VIAVI

HP2 Series

Fiber Inspection and Test System with 3.5-inch Video Display

HP2 Series Fiber Inspect and Test System

The Viavi Solutions HP2 Series inspection and test systems combine fiber inspection and optical power measurement into a single seamless handheld device. The result is a significant increase in workflow efficiency with a system that is easy, repeatable, and fast in performing essential tests in less than half the time it takes with other tools.

Applications

- Inspects fiber end faces and accurately tests and measures optical power in one device

- Quickly and easily inspects both the bulkhead (with probe) and patch cord (with PCM) sides of fiber interconnects

- View clear detailed fiber end face image on 3.5-inch video display

- Measures optical power and attenuation (with Viavi optical light source)

- Measures optical power with multiple pre-calibrated wavelengths:
  - 850, 980, 1300, 1310, 1490, 1550, and 1625 nm

- Dedicated for all single-mode and multimode applications, such as LAN, telecom, CATV, and DWDM testing

- Use with Viavi light source to detect modulation frequency and identify individual fibers

HP2-60-P4 Fiber Inspect
and Test System with Integrated
Power Meter and Patch Cord Microscope

Key Features

- 3.5-inch TFT LCD to view clear, crisp, detailed images of fiber end faces with optimal resolution

- Inspects both sides of fiber interconnect, and accurately tests and measures optical power with one device

- Integrated functions and features eliminate switching between multiple devices

- Input for FBP series probe microscope and a dedicated patch cord microscope (PCM) let users quickly and easily inspect both sides fiber interconnects

- Integrated PCM eliminates need for changing inspection tips, prevents misrouting, and protects patch cords

- Integrated power meter (OLP-6/OLP-8) for all single-mode and multimode applications, such as LAN, telecom, CATV, and DWDM testing

- Modulation frequency detection lets users identify individual fibers at specific tones

- Three-year calibration period

- Automatic wavelength detection (with Viavi optical light source)

- GripSwitch™ power-save mode activates the display when held in-hand and deactivates when released

Benefits of the Integrated PCM and Power Meter

- Improve technician performance with tools designed for workflow

- Reduce inspection + test time by more than 50 percent with easy repeatable process

- Integrated PCM eliminates changing inspection tips on the probe to inspect patch cord side

- Prevents misplaced and mishandled inspection tips

- Prevents misrouting by inspecting one interconnect at a time

- Protects male (patch cord) ends from contamination by parking it in the patch cord module

- A complete selection of FMAE adapters for every application and connector

The HP2 system, derived from the popular HD2 Series, provides high-quality image resolution in a compact, portable design. The integrated power meter offers quick, easy, and convenient field measurement of optical power and attenuation. Easy push-button operation makes the device simple and straightforward, while the inspect-test process establishes optimal workflow practices.
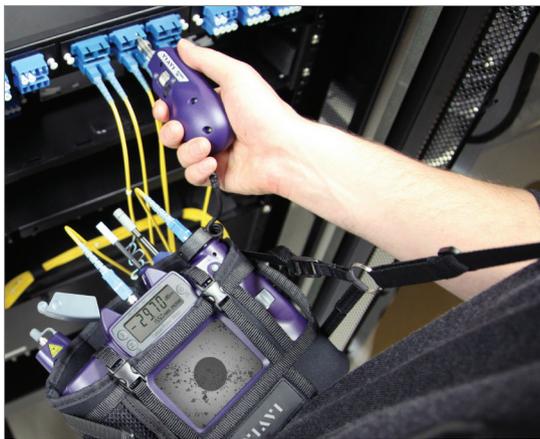
HP2-60-P4 shown with utility carrier and other tools.

Integrated Patch Cord Microscope (PCM)

The HP2 systems feature an integrated patch cord microscope, adding further value with improved workflow efficiency. Enabling the user to quickly and easily inspect both the female (bulkhead) and male (patch cord) sides of a fiber interconnect and measure optical power levels makes the HP2-**-P4 the ultimate system for fiber technicians.

Viavi offers a wide selection of precision FMAE adapters optimized for easy and accurate inspection of various connector types and applications. To inspect the patch cord, simply insert the connector into the FMAE adapter and focus the image on the display.

Comparison (Display Types)

Viavi Fiber Display Types (with Probe Microscope)				
	HD2	HD2-P	HP2-**	HP2-**-P4
Inspect patch cords (w/Probe microscope)	■	■	■	■
Inspect bulk-heads (w/Probe microscope)	■	■	■	■
Inspect both sides quickly and easily (w/ Probe+PCM)		■		■
Test/measure optical power and attenuation			■	■

Integrated Power Meter

Basic and Reliable

The power meter is used for simple optical power testing, or with a light source for insertion loss measurements at various wavelengths.

Accurate Measurement and Simple Operation

Three-button operation and a bright, clear display make the power meter very easy to use. When combined with a Viavi light source, the possibility of measurement errors is eliminated because the power meter automatically detects the wavelength being transmitted.

Automatic Identification of Individual Fibers

The power meter can be used with a Viavi light source to detect the modulation frequency of the light coupled into the fiber, for identification purposes.

Universal Push-Pull Interface

Interchangeable UPP adapters let you connect and test any fiber connector.

Components and Features

Power Meter Operation Controls/Display

Univ. Push-Pull input for Power Meter

Patch Cord Microscope (PCM) Input
(Dedicated patch cord inspection with interchangeable FMAE adapters)

A/B Switch
(Toggles between patch cord [PCM] and bulkhead [probe] fiber views)

Focus Control for PCM

3.5-in TFT LCD Screen

GripSwitch *(backside)*

Power and Low Battery LEDs

Brightness Control

Hanging Hook

4-pin FBP Probe Input

12VDC Power Input

Power Mode Selector

Table Stand

HP2-**-P4 Display Specifications	
Dimensions	18.5 x 15 x 6.0 cm (7.3 x 5.9 x 2.4 in)
Weight	760 g (26.8 oz) with eight AA alkaline batteries
Video display	88.9 mm (3.5-in) TFT LCD
Connector	4-pin Hirose™ input for FBP probes
Power source	Eight AA batteries or AC power adapter (100–240 VAC/9V DC/500mA)
Power mode	ON (continuous on) OFF GripSwitch (power save mode)
Horizontal field-of-view (FOV)	550 µm @ 200X 350 µm @ 400X
Warranty	1 yr

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HP2-**-P4 Power Meter Specifications	
Display range: » HP2-60-P4 » HP2-80-P4	−65 to +10 dBm −50 to +26 dBm
Max. permitted input level » HP2-60-P4 » HP2-80-P4	+13 dBm +27 dBm
Standard wavelength settings Calibrated wavelengths	850, 980, 1300, 1310, 1490, 1550, 1625 nm 850, 1300, 1310, 1490, 1550, 1625 nm
Intrinsic uncertainty[1]	±0.20 dB (±5%)
Linearity[1] » HP2-60-P4 » HP2-80-P4	±0.06 dB (-50 to +5 dBm) ±0.06 dB (-32 to +20 dBm)
Wavelength range	780 to 1650 nm
Wavelength and modulation » HP2-60-P4 1300, 1310, 1490, 1550, 1625 nm 850, 980 nm » HP2-80-P4 1300, 1310, 1490, 1550, 1625 nm 850, 980 nm	270 Hz, 330 Hz, 1 kHz, 2 kHz −50 to +10 dBm −45 to +10 dBm −35 to +23 dBm −30 to +23 dBm
Run time	~180 hours (continuous on)
Auto-shutoff time	5 minutes
Optical interface	UPP 2.5 mm adapter (DIN, ST, FC, SC, E2000) UPP 1.25 mm adapter (LC, MU) - *sold separately*
Detector Type	Germanium
Display	LCD, 4-digit
Result display in	dBm, dB
Resolution	0.01 dB

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

Ordering Information

Description	Order Number
Handheld 3.5-in display with integrated optical power meter	FIT-HP2-60
Handheld 3.5-in display with integrated optical power meter and 200X patch cord microscope (PCM)	FIT-HP2-60-P2
Handheld 3.5-in display with integrated optical power meter and 400X patch cord microscope (PCM)	FIT-HP2-60-P4
Handheld 3.5-in display with integrated high-power optical power meter	FIT-HP2-80
Handheld 3.5-in display with integrated high-power optical power meter and 200X patch cord microscope (PCM)	FIT-HP2-80-P2
Handheld 3.5-in display with integrated high-power optical power meter and 400X patch cord microscope (PCM)	FIT-HP2-80-P4
Inspection and Test Kit: Dual-mag (200/400X) FBP probe microscope and tips, FIT-HP2-60-P4 inspection and test system with 400X PCM, carrying case	FIT-S205
Inspection, Cleaning and Test Kit: Dual-mag (200/400X) FBP probe microscope and tips, FIT-HP2-60-P4 inspection and test system with 400X PCM, cleaning tools, utility carrier, carrying case	FIT-S205-C
Fiber Essentials Tool Kit: Dual-mag (200/400X) FBP probe microscope and tips, FIT-HP2-60-P4 inspection and test system with 400X PCM, FFL-050 visual fault locator, cleaning tools, utility carrier, carrying case	FIT-S205-PRO
Inspection and Test Kit: Dual-mag (200/400X) FBP probe microscope and tips, FIT-HP2-80-P4 inspection and test system with 400X PCM, carrying case	FIT-S215
Inspection, Cleaning and Test Kit: Dual-mag (200/400X) FBP probe microscope and tips, FIT-HP2-80-P4 inspection and test system with 400X PCM, cleaning tools, utility carrier, carrying case	FIT-S215-C
Fiber Essentials Tool Kit: Dual-mag (200/400X) FBP probe microscope and tips, FIT-HP2-80-P4 inspection and test system with 400X PCM, FFL-050 visual fault locator, cleaning tools, utility carrier, carrying case	FIT-S215-PRO

Accessories

Description	Order Number
Carrier, for HD2 and HP2 displays - hands-free neck strap	FBPP-HF1
Utility carrier, for HD2 and HP2 displays and components - hands-free carrier with storage	FITP-UC2

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