## **Test & Inspection**

# FAFL



#### C840 with DFS1 Digital FiberScope

## **C880 QUAD Certification Test Kit**

#### Features

- Hand-held, 0.9 kg (2 lb)
- Inspection capable with the DFS1 Digital FiberScope
- Integrated OPM, OLS, and VFL (650 nm)
- OLS sources: LED 850/1300 nm; Laser 1310/1550 nm
- Dual-wavelength certification Pass/Fail
- Two fibers bi-directional and single fiber testing
- >8 hours battery life or AC power
- Touch and Test<sup>™</sup> user interface
- TRM<sup>®</sup> (Test Results Manager) reporting software
- Internal (1000s tests) and USB storage
- USB host and function ports
- Available in seven languages

#### Applications

- Tier 1 testing of premise networks
- Bi-directionally measure loss and length of fiber links
- Save time simultaneously testing two fibers at two wavelengthsVerify polarity
- Certify SM and MM networks to industry standards (ISO/TIA/EN) and applications
- Find faults using integrated Visual Fault Locator
- Create and test to user defined rules
- Review Pass/Fail feedback after each test
- Review fibers by cable and retest fiber pairs if needed
- Create professional certification reports

Combining two C840 Certification Testers, the C880 QUAD Certification Test Kit from AFL is designed for testing and troubleshooting both multimode and single-mode fiber links. Each tester includes an integrated Visual Fault Locator (VFL, 650 nm), both single-mode (Laser 1310/1550 nm) and multimode (LED 850/1300 nm) Optical Light Sources (OLS), and an Optical Power Meter (OPM). Each tester may be used alone as a traditional power meter, light source, or visual fault locator.

In Auto Test mode, the user may perform certification tests to one of the industry cabling standards (TIA, ISO, EN), one or more application standards, or a user-defined loss/length limit. Certification reports may be generated based on the selected standards and rules using PC reporting software. The transflective touch-screen display of the C840 tester is suitable for both indoor and outdoor operation.

The C840 supports visual inspection per IEC 61300-3-35 using the DFS1 Digital FiberScope allowing users the ability to view and document connector end-face images. Thousands of test results may be stored internally for transfer to a computer via a USB cable or a standard USB drive for viewing, printing, and analyzing with the supplied Windows<sup>®</sup> compatible software - TRM<sup>®</sup> (Test Results Manager). Acceptance reports generated using TRM can include certification reports and end-face images.





# **C880 QUAD Certification Test Kit**

## **Ordering Information**

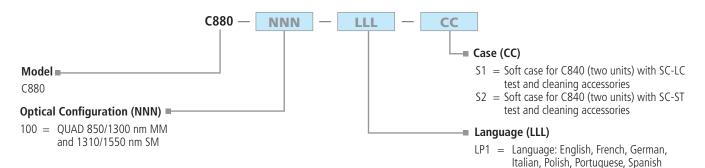
Each C880 kit or C840 kit includes two (2) C840s or one (1) C840 Tester respectively, USB flash drive, PC software for OTDR trace analysis and certification or OPM loss reporting, AC adapters (two (2) with C880 kit, one (1) with C840 kit), switchable test ports adapters, and accessories (see table below).

CARRY CASE	TEST CORDS <sup>a</sup>	ADAPTERS			CLEANING PRODUCTS	AFL NO.
		OLS	ОРМ	VFI		
Soft case	SC/LC	SC, ST, LC	SC, 2.5, 1.25 mm	2.5, 1.25 mm	One-Click Cleaner SC/ST/FC, 2.5 mm One-Click Cleaner LC, 1.25 mm	C880-100-LP1-S1
Soft case	SC/ST	SC, ST, LC	SC, 2.5, 1.25 mm	2.5, 1.25 mm	One-Click Cleaner SC/ST/FC, 2.5 mm	C880-100-LP1-S2
Soft case	—	SC, ST, LC	SC, 2.5, 1.25 mm	2.5, 1.25 mm	One-Click Cleaner SC/ST/FC, 2.5 mm	C840-100-LP1-S1

The C840 Certification Tester works with the DFS1 Digital FiberScope.

When placing an order, select options as follows: Model, Optical Configuration, Language, and Case.

Example: C880 — 100 — LP1 — S1



#### C880—100—LP1—S1 (or S2) C880 Kit Contents

ITEM	DESCRIPTION
C840	QUAD Auto Test Certification Tester (2 ea)
Adapters	OLS Ports — SC, ST, LC OPM port — SC, 1.25 and 2.5 mm Universal VFI port — 1.25 and 2.5 mm Universal
Jumpers (12)	2 m (62.5 µm, 50 µm, SM)
Miscellaneous	Mandrels (2) — 62.5 $\mu$ m, 3 mm jacket
Accessories	Mandrels (2) — 50 $\mu$ m, 3 mm jacket
	Stylus pens for touch screen
	USB flash drive -1G, USB to mini-USB cable
	AC adapters (2), specify country of use
Cleaning	(2) One-Click Cleaner SC/ST/FC, 2.5 mm (S1 and S2 kit)
Accessories	One-Click Cleaner LC/MU, 1.25 mm (S1 kit only)
Cases	Soft case (2)
Report Software	PC software and user guide

## **Inspection and Cleaning Accessories**

DESCRIPTION	AFL NO.
DFS1 Digital FiberScope PC/UPC Inspection Kit	DFS1-00-04XU
DFS1 Digital FiberScope APC Inspection Kit	DFS1-00-04XA
DFS1 USB Digital Fiber Inspection Kit without Adapters	DFS1-00-04XN
Wet Cleaning Kit (shown) for SC/FC/ST/LC connectors	8500-20-0900
Dry Cleaning Kit	8500-20-0901
One-Click Cleaner SC, ST, FC (500+ cleans)	8500-05-0001MZ
One-Click Cleaner LC/MU (500+ cleans)	8500-05-0002MZ
One-Click Mini-100 SC, ST, FC (100+ cleans)	8500-05-0005MZ
One-Click Mini-100 LC/MU (100+ cleans)	8500-05-0006MZ
One-Click Cleaner Ultra 2.5 SC, ST, FC (enlarged cleaning)	8500-05-0007MZ

#### Notes:

a. (4) each - 2 m (62.5 $\mu\text{m}$ , 50  $\mu\text{m}$ , SM).



# **C880 QUAD Certification Test Kit**

## **Specifications** <sup>a</sup>

POWER METER		
Auto Test Wavelengths	850/1300 nm (MM), 1310/1550 nm (SM)	
Detector Type	InGaAs 2 mm	
Measurement Range	+6 to -60 dBm	
Accuracy <sup>b</sup>	±0.25	
Measurement Units	dB, dBm, mW	
Wavelength ID <sup>c</sup>	Yes (to -47 dBm)	
Set Reference	Yes	
Data Storage	Yes	
Tone Detection	Yes (to -47 dBm)	

LIGHT SOURCE	MULTIMODE PORT	SINGLE-MODE PORT	
Available Wavelengths	850/1300 nm (nominal)	1310/1550 nm (nominal)	
Emitter Type	LED	Laser	
Safety Class	Class I FDA 21 CFR 10 IEC EN60825-		
Output Power	>-20 dBm, 62.5 µm MM <sup>d</sup>	0 dBm, 9 µm SM	
Stability (after 15- minute warm-up)	$\pm 0.1 \text{ dB}$ over 1 hour	$\pm 0.07$ dB over 1 hour $\pm 0.15$ dB over 8 hours	
Wave ID Transmit	Yes	5	
Tone Generation	270 Hz, 330 Hz, 1 KHz, 2 kHz		

VISUAL FAULT LOCATOR		
Emitter Type	Laser	
Safety Class	Class II FDA 21 CFR 1040.10 and 1040.11, IEC 60825-1: 2007-03	
Wavelength	650 ±20 nm	
Output Power (nominal)	0.8 mW	

#### Notes:

- a. All specifications valid at 25°C unless otherwise specified.
- b. Accuracy measured at -10 dBm per N.I.S.T. standards.
- c. Automatic wavelength identification and switching when used with Wave ID Series Light Sources.
- d. Output power will be approximately 3 dB less if a 50 µm mandrel-wrapped jumper is used instead of a 62.5 µm mandrel-wrapped jumper.
- e. Typical, depending on display brightness.
- f. Typical, from fully discharged to fully charged state, unit may be operating.
- g. External battery charger available.



#### **International Sales and Service Contact Information**

Available at www.AFLglobal.com/Test/Contacts

www.AFLglobal.com or (800) 321-5298, (603) 528-7780

GENERAL		
Test Modes	Auto Test, OPM, OLS, VFL, DFS	
Length Measurement Range	5 km (MM); 200 km (SM)	
Data Storage	Internal flash memory	
	USB flash drive (2.0)	
	Downloadable from unit directly to PC	
Data Storage Capacity	Internal >1000 fibers	
Data Transfer to PC	USB	
Tool Free Adapters	Modular cleanable SC/ST/LC	
Size	23 x 11 x 7 cm (8.8 x 4.3 x 2.8 in)	
Weight	0.9 kg (2 lb)	
Operating Temperature	-10°C to +50°C, 0 to 90 % RH (non-condensing)	
Storage Temperature	-20°C to +60°C, 0 to 90 % RH (non-condensing)	
Power	Rechargeable Li-Ion or AC power adapter	
Battery Life <sup>e, g</sup>	>8 hours continuous testing	
Recharge Time <sup>f, g</sup>	4 hours	
Display	8.9 cm (3.5 in), color, transreflective	