



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 JDSU test equipment, letting technicians quickly measure power, store data, generate reports, and share their results via e-mail.

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

Key Benefits

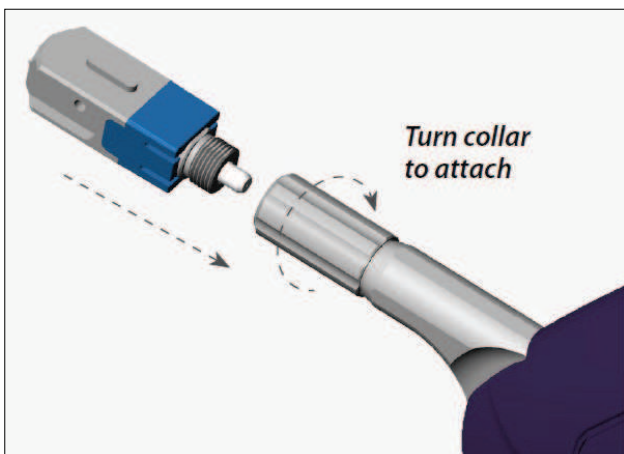
- Eliminate the test lead when measuring optical power — connects directly to a bulkhead
- Always ensure a safe test — contacting ferrule instead of fiber prevents link damage
- Easily access connections anywhere — adjustable arm rotates 360°
- Pair with your mobile device over Bluetooth — use the FiberChekMOBILE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



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



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, 1kHz, 2kHz |
| 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 |
|---|-------------|
| Standalone | |
| 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 |



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