K-527 Optical Power Meter

Absolute power and link loss on one backlit screen — -70 to +10 dBm across the seven wavelengths FTTH work uses.

How much light arrives here? The meter answers in dBm. At an ONT a healthy reading sits near -20 dBm; every further -10 is a tenfold drop, and after a 1:32 splitter a weak drop or a dirty connector pushes the level far below the point where service fails. The K-527 reads to -70 dBm, so the number keeps talking while you hunt: clean a connector and watch it climb.



K-527 in its boot — wavelength, dBm and nW together

Key Features

- -70 dBm sensitivity is the point of this meter: after a 1:32 splitter a weak drop or a dirty connector can push the ONT level far below -25 dBm — a meter that stops at -50 cannot even see the light you are troubleshooting
- Seven calibrated wavelengths cover the working set: 1310 and 1490 for PON, 1550 for trunk and RF overlay, 1625 for in-service monitoring, 1300 and 850 for multimode premises work, 980 for specialty links
- One screen, three readings: wavelength, absolute power in dBm and linear power in nW together, with a backlight for dark cabinets and street boxes
- Relative loss the way installers use it: set ZERO on the source and the dB key reads the loss of everything plugged in after it — splitter, splices and connectors as one number against the budget
- FC port on top with an SC adapter in the box; auto power-off after about ten minutes saves the batteries when a test ends in a hurry
- The meter rides in a silicone boot with raised guards around the port and screen — the difference between a knock on a ladder and a cracked instrument
- Private labeling made to your requirements — labels with your logo, part numbers and barcodes on the inner boxes and outer cartons, ready for your warehouse

Specifications

Measurement range	-70 to +10 dBm
Calibrated wavelengths	850 / 980 / 1300 / 1310 / 1490 / 1550 / 1625 nm
Wavelength range	800–1700 nm
Detector	InGaAs
Uncertainty	±5%
Display resolution	0.01 dBm (logarithmic) / 0.1% (linear)
Display	Backlit LCD showing wavelength, dBm and linear power (nW) together
Functions	Absolute power (dBm / nW), relative loss (dB) with ZERO reference, backlight, auto power-off (about 10 min)
Connector	FC port; SC adapter included
Power supply	2 × AA batteries
Housing	Meter in a protective silicone boot

Two Views

The kit photograph shows the meter as supplied: the boot, an SC adapter for the FC port, two AA batteries, the manual and the QC certificate. The front view shows the six keys — power, AUTO OFF, ZERO, LIGHT, dB and wavelength — under the display.



As supplied — the full kit



The display — three readings at once

In Use

Set the wavelength to the one being sent (the lambda key) — a 1490 nm PON signal read on the 1310 setting is off by a calibration offset, not by a little. For loss work, connect straight to the source, press ZERO, then insert the link and read its whole loss on the dB display. Clean and inspect the connector end-face before measuring: a fingerprint is a loss you will otherwise chase into the plant. Keep the dust cap on the port, and let the meter settle for a minute in cold weather before trusting small differences.

OEM & Private Label

The K-527 is supplied in neutral, unbranded stock as standard. Private labeling is made to your requirements — labels with your logo, part numbers and barcodes on the tools, the inner boxes and the outer cartons, so the goods arrive ready for your warehouse. Custom barcode & contract labeling is applied to every inner box and outer carton to your receiving specification.