VIAVI

PowerChek™ Optical Power Meter

OP-1

An optical power meter (OPM) is the primary test instrument for fiber optic networks—measuring optical signal power is an essential task for any fiber technician. However, as requirements for testing and certifying optical networks expand, technicians need their OPM to not just measure optical power, but also to document results and generate reports. Moreover, the rapid expansion of fiber into new applications has created an influx of technicians that are new to fiber optic technology. These technicians need easy-to-use tools.

PowerChek is an innovative OPM that lets fiber technicians measure optical power without the need for a test lead. Instead, users attach interchangeable PowerChek connectors that engage safely to the bulkhead port without risking cross contamination or damage to the fiber endface. It is a compact, intuitive, and reliable OPM equipped with a touch-screen display and onboard storage so users can measure data and store readings much faster than with traditional power meters. PowerChek is also Bluetooth enabled for pairing with various devices including mobile phones, tablets, PCs, and other Viavi Solutions test equipment, letting technicians quickly measure power, store data, generate reports, and share their results via e-mail.

Viavi fiber optic test solutions help technicians complete jobs faster, correctly, and on time—the first time.

Key Benefits

- Eliminate the test lead when measuring optical power — connects directly to a bulkhead
- Always ensure a safe test — contacting ferrule instead of fiber prevents link damage
- Easily access connections anywhere — adjustable arm rotates 360°
- Pair with your mobile device over Bluetooth® — use the FiberChekMOBILE app

Key Features

- Interchangeable connectors connect directly to bulkhead port
- Supports multiple connector types including SC, LC, and SC-APC
- Pairs with other devices via Bluetooth
- Stores up to 125 test results on the device
- Measures wavelengths ranging from 780 to 1625 nm
- Micro-USB port for PC connection to FiberChekPRO or charging
- Compatible with FiberChekPRO and FiberChekMOBILE
- Re-chargeable Li-ion battery for 12 hours continuous use
- Touch screen

Eliminate the Test Lead

Most field measurements are made with connectors located behind a bulkhead, which has a female interface. Since traditional OPMs also have a female interface, technicians have had to use various patch cords as test leads. This forces technicians to carry an assortment of different patch cords with them that are compatible with the different connector ports in the network. PowerChek connects directly to the bulkhead port, eliminating test leads.

Turn collar to attach
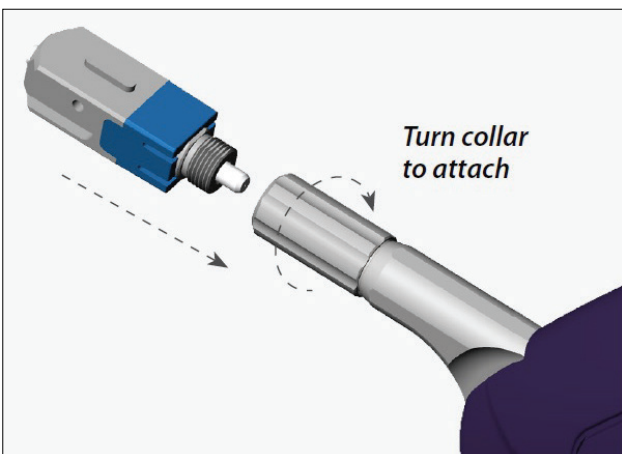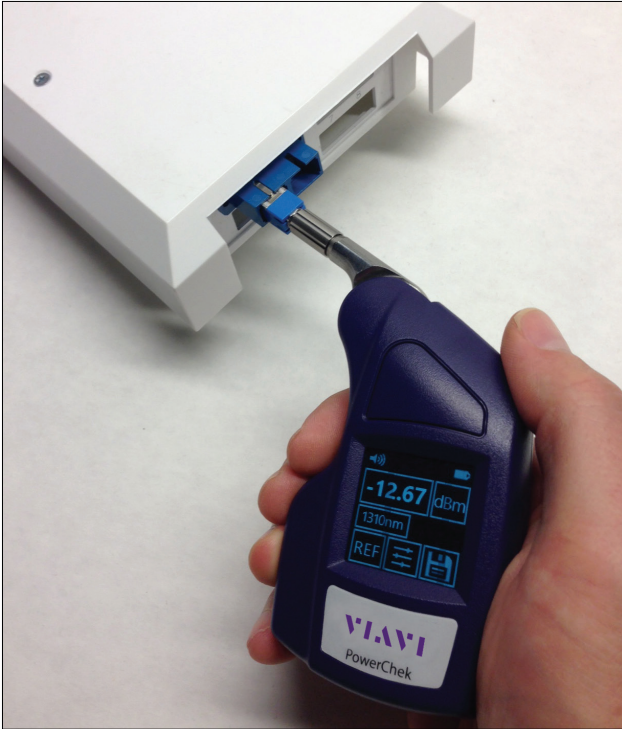
Always Ensure a Safe Connection

As loss budgets get increasingly strict, it is increasingly vital for technicians to maintain the quality of connector end faces throughout the network. Contaminated connectors are the #1 cause of troubleshooting in optical networks, compromising the accuracy of every measurement reading and damaging any lead to which they connect. Importantly, PowerChek connectors:

• Securely engage with bulkhead ports
• Make physical contact on the outer ferrule
• Prevent cross contamination when connecting
• Prevent embedded debris in fiber end faces
• Are easily cleanable
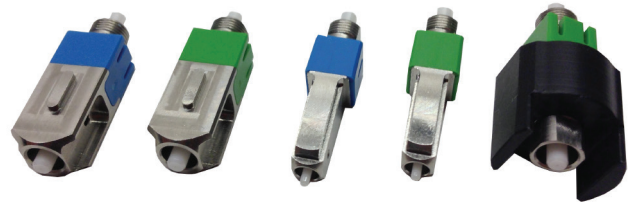
PowerChek Connectors

Bluetooth Pairing with Mobile Devices

Smartphones and tablets are quickly becoming essential test devices, and apps like FiberChekMOBILE let technicians perform essential tests with their mobile devices. PowerChek uses Bluetooth to enable a wide variety of capabilities.

• Full OPM operation with on-screen user interface
• Import stored readings from the PowerChek OPM
• Measure and store readings in real time
• Generate certification reports
• Share certification reports via email

GET IT ON Google play
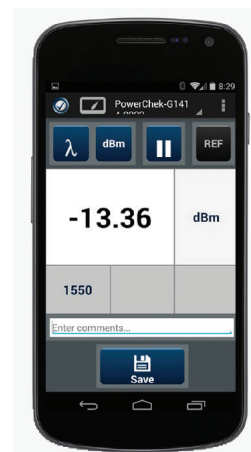
Download and install FiberChekMOBILE from the Google Play Store—free!

Specifications (Typical at 25°C)

Dimensions	100 x 57 x 25 mm
Weight	100 g
Display	128 x 128 x 1.5" OLED touch screen
Connector	USB 2.0 (Micro-B)
Power source	Li-ion battery, USB power
Run time	12 hours continuous, 24 hours ON idle
Power mode	Active, auto-off
Auto-shutoff time	User programmable
Charge time	4.5 hours from empty
Data storage	Yes (125 results)
EC/IEC/EN61326	Yes
Warranty	1 year
Power measurement ranges	
850 nm	−45 to +10 dBm
1300, 1310, 1490, 1550, 1625 nm	−50 to +10 dBm
Display range	−65 to +10 dBm
Maximum permitted input level	+10 dBm
Standard wavelength settings	850, 980, 1300, 1310, 1490, 1550, 1625 nm
Intrinsic uncertainty[1]	±0.20 dB (±5%)
Linearity[2]	±0.06 dB (−50 to +5 dBm)
Wavelength range	780 to 1650 nm
Wavelength and modulation result units	dBm, dB, Mw
Resolution	0.01 dB
Calibrated wavelengths	850, 1310, 1490, 1550, 1625
Wavelength settings	780 to 1650 in 1 nm steps
Tone detection	270 Hz, 1 kHz, 2 kHz
Auto lambda	Yes

1. Under the following reference conditions: −20 dBm (CW), 1300 nm ±1 nm, 23°C ±3 K, 45 to 75% rel. humidity, 9 to 50 µ fiber.
2. −5 to +45°C.

Ordering Information

Description	Part Number
Stand-Alone	
OPM, cable: USB male to micro-USB male, carrying pouch (PowerChek connectors sold separately)	OP-1
Connectors and Accessories	
SC PowerChek connector	OPT-SC
LC PowerChek connector	OPT-LC
SC APC PowerChek connector	OPT-SC-APC
LC APC PowerChek connector	OPT-LC-APC
OptiTap PowerChek connector	OPT-OPTITAP
Connector case	FBPP-TACS5
Kits	
Kit: OPM (OP-1), 3 PowerChek connectors (SC, LC, SC APC), cable: USB male to micro USB male, carrying pouch, connector case	FIT-SP-1