SmartClass™ Fiber FBP-HD4i/HD4iP and OLP-82/82P

Inspect, test, certify, and save with one device

QUICK START GUIDE
Notice
Every effort was made to ensure that the information in this document was accurate at the time of printing. However, information is subject to change without notice, and JDSU reserves the right to provide an addendum to this document with information not available at the time that this document was created.

Copyright
© Copyright 2012 JDSU, LLC. All rights reserved. JDSU, Enabling Broadband and Optical Innovation, and its logo are trademarks of JDSU, LLC. All other trademarks and registered trademarks are the property of their respective owners. No part of this guide may be reproduced or transmitted electronically or otherwise without written permission of the publisher.

Trademarks
JDSU is a trademark of JDSU in the United States and other countries.

FCC Information
Electronic test equipment is exempt from Part 15 compliance (FCC) in the United States.

European Union
Electronic test equipment is subject to the EMC Directive in the European Union. The EN61326 standard prescribes both emission and immunity requirements for laboratory, measurement, and control equipment. This unit has been tested and found to comply with the limits for a Class A digital device.

Independent Laboratory Testing
This unit has undergone extensive testing according to the European Union Directive and Standards.
# TABLE OF CONTENTS

## CHAPTER 1
**INTRODUCTION** .......................................................................................................................... 4–5
- SmartClass Fiber Devices .............................................................................................................. 4
- Key Features and Functions ........................................................................................................... 5

## CHAPTER 2
**CONTROLS** .................................................................................................................................... 6–8
- Operator Control Panel .................................................................................................................. 7
- Home Screen Display ..................................................................................................................... 8

## CHAPTER 3
**OPERATION** ................................................................................................................................ 9–11
- Setting Up PASS/FAIL Analysis ...................................................................................................... 9
  - Activate inspection with PASS/FAIL analysis ............................................................................ 9
  - Select acceptance criteria: Inspection (PCM) ........................................................................... 9
  - Select acceptance criteria: Inspection (Probe) ........................................................................ 10
- Set up OPM PASS/FAIL thresholds (if measuring in dBm) ............................................................ 10
  - Using the Device ....................................................................................................................... 11
JDSU’s SmartClass Fiber family is the next generation of optical handheld test solutions that allow technicians to inspect, test, certify, and save on a single device. Designed to help users work smarter and faster, the SmartClass Fiber family incorporates the features that technicians rely on every day to deliver best-in-class reliable networks to their customers.

**Products in the SmartClass Fiber family include:**

**HD4i**  
Digital handheld video display

**OLP-82**  
Digital handheld video display with optical power meter

**OLP-87**  
Digital handheld video display with PON power meter
### Key Features and Functions

<table>
<thead>
<tr>
<th>Description</th>
<th>HD4i</th>
<th>OLP-82</th>
<th>OLP-87</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portable handheld display with 3.5&quot; color touch screen</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Simple graphical menu-driven interface</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Accepts PASS/FAIL P5000i Probe</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Accepts external USB power meter</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Integrated connector certification reporting</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>On-board storage: Endface images and inspection analysis</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>User-definable acceptance criteria</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Integrated optical power meter</td>
<td>✔</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>On-board storage: Power meter results</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Integrated PON power meter (BPON, EPON, and GPON)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Integrated PASS/FAIL patch cord microscope option</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

This **Quick Start Guide** highlights general controls and use the **HD4i** and **OLP-82** products only. A comprehensive User Manual is included on the FiberChekPRO installation disk that is included with this product.

For further information on the **OLP-87** or other JDSU fiber test tools, visit [www.jdsu.com/test](http://www.jdsu.com/test).
CONTROLS

Standard

with Patch Cord Microscope (PCM)

1

2

3

4

5

6

7

8

9

10
Controls

1. Connector interface
2. 3.5 inch color touch screen
3. Key pad (operator control panel)
4. LED indicators
5. Patch Cord Microscope (PCM) with FMAE adapter
6. Test head cover
7. Battery life indicator
8. Graphic menu interface
9. 2x USB2 interfaces, 1x micro-USB interface, external power supply connector
10. PCM controls (focus control, automated PASS/FAIL analysis, magnification control)

Operator Control Panel

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>🔽</td>
<td>HOME - Press to go to the home screen</td>
</tr>
<tr>
<td>🔼</td>
<td>MENU - Press to open a menu</td>
</tr>
<tr>
<td>←</td>
<td>BACK - Press to go back one step</td>
</tr>
<tr>
<td>⏯️</td>
<td>INPUT SELECT KEY (ISK) - Press for fast toggling between device functions</td>
</tr>
</tbody>
</table>
| 🔥 | POWER - Press to switch the instrument ON and OFF  
**NOTE:** LED glows GREEN when the instrument is ON. |
| ⬆️ ⬇️ ⬅️ ➤ | ARROW KEYS  
• Press to navigate through the menus  
• Press to change values in the menus |
| 🔢 | CENTER KEY  
• Press to confirm the selection |
| 📡 | SAVE - Press to save results |
| ⚥ | LOW BATTERY - Glows RED when battery is low |
| ⌚️ | TEST IN PROCESS - Glows RED when a measurement is running in the background |
| ⚪️ | CHARGE - Glows AMBER when battery is charging; If the power is OFF, charging will continue with no LED indicator |
**Home Screen Display**

**Battery Status** - Indicates the battery charge level / status.

**Optical Power Meter (OPM)** - Activates the on-board OPM to view optical power measurement results, edit acceptance criteria, and view saved results.

**Inspect (PCM)** - Activates the integrated Patch Cord Microscope (PCM) to inspect and analyze fiber endfaces, detect scratches and defects, and provide PASS/FAIL results. The PCM is ideal for inspecting male fiber connectors such as patch cords and test leads.

**Inspect (Probe)** - Activates the handheld P5000i Digital Probe microscope to inspect and analyze fiber endfaces, detect scratches and defects, and provide PASS/FAIL results. The probe is ideal for inspecting connectors located behind bulkheads.

**USB Optical Power Meter (OPM)** - Activates OPM devices (such as MP-60 or MP-80) that are connected to one of the USB ports to view optical power measurement results, edit acceptance criteria, and view saved results.
Setting Up PASS/FAIL Analysis

**Select Acceptance Criteria:**
**Inspection (Probe)**

1. Open the **INSPECT (Probe)** application
2. Press **MENU**
3. Select **PROFILE** *(choose desired PROFILE from list)*
4. Select **TIP** *(choose from list)*

**Select Acceptance Criteria:**
**Inspection (PCM)**

1. Open the **INSPECT (PCM)** application
2. Press **MENU**
3. Select **PROFILE** *(choose desired PROFILE from list)*
**Set Up OPM PASS/FAIL Thresholds (if measuring in dBm)**

1. Open the **POWER METER** application
2. Select **MORE... > EDIT WAVELENGTH TABLE**
3. Select a wavelength from the list
4. Press **MENU**
5. Select **ENTER LIMIT**
6. Enter your desired limit value (*measured in dBm*) using the numeric keypad
7. Press **OK**
   - Repeat steps 4–7 for all desired OPM wavelengths
8. Check the boxes for only the wavelengths you want to use
Using the Device

This SmartClass Fiber device allows users to inspect, test, certify, and save results quickly and easily by driving the user’s behavior and incrementally stepping them through each application as it should be used in a proper testing workflow as follows:

Starting from the Home Screen

1. **Certify the patch cord/test lead endfaces**
   a. Press the \( \) to activate the PCM
   b. Inspect patch cord/test lead end A using the PCM
   c. Press the [TEST] button on the PCM
   d. Press \( \) to save result (if necessary)
   e. Move end A over to the OPM port
   f. Inspect patch cord/test lead end B using the PCM
   g. Press the [TEST] button on the PCM
   h. Press \( \) to save result (if necessary)
   i. Leave end B in the PCM

2. **Certify the bulkhead connector endface**
   a. Press the \( \) to activate the Probe Microscope
   b. Inspect the bulkhead endface using the Probe Microscope
   c. Press the [TEST] button on the Probe
   d. Press \( \) to save result
   e. Plug patch cord/test lead end B into the bulkhead port

3. **Measure the optical power**
   a. Press the \( \) to switch to the OPM
   b. Select desired wavelength (OPM value will be displayed on the screen)
   c. Press \( \) to save result
   d. Repeat as necessary for other wavelengths
### Test and Measurement Regional Sales

<table>
<thead>
<tr>
<th>Region</th>
<th>TEL</th>
<th>FAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTH AMERICA</td>
<td>1 866 228 3762</td>
<td>1 301 353 9216</td>
</tr>
<tr>
<td>LATIN AMERICA</td>
<td>+1 954 688 5660</td>
<td>+1 954 345 4668</td>
</tr>
<tr>
<td>ASIA PACIFIC</td>
<td>+852 2892 0990</td>
<td>+852 2892 0770</td>
</tr>
<tr>
<td>EMEA</td>
<td>+49 7121 86 2222</td>
<td>+49 7181 86 1222</td>
</tr>
</tbody>
</table>

Product specifications and descriptions in this document subject to change without notice. © 2012 JDS Uniphase Corporation. September 2012