$ % <sup>1</sup>
Number of Calibrated Wavelengths	2 (1490, 1577 nm)	
Optical Connectors	1x SC/APC	1x SC/APC

<sup>1</sup>under reference conditions: -2 dBm (CW), nominal wavelength, 23 °C  $\pm$  3 K, 45 to 75 % relative humidity, SM test fiber (Single Mode, 9 $\mu$ m core, 8° APC), when used with SC/APC connectors

## Kits

	OMK-35V2	OMK-36V2	OMK-38V2
Light Source Wavelengths	1310, 1550 nm	850, 1300, 1310, 1550 nm	1310, 1550 nm
Light Source Output Power (CW)	Typ. -3 dBm	Typ. -20 dBm / -3 dBm	Typ. -3 dBm
Optical Power Meter Power Range	-65 to +10 dBm	-65 to +10 dBm	-50 to +26 dBm

## General Information

General (typical at 25°C)	
<b>Storage and Interface</b>	
Data Storage	1,000 Results
Data Download Capability	USB-C for PC/Laptop Transfer or BLE to StrataSync via MTA
<b>Power Supply</b>	
Batteries	2x Mignon (AA) Size
AC Operation	Via USB-C and Universal Power Adapter (P <sub>max</sub> : 2.5 W)
Operating Time	45 hrs. (OLP-35V2/-35SC/-38V2, OLP-37XV2 and OLP-39G/-39X in PON Mode), 15 hrs. (OLP-39G/-39X in TruePON or ONT Detection Mode), 25 hrs. (OLS-34V2/-35V2/-36V2/-38V2) continuous operation with dry batteries
<b>Safety and Environmental Conditions</b>	
EMI/ESD	CE Compliant
Electromagnetic Compatibility	EN 61326-1:2013
Device Safety	EN 61010-1:2010/A1:2019
Recommended Calibration Interval	3 Years

Operating Temperature	-10 to +55 °C (14 to 131 °F)
Storage Temperature	-20 to +70 °C (-4 to +158 °F)
Dimensions (H x W x D)	30 x 80 x 150 mm (1.2 x 3.1 x 5.9 in)
Weight (w/o Batteries)	200 g (0.45 lb)
Max. Altitude	2,000 m (6,500 ft)
Pollution Degree	2
Ingress Protection	IP44
Humidity	15 to 85 % (Relative) up to +31 °C 20 g/m <sup>3</sup> (Absolute) > +31 °C occasional condensation is tolerable as a limit condition

## Ordering Information

Description	Catalog Number
<b>Light Sources</b>	
OLS-34V2 – MM Source 850/1300 nm SC mounted FC enclosed	OLS-34V2
OLS-35V2 – SM Source 1310/1550 nm SC mounted FC enclosed	OLS-35V2
OLS- 36V2 – SM+MM Quad Source 850/1300/1310/1550 nm SC mounted FC enclosed	OLS-36V2
OLS-38V2 – SM Source 1310/1550/1625 nm SC mounted FC enclosed	OLS-38V2
Light Sources include: instrument, switchable adapter, belt bag, neck strap, quick start guide, safety instructions, alkaline batteries	
<b>Power Meters</b>	
OLP-35V2 – Broadband Power Meter with UPP 2.5 mm mounted	OLP-35V2
OLP-35SC – Broadband Power Meter with fixed SC Adapter FC enclosed	OLP-35SC
OLP-38V2 – High Power Broadband Power Meter UPP 2.5 mm mounted	OLP-38V2
Power Meters include: instrument, belt bag, neck strap, quick start guide, safety instructions, alkaline batteries, USB cable	
<b>Selective PON Power Meter</b>	
OLP-37XV2 – Selective PON Power Meter SC mounted FC enclosed	OLP-37XV2
Broadband SW option for OLP-37XV2 via SmartReporter	2335/94.01G
Broadband SW option for OLP-37XV2 via StrataSync and Mobile Tech App (MTA) – requires StrataSync account	2335/94.01S
OLP-37XV2 and Broadband SW option (already installed)	OLP-37XV2-INCL-BB
Selective PON Power Meter includes: instrument, switchable adapter, belt bag, neck strap, quick start guide, safety instructions, alkaline batteries, USB cable	
<b>TruePON Tester</b>	
OLP-39G – TruePON Tester Terminate Mode GPON SC mounted FC enclosed	OLP-39G
OLP-39X – TruePON Tester Terminate Mode GPON and XGS-PON SC mounted FC enclosed	OLP-39X
SW Upgrade OLP-39G to OLP-39X via SmartReporter	2336/94.01G

SW Upgrade OLP-39G to OLP-39X via StrataSync and Mobile Tech App (MTA) – requires StrataSync account	2336/94.01S
ONT detection SW option for OLP-39G/X via SmartReporter	2336/94.02G
ONT detection SW option for OLP-39G/X via StrataSync and Mobile Tech App (MTA) – requires StrataSync account	2336/94.02S
OLP-39G ONT Detection Kit	OLP-39G-ONT-KIT
OLP-39X ONT Detection Kit	OLP-39X-ONT-KIT

TruePON Tester include: instrument, switchable adapter, belt bag, neck strap, quick start guide, safety instructions, alkaline batteries, USB cable

ONT Detection Kits include: TruePON Tester content, ONT Detection SW option (already installed),

Battery Extension (w/o Power Bank), Coupler

### **Optical Measurement Kits for Loss Testing**

OMK-35V2 – SM Test Kit with OLP-35V2 and OLS-35V2	OMK-35V2
OMK-36V2 – SM+MM Test Kit with OLP-35V2 and OLS-36V2	OMK-36V2
OMK-38V2 – SM Test Kit with OLP-38V2 and OLS-35V2	OMK-38V2

Kits include: instruments (OLS and OLP), switchable adapter, soft bag for 2 units, neck straps, quick start guide, safety instructions, alkaline batteries, USB cable

## **Optional/Configurable**

<b>Description</b>	<b>Catalog Number</b>
Calibration Report Power Meters (OLP-35V2/-35SC/-38V) and OLP-37XV2	2302/90.02
Calibration Report Light Sources (OLS-34V2/-35V2/-36V2/-38V2)	2303/90.01
Calibration Report TruePON Testers (OLP-39G and OLP-39X)	2302/90.04
UPP 1.25 mm for Power Meters (not for OLP-35SC)	VPP-UPP12
UPP 2.5 mm for Power Meters (not for OLP-35SC)	VPP-UPP25
Switchable Adapter FC/PC FC/APC for Light Sources and OLP-37XV2	2155/00.05
Switchable Adapter SC/PC for Spare Light Sources	2155/00.06
Switchable Adapter LC/PC LC/APC for Light Sources and OLP-37XV2	2155/00.07
Switchable Adapter SC/APC Spare for OLP-37XV2	2155/00.26
Switchable Adapter ST/PC for Light Sources	2155/00.32
Battery Extension (w/o Power Bank) for OLP-39G/-39X	2302/90.05
OCK-10 Cleaning Kit complete	2229/90.21
USB 2.0 Type A to Type C Cable	22122619
2x Alkaline Batteries Mignon AA-Size LR6	2229/90.01
2x Rechargeable batteries AA; NiMH; 1.2V; 2.6 / 2.7Ah (not for OLP-39G/-39X)	2237/90.02
Universal AC Power Adapter	2302/90.01
SmartReporter	free download from <a href="http://www.updatemyunit.net/">http://www.updatemyunit.net/</a>



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