VIAVI Solutions

Data Sheet

VIAVI T-BERD/MTS

OCC-4056C DWDM Optical Channel Checker Module with SFP/SFP+ bays

For T-BERD/MTS-2000, –4000 V2, –5800

Connect the VIAVI Solutions™ 4100-Series OCC-4056C DWDM Channel Checker to successfully deploy and maintain passive DWDM signals for Fiber Deep, Remote PHY and C-RAN applications. The OCC-4056C optical performance, combined with the T-BERD/MTS platform's suite of testing features, ensures that testing jobs are performed right—the first time.

The OCC-4056C scans the DWDM system and automatically records all channels with the wavelength/frequency and the related power level. Information can be displayed in a graphical spectrum format or in a table of results so that users can easily check the performance of each channel.

T-BERD/MTS-2000

One-slot handheld modular platform for testing fiber networks

T-BERD/MTS-4000 V2

Two-slot handheld modular platform for testing fiber optic networks

T-BERD/MTS-5800

Handheld tester for fiber, 5G, Ethernet up to 100G, OTN, and legacy networks

2019 DIAMOND TECHNOLOGY REVIEWS BTR BROADBAND TECHNOLOGY REPORT

2019 Broadband Technology Review – 4.0 Diamond Award Winner

2020 LIGHTWAVE 4.0 INNOVATION REVIEWS

2020 Lightwave Innovation Award – 4.0 Winner

Benefits

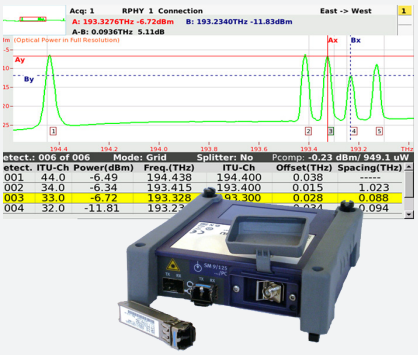
- Qualify any DWDM channel Frequency and Power level
- Troubleshoot any Passive DWDM network (e.g. Fiber Deep, Remote-PHY or C-RAN)
- Verify end-to-end continuity using a DWDM source in the SFP/SFP+ bays

Features

- Supports C-band applications (Ch61 to Ch12)
- Graphical and tabular display mode
- Supports ITU-T G.692 DWDM grid with 50/100 and 200GHz channel spacing
- Power and wavelength drift test application
- Slots for up to two SFP/SFP+ DWDM transceivers or one tunable SFP/SFP+

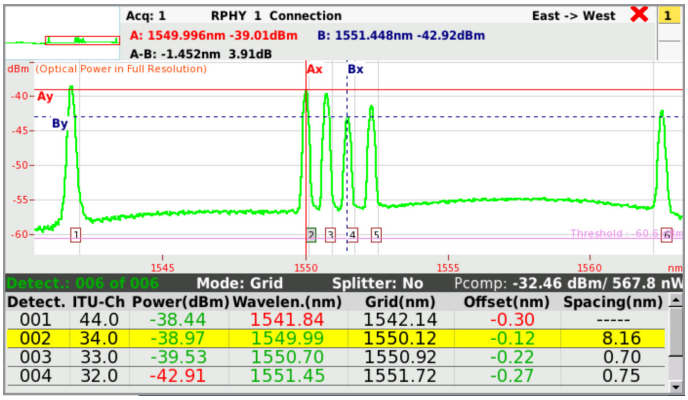
Applications

- Qualify forward/return path links through Mux and Demux
- Validate new wavelength routes for Fiber Deep and Remote-PHY
- Conduct spectral and drift testing on DWDM sources



Ease of Use

One-button auto-testing guarantees that technician needs no special training to carry out a DWDM test, making the VIAVI instrument suitable for both novice and expert technicians. An Auto-Test mode automatically identifies WDM channels, selects the appropriate wavelength range, and provides auto scaling and system qualification according to pre-defined parameters.



Graphical and tabular result screen with P/F indication

Flexible Measurement Capability

In-depth analysis, featuring statistical, continue or single evaluation with automatic storage capabilities, is provided. Different measurement functions such as automatic channel detection, and pass/fail analysis against user-settable limits are available on the OCC-4056C.

High Performance DWDM Testing for installation and Troubleshooting

Covers C-band from 1528.77 nm to 1567.95 nm (Ch61 to Ch12)

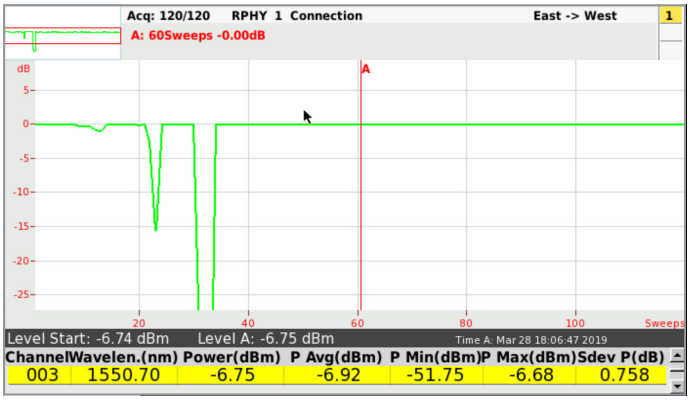
Fast scanning speed (<4 s)

Real spectral measurements with:

- Complete spectral trace
- Tabular results of power and wavelength
- Zoom and marker functions
- High power dynamic for testing at monitor ports

Drift Measurement for Wavelength and Power

For optical performance monitoring it is essential to measure the key parameters over time. The built-in drift test application provides the result of power and wavelength over a customer definable time in a graphical and numerical format.



Power drift over time

SFP/SFP+ Slots for DWDM Transceivers and Tunable SFP/SFP+

The OCC-4056C provides an integrated SFP/SFP+ slot to host up to 2 SFP/SFP+ DWDM transceivers or a tunable SFP/SFP+ (Tunable Optics SW-option required).

The Tunable Optics SW option enables reading type and wavelength of DWDM transceivers and to control tunable SFP/SFP+.

Optical transceiver and tunable SFP/SFP+ can be used to simulate DWDM transmitters for testing insertion loss per wavelength, and end-to-end continuity of a link in DWDM networks with mux/demux and OADMs.

Specifications

Modes	
Operating modes	DWDM, drift
Display modes	Graph (trace + overview) DWDM table and graph + table
Measurement parameters	Channel #, power, wavelength, drift
Spectral Measurement Ranges	
Wavelength range	1528.77 nm to 1567.95 nm 196.10 to 191.20 THz (Ch61 to Ch12)
Wavelength accuracy[1]	±0.060 nm (±7.5 GHz)
Readout resolution	0.01 nm
Resolution bandwidth FWHM[1]	> 0.15 nm
Minimum channel spacing[4]	0.4 nm/50GHz
Number of channels	Max 99
Power Measurement Ranges	
Dynamic range	–65 to +10 dBm
Noise floor RMS	–75 dBm
Absolute accuracy[2]	±0.6 dB
Linearity[3]	±0.1 dB
Readout resolution	0.01 dB
Scanning time (full band)	< 4 s
Optical Port	
Input port	SM/APC
Switchable optical adapters	SC/APC mounted FC enclosed (LC and ST on request)
Optical return loss	>35 dB
Total safe power	+22 dBm all channels +10 dBm one channel
SFP/SFP+ Bay	
Can host up to two SFP/SFP+ transceivers or one tunable laser (not included)	

General	
Weight	0.35 kg (0.7 lb)
Dimensions (W x H x D)	128 x 134 x 40 mm (5.04 x 5.28 x 1.57 in)
Temperature	
Operation	–5 to +50°C (23 to 122°F)
Storage	–20 to +60°C (–4 to 140°F)

1. At 23°C ±5°C – 2331/94.01
2. Typical at –5 dBm at DWDM wavelength grid including PDL
3. –45 dBm to +5 dBm, at 23 °C
4. Two channels at equal power level

Ordering Information

Description	Part Number
OCC-4056C DWDM Optical Channel Checker with SFP/SFP+ bays, C-band, APC, SC mounted FC enclosed	2331/12
Tunable SFP SW-option for OCC-4056C	2331/94.01
Adapters	
Switchable ST adapter	2155/00.32
Switchable FC adapter	2155/00.05
Switchable SC adapter	2155/00.06
Switchable LC adapter	2155/00.07

VIAVI Care Support Plans

Increase your productivity for up to 5 years with optional VIAVI Care Support Plans:

- Maximize your time with on-demand training, priority technical application support and rapid service.
- Maintain your equipment for peak performance at a low, predictable cost.

For more Information: go to viavisolutions.com/viavicareplan

Features

*5-year plans only

Plan	Objective	Technical Assistance	Factory Repair	Priority Service	Self-paced Training	5 Year Battery and Bag Coverage	Factory Calibration
BronzeCare	Technician Efficiency	Premium	✓	✓	✓		
SilverCare	Maintenance & Measurement Accuracy	Premium	✓	✓	✓	✓*	✓

VIAVI Solutions

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