Quick Start Guide



Manufacturer:

Viavi

Product Name:

Viavi SmartClass™ HD4i Digital Handheld Video Display Kit with Probe Scope

Manufacturer Part Number:

FBP-SD4I

Click here for more details on the Viavi SmartClass™ HD4i Digital Handheld Video Display Kit with Probe Scope



Contact the professionals at Fiber Optic Center for a quote or to get more details.

Copyrights

This product or parts of this product are based on recommendations and/or standards from the standardization section of the International Telecommunication Union – ITU-T and/or the European Telecommunications Standards Institute – ETSI. These recommendations and standards are subject to the proprietary rights of these organizations. It is not permitted to copy ITU-T recommendations or ETSI standards fully or in part and/or to pass them on to third parties without prior written permission from ITU-T and/or ETSI.

Copyright

© Copyright 2022 VIAVI Solutions Inc. All rights reserved. VIAVI and the VIAVI logo are trademarks of VIAVI Solutions Inc. All other trademarks and registered trademarks are the property of their respective owners.

Order number: 22002195

Issue: 2022.11

Previous issue: 2012.09

Notes:

Changes may be made to specifications, designations and delivery information.



VIAVI

CONTENTS

CONTENTS

1	INTRODUCTION	5
	SmartClass Fiber Devices.	
	User manual update	
	Symbols used in this Quick Start Guide	6
2	CONTROLS	_
2	CONTROLS	1
	Operator control panel	8
	Home Screen Display	9
3	OPERATION	10
	Setting Up PASS/FAIL Analysis	10
	Using the Device	



1 INTRODUCTION SMARTCLASS FIBER DEVICES

1 INTRODUCTION

SmartClass Fiber Devices

VIAVI'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-inclass reliable networks to their customers.

Products in the SmartClass Fiber family include:





Digital handheld video display

OLP-82Digital handheld video display with optical power meter

Key Features and Functions

Description		OLP-82
Portable handheld display with 3.5" color touch screen		✓
Simple graphical menu-driven interface	✓	✓
Accepts PASS/FAIL P5000i Probe	✓	✓
Accepts external USB power meter	✓	✓
Integrated connector certification reporting		✓
On-board storage: Endface images and inspection analysis	✓	✓
User-definable acceptance criteria	✓	✓
Integrated optical power meter		✓
On-board storage: Power meter results		✓
Integrated PON power meter (BPON, EPON, and GPON)		
Integrated PASS/FAIL patch cord microscope option	✓	✓

1 Introduction USER MANUAL UPDATE



This Quick Start Guide will focus on the HD4i and OLP-82 products.

Symbols Used in this Quick Start Guide

The following character formats are used in this guide:

✓	Requirement This requirement must be met first; e.g. ✓ The device is switched on.
•	Instruction
1.	Follow the instructions given (the numbers indicate the order
2.	in which the instructions should be followed); e.g.
	► Select mode.
Bold type face	Pages, controls, and display elements
	Screen pages, controls, and display elements are indicated in bold type.



VIAVI

2 CONTROLS

2 CONTROLS

with Patch Cord Microscope (PCM)



- 1 Connector interface (OLP-82/82P only)
- **2** 3.5 inch color touch screen
- **3** Key pad (operator control panel)
- 4 LED indicators
- Patch Cord Microscope (PCM) with FMAE adapter (HD4iP and OLP-82P only)
- 6 Test head cover (OLP-82/82P only)
- **7** Battery life indicator
- **8** Graphic menu interface
- **9** PCM controls (focus control, automated PASS/FAIL analysis, magnification control)
- 10 2x USB2 interfaces, 1x micro-USB interface, external power supply connector

2 CONTROLS
OPERATOR CONTROL PANEL



Operator Control Panel

Mode	Description
lack	Home key ▶ Press to go to the home screen.
	Menu key ▶ Press to open a menu.
~	Back key ▶ Press to go back one step.
Ð	Input Select Key (ISK) ▶ Press for fast toggling between device functions.
1	Power key ▶ Press to switch the instrument ON and OFF. LED glows green when the instrument is ON.
·Ô·	Arrow keys ► Press to navigate through the menus. ► Press to change values in the menus. Center key ► Press to confirm the selection.
H	Save key ▶ Press to save results
-	Low battery LED Glows red when battery is low
⊙	Test in process LED Glows red when a measurement is running in the background
4	Charge LED Glows amber when battery is charging. If the power is OFF, charging will continue with no LED indicator.



2 CONTROLS HOME SCREEN DISPLAY

Home Screen Display



Fig. 1: OLP-82P Home Screen shown with P5000i Probe and MP-series USB OPM attached via USB

Icon	Description
	Battery Status Indicates the battery charge level / status.
POWER METER	Optical Power Meter (OPM) Activates the on-board OPM to view optical power measurement results, edit acceptance criteria, and view saved results.
INSPECT	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	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.
MP-60	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.

3 OPERATION
SETTING UP PASS/FAIL ANALYSIS



3 OPERATION

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).

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



- Wavelengths are measured 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 you desired limit value (*measured in dBm*) using the numeric keypad.
- 7. Press OK.
- 8. Repeat steps 4–7 for all desired OPM wavelengths.
- 9. Check the boxes for only the wavelengths you want to use.





3 OPERATION USING THE DEVICE

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

3. Measure the optical power:

- a. Press to switch to the OPM.
- **b.** Select desired wavelength (OPM value will be displayed on the screen).
- c. Press \blacksquare to save result.
- d. Repeat as necessary for other wavelengths.