

Data Sheet

# VIAVI Optimeter

A simple to use, intelligent optical fiber meter to certify and troubleshoot fiber links

The Optimeter is the ideal fiber test tool for novice or entry-level technicians in charge of fiber premises installation and repair.

With the boom in demand for fiber infrastructure service providers and contractors are under significant pressure to deploy fiber quickly and cost-effectively, while ensuring high quality, reliable installations.

The Optimeter provides everything a new fiber tech needs in one simple and fast solution. In less than 1 minute, with a single fiber connection, and 1 key press, any tech can completely validate and certify a link to ensure smooth service installation and activation.



## Benefits

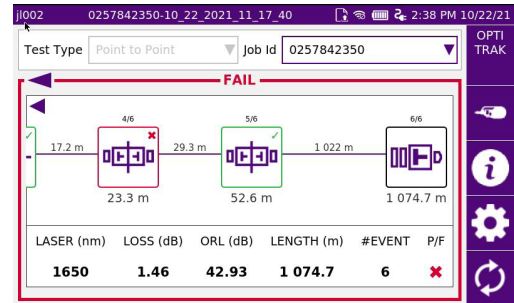
- Ramp-up new fiber techs faster
- Deliver repeatable test procedure for improved first time install success rate
- Reduce 'repair tech' hand offs, blind fault finding and unnecessary fiber or equipment replacements
- Reduce activation delays and guarantee time to revenue
- Streamline job allocation, workflow and reporting, removing manual processes
- Track project/deployment progress in real time with KPI dashboards

## Features

- Simple user interface requires no settings and no training
- One-button press, one-screen result tests, all run under 1 minute
- Auto saved results with on-board report generation (.pdf) tied to work order
- USB connectivity supporting P5000i inspection probe
- WiFi connectivity supporting VIAVI Mobile Tech App and FiberChek inspection probe
- Compatible with VIAVI Mobile Tech App for cloud storage
- 20 hours of operation

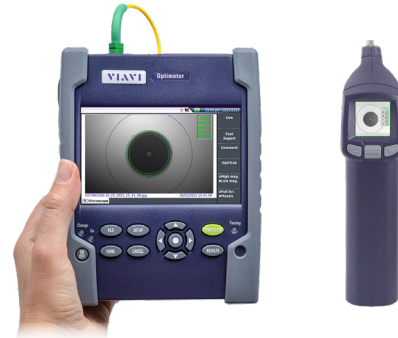
## Smart and Powerful

- Optimeter takes less than one minute to provide power, length, loss and return loss (ORL) at the push of a button.
- The fault-finding test feature gives the tech a simple but powerful troubleshooting to diagnose any fiber issue immediately while still on-site and determine ownership of the repair.



## Easy as 1–2–3

- No special training is needed to understand how to operate the Optimeter — new fiber techs are ready to test from day one!
- Optimeter offers minimal settings and one-touch operation.
- All test results are presented on a single screen — no need to navigate between different screens and menus!



## Designed with the user in mind

- The Optimeter comes with a “glove” case as standard for increased portability and to protect it from scratches and damage while keeping essential accessories (cleaner, launch cable, inspection scope, etc.) organized, accessible, and secure when a tech is on the go.
- An innovative launch cable that can remain connected to the Optimeter at all times reduces the risk of damaging the test connector. The Optimeter also systematically checks the condition of its test port and test lead to prevent any bad measurements or inaccurate results.



## Test Rapidly. Share Results Instantly

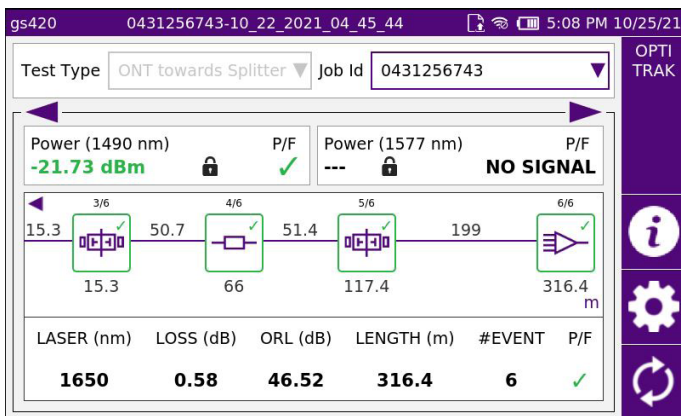
- Test results are captured and saved automatically on test completion in a single test report organized by job number.
- With the VIAMI Mobile Tech App, the Optimeter test reports can be wirelessly transferred to a smartphone or tablet and further enhanced with geolocation data, then automatically uploaded direct to VIAMI StrataSync Test Process Automation suite for KPI dashboarding and reporting.



## Dedicated Test Modes for PON/FTTx Last Mile Installation and Maintenance

The Optimeter delivers full certification of the last mile fiber installation and turn-up with on-the-go troubleshooting to improve first time install success rate while reducing unnecessary handovers, drop fiber replacements and repeat truck rolls. With the Optimeter, be confident that last mile and PON/FTTx installation and maintenance tasks happen right — the first time.

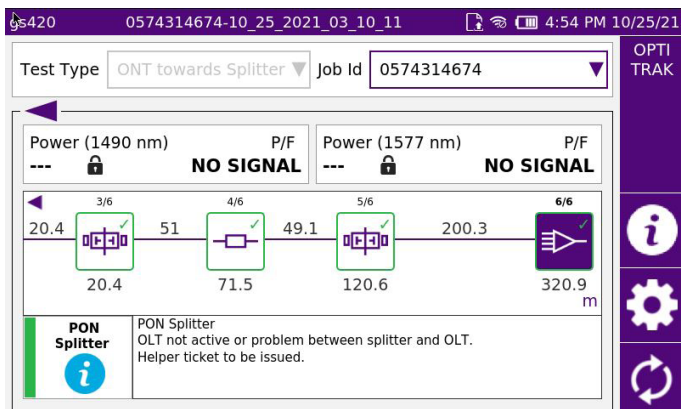
The Optimeter combines all the key features and capabilities to enable installers to certify the last mile drop is good, identify and locate any issues and determine if it is their responsibility to fix while still on site or hand off to the correct repair team.



### Power Level Verification and Fault Mapping

Turn the meter on, connect the fiber, and the Optimeter automatically checks the light level(s). The dual-band selective power meter can separate and measure instantaneously two co-existing PON downstream signals (1490nm/1550 nm and 1490/1577 nm).

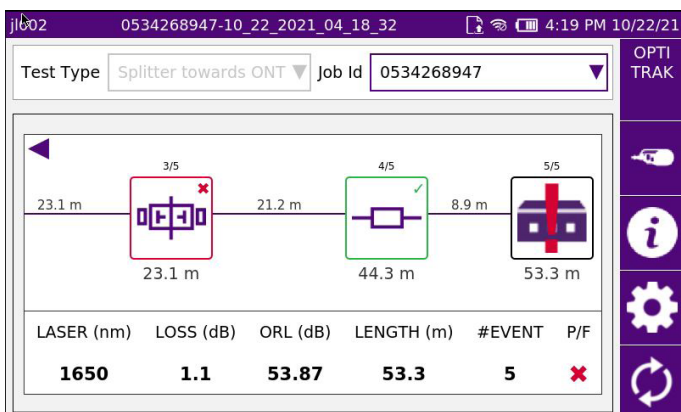
With a single key press, the meter performs a fiber link verification plus fault finding and displays a simple link map with all elements clearly identified.



### Continuity-to-OLT and Splitter Connectivity Check (patent pending)

When no light is present, to avoid guess work and before starting time-consuming fault finding with a Visual Fault Locator (VFL), a tech can check the physical connection all the way up to the first splitter and validate the splitter presence and connectivity.

The Optimeter provides guidance on the possible root cause of “no light” such as a fiber break, a disconnected splitter or an inactive/disconnected OLT.



### ONT detection

For one reason or another, accessing the customer premises is not always possible. The Optimeter features an ONT detection capability which will determine whether an ONT is connected to the drop cable or not, without the need to access the customer premises.

## Specifications (typical at 25°C)

General Specifications	
Display	5-inch (12.7cm) touchscreen
Size (H x W x D)	175 x 138 x 57 mm (6.9 x 5.4 x 2.24 in)
Weight (battery included)	0.9 kg (1.98 lb)
Battery autonomy <sup>1</sup>	Up to 20 hours of operation
Battery charging	5 hours charging time, when unit is off
Power supply	AC/DC adapter input: 100-250 V; 50/60 Hz; 2.5 A max, output 12 V; 25 W Optional vehicle battery-charging adapter (12V)
Interfaces	2 x USB 2.0 ports 1 x mini-USB 2.0 port Built-in WiFi/Bluetooth Low Energy (BLE)
Storage capacity	Up to 10 000 test results
Operating temperature	-20° to +50°C (-4° to 122°F)
Storage temperature	-20° to +60°C (-4° to 140°F)
Humidity	95% (non-condensing)
Visual Fault Location	
Wavelength	650 nm +/-10 nm
Emission modes	Continuous Wave or 1 Hz
Laser class <sup>2</sup>	Class 2
Power Level Verification	
Power meter type	Dual Band
Wavelengths	1310, 1490, 1550, 1577 nm or 1310 + 1550 nm, 1490 + 1577 nm, 1490 + 1550 nm
Measurement Range	1310/1490 nm: -35 to +5 dBm 1550/1577 nm: -35 to +23 dBm
Measurement accuracy <sup>3</sup>	+/-0.5 dB
Fault and Link Mapping – General	
Wavelength <sup>4</sup>	1650 nm +/-20 nm - Integrated filter for in-service testing
Maximum fiber length <sup>5</sup>	60 km / 197 kfeet
Testing time	20s
Distance uncertainty <sup>7</sup>	+/- 1 m
Test report <sup>8</sup>	PDF – auto-saving on test completion Link Mapping Results and Power Level(s) when available included
FTTH Last Mile Fault and Link Mapping – Splitter towards ONT direction	
Testing time	< 30 s
ONT detection	Yes
Maximum last-mile fiber length <sup>6</sup>	5 km / 16.4 kfeet
FTTH Last Mile Fault and Link Mapping – ONT towards Splitter direction	
Testing time	< 1 min
Minimum splitter ratio	1:4
Continuity-to-OLT and Splitter connectivity check <sup>9</sup>	Yes
Maximum last-mile fiber length <sup>6</sup>	5 km / 16.4 kfeet

1. In typical conditions of use

2. Per EN60825-1 and FDA21 CFR Part 1040.10 standards

3. At calibrated wavelengths and power levels.

4. Laser Safety Class 1

5. Maximum fiber loss = 24 dB

6. Maximum last mile fiber loss = 2.5dB

7. Excluding index of refraction uncertainty

8. tsor and json files also available

9. Splitter closest from subscriber

## What comes with your Optimeter Standard Kit?

- Optimeter mainframe with battery, power supply and stylus pen
- In-line dual-band power meter for power levels verification
- Fiber meter for fault finding and link mapping
- USB connectivity supporting P5000i inspection probe
- WiFi connectivity supporting VIAVI Mobile Tech App and FiberChek inspection probe
- Custom soft bag with strap to carry the unit and manage all accessories



## Which options/accessories are also available?

- VFL (red light) built into the Optimeter mainframe
- Ruggedized launch cable, managed in custom soft bag
- SmartAccess Anywhere (SAA) application for remote operation and coaching
- Hookstrap to attach the Optimeter anywhere
- Large soft carrying case
- P5000i and FiberChek inspection probes

## Ordering Information

Optimeter Standard Kit	
EOPT-165FAPM-APC*	Optimeter - Filtered 1650 nm – SC/APC
Hardware Option	
E10VFL	Built-in VFL (red light) with 2.5 mm UPP adapter
Software Option	
SAA-L2	SmartAccess Anywhere App
EGPS	Embedded GPS Coordinates into Test Files and Reports
Accessories	
ELCSM20M-SCA-SCA	20 m SM Fiber Launch Cable - SC/APC to SC/APC
ELCSM100M-LC-SCA	100 m SM Fiber Launch Cable - SC/APC to LC/PC
FBPP-SCASE2	Large soft carrying case
E40HOOKSTRAP1	Hookstrap
FBP-MTS-101	P5000i digital inspection probe with 7 tips
FIT-FC-KIT3	FiberChek Autofocus Wireless Probe with 6 tips
E40LIGHTER	Vehicle battery-charging adapter (12V)
Spare Parts	
E10LIPO	Lithium Polymer battery
E20PWMC	AC/DC Adapter/Charger
E10GLOVE	Hands-free soft case with neck strap
E10GLOVE2**	Enhanced hands-free softcase with neck strap for permanent fiber launch cable connection
EHVT-STYLUS	Stylus pen for capacitive touch screen

\*Replace EOPT by FOPT for the USA

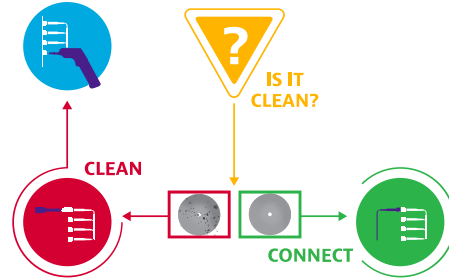
\*\*Compatible with listed VIAVI Fiber Launch Cables

## Test Process Automation (TPA)

Allows your team to deliver expert-level test results and close projects on the first try, every time. TPA is a closed loop test system that optimizes workflows, eliminates manual, error prone work and automates immediate data reporting for job close out, team progress updates and network health analytics. Execute jobs efficiently to ensure high quality network builds, rapid turn-up/activation and enhanced operational visibility.

## Inspect Before You Connect (IBYC)

Contamination is the number 1 reason for troubleshooting optical networks. Proactive inspection and cleaning of fiber connectors can prevent poor signal performance, equipment damage, and network downtime.



## VIAVI Care Support Plans

**Increase your productivity for up to 5 years with optional VIAVI Care Support Plans:**

- Maximize your time with on-demand training, priority technical application support and rapid service.
- Maintain your equipment for peak performance at a low, predictable cost.

Plan availability depends on product and region. Not all plans are available for each product or in every region. To find out which VIAVI Care Support Plan options are available for this product in your region, contact your local representative or visit: [viavisolutions.com/viavicareplan](https://viavisolutions.com/viavicareplan)

## Features

\*5-year plans only

Plan	Objective	Technical Assistance	Factory Repair	Priority Service	Self-paced Training	5 Year Battery and Bag Coverage	Factory Calibration	Accessory Coverage	Express Loaner
 BronzeCare	Technician Efficiency	Premium	✓	✓	✓				
 SilverCare	Maintenance & Measurement Accuracy	Premium	✓	✓	✓	✓*	✓		
 MaxCare	High Availability	Premium	✓	✓	✓	✓*	✓	✓	✓



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