HP3-60-P4

Fiber Inspection & Test System w/Integrated Patch Cord Microscope & Power Meter

HP3-60-P4 Fiber Inspect and Test System with Integrated Patch Cord Microscope and Power Meter

Key Features

- 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

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

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

- Modulation frequency detection lets users identify individual fibers

- Three-year calibration period

- TWINtest and Auto-λ (with JDSU optical light source)

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

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

- Measures optical power at 850, 1300, 1310, 1490, and 1550 nm

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

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

- Promote proper fiber handling workflow and practice

HP3-60-P4 Fiber Inspect and Test System

The new JDSU HP3-60-P4 (with integrated patch cord microscope) inspection and test system combines fiber inspection and optical power measurement into a single seamless handheld device. The result is a significant increase in workflow efficiency and a decrease in total inspection and test time.

The HP3-60-P4 system, derived from the popular HD3 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.

Inspect the Patch Cord with Integrated PCM and the Bulkhead with Probe

FMAE Adapter/Patch Cord Inspection Input

Protective Rubber Cap

UPP Input for 2.5 mm and 1.25 mm Connectors

4-Pin FBP Probe Microscope Input

Power Meter: 4-Digit Display for Wavelengths and Types of Modulation

Power Meter: Straightforward 3-Button Operation

PCM Focus Control

Display Power Button

1.8-inch TFT LCD

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

Battery Compartment
(Back panel - holds 6 x AA alkaline batteries)

Low Battery Warning Indicator

Benefits of the Integrated PCM

- Lets users quickly and easily inspect both sides of the fiber interconnect

- Reduces inspection time by more than 50 percent

- Inspects bulkhead with probe microscope and patch cord with PCM

- Eliminates changing inspection tips on the probe to inspect patch cord side

- Prevents misplaced and mishandled inspection tips

- Prevents misrouting by inspecting one port/channel 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

Integrated Patch Cord Microscope (PCM)

The HP3-60-P4 features 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 HP3-60-P4 the ultimate system for fiber technicians.

JDSU offers a complete selection of FMAE adapters that lets users inspect every application and connector.

Comparison (Display Types)

JDSU Fiber Display Types (with Probe Microscope)				
	HD3	HD3-P	HP3-60	HP3-60-P4
• Inspect patch cords (w/Probe microscope)	●	●	●	●
• Inspect bulkheads (w/Probe microscope)	●	●	●	●
• Inspect *both sides* quickly and easily (w/Probe+PCM)		●		●
• Test/measure optical power and attenuation			●	●

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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 (850, 1300, 1310, 1490, and 1550 nm).

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 JDSU light source, the possibility of measurement errors is eliminated because the power meter automatically detects the wavelength being transmitted. As a result, dual wavelength measurements at 850 and 1300 nm or 1310 and 1550 nm can be made quickly and easily using the saved reference levels.

Automatic Identification of Individual Fibers

The power meter can be used with a JDSU 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.

Efficient Inspection and Test Workflow

1
INSPECT PATCH CORD

2
ACTIVATE PROBE

3
INSPECT BULKHEAD

4
CONNECT

5
TEST

Power Meter Specifications

Display Range	−65 to +10 dBm
Max. Permitted Input Level	+10 dBm
Intrinsic Uncertainty[1]	±0.20 dB (±5%)
Linearity[1] (-50 to +5 dBm)	±0.06 dB
Wavelength Range	780 to 1650 nm
Wavelength & Modulation	270 Hz, 330 Hz, 1 kHz, 2 kHz
1300, 1310, 1490, 1550 nm	−50 to +10 dBm
850 nm	−45 to +10 dBm
Run Time	~180 hours (continuous on)
Auto-shutoff Time	20 minutes
Connectable Fiber Types	9/125 to 100/140 µm
Optical Interface	UPP 2.5 mm adapter (DIN, ST, FC, SC, E2000) UPP 1.25 mm adapter (LC, MU) - sold separately
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℃ ± 3K, 45 to 75% relative humidity, 9 to 50 µm fiber

HP3-60-P4 Specifications

Dimensions	162 x 114 x 42 mm (6.4 x 4.5 x 1.7 in)
Weight	333 g (11.7 oz) with six AA alkaline batteries
Video Display	45.7 mm (1.8 in) TFT LCD
Connector	4-pin Hirose™ input for FBP probes
Power Source	Six AA batteries or AC power adapter (100−240 VAC/9V DC/500mA)
Power Mode	ON (continuous on) OFF
Run Time	~3 hours (continuous on)
Auto-shutoff Time	20 minutes
Horizontal Field-of-View (FOV)	550 µm @ 200X; 350 µm @ 400X
Warranty	1 yr

Hirose is a trademark of Hirose Electronic Corporation.

Ordering Information

FIT-HP3-60	Handheld display with integrated power meter
FIT-HP3-60-P4	Handheld display with integrated power meter and 400X patch cord microscope
FIT-S105	KIT: Dual-mag (200/400X) fiber inspection probe microscope and tips, handheld display with integrated power meter and 400X PCM, carrying case
FIT-S105-C	KIT: Dual-mag (200/400X) fiber inspection probe microscope and tips, handheld display with integrated power meter and 400X PCM, cleaning materials, carrying case
FIT-HP3-60-EU	Handheld display with integrated power meter - EU plug
FIT-HP3-60-P4-EU	Handheld display with integrated power meter and 400X patch cord microscope - EU plug
FIT-S105-EU	KIT: Dual-mag (200/400X) fiber inspection probe microscope and tips, handheld display with integrated power meter and 400X PCM, carrying case - EU plug
FIT-S105-EU-C	KIT: Dual-mag (200/400X) fiber inspection probe microscope and tips, handheld display with integrated power meter and 400X PCM, cleaning materials, carrying case - EU plug
FIT-HP3-60-AU	Handheld display with integrated power meter - AU plug
FIT-HP3-60-P4-AU	Handheld display with integrated power meter and 400X patch cord microscope - AU plug
FIT-S105-AU	KIT: Dual-mag (200/400X) fiber inspection probe microscope and tips, handheld display with integrated power meter and 400X PCM, carrying case - AU plug
FIT-S105-AU-C	KIT: Dual-mag (200/400X) fiber inspection probe microscope and tips, handheld display with integrated power meter and 400X PCM, cleaning materials, carrying case - AU plug
FIT-HP3-60-UK	Handheld display with integrated power meter - UK plug
FIT-HP3-60-P4-UK	Handheld display with integrated power meter and 400X patch cord microscope - UK plug
FIT-S105-UK	KIT: Dual-mag (200/400X) fiber inspection probe microscope and tips, handheld display with integrated power meter and 400X PCM, carrying case - UK plug
FIT-S105-UK-C	KIT: Dual-mag (200/400X) fiber inspection probe microscope and tips, handheld display with integrated power meter and 400X PCM, cleaning materials, carrying case - UK plug

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