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Data Sheet

# VIAVI
## T-BERD/MTS OCC-4056C DWDM Optical Channel Checker Module with SFP/SFP+ bays

### For T-BERD/MTS-2000 V2, –4000 V2, –5800 and OneAdvisor 800 Platforms

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 or OneAdvisor 800 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

**OneAdvisor 800**



All-in-One Cell-site Installation and Maintenance Test Solution



**2019 Broadband Technology Review – 4.0 Diamond Award Winner**



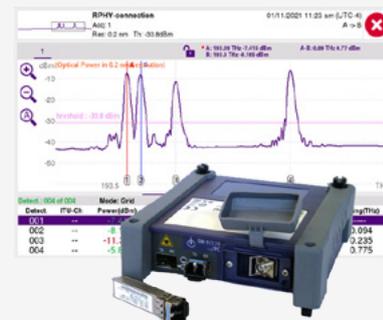**2020 Lightwave Innovation Award – 4.0 Winner**

## 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 (Ch62 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
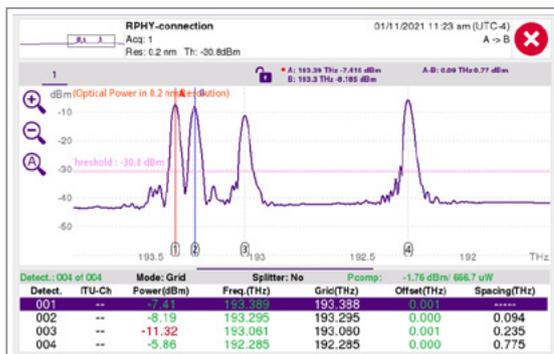- Slots for up to two SFP/SFP+ DWDM transceivers or one tunable SFP/SFP+

## 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

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## 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

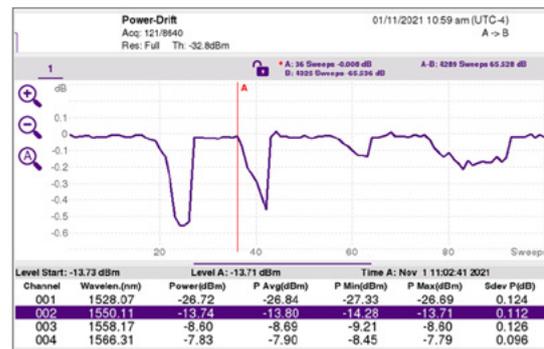Covers C-band from 1527.99 nm to 1567.95 nm (Ch62 to Ch12)

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.

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## Specifications

### Modes

| 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 | 1527.99 nm to 1567.95 nm 196.20 to 191.20 THz (Ch62 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
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 |

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## 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.

Plan availability depends on product and region. Not all plans are available for each product or in every region. To find out which VIAVI Care Support Plan options are available for this product in your region, contact your local representative or visit: 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 | Accessory Coverage | Express Loaner |
|------|-----------|----------------------|----------------|------------------|---------------------|--------------------------------|---------------------|--------------------|----------------|
| BronzeCare | Technician Efficiency | Premium | ✓ | ✓ | ✓ | | | | |
| SilverCare | Maintenance & Measurement Accuracy | Premium | ✓ | ✓ | ✓ | ✓* | ✓ | | |
| MaxCare | High Availability | Premium | ✓ | ✓ | ✓ | ✓* | ✓ | ✓ | ✓ |

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/ Germany and Other Countries    LASER COMPONENTS Germany GmbH    Tel +49 8142 2864 – 0    info@lasercomponents.com    www.lasercomponents.com

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