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.

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

One-slot handheld modular platform for testing fiber networks
Two-slot handheld modular platform for testing fiber optic networks
Handheld tester for fiber, 5G, Ethernet up to 100G, OTN, and legacy networks

2019 Broadband Technology Review – 4.0 Diamond Award Winner
2020 Lightwave Innovation Award – 4.0 Winner
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.

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.

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

<table>
<thead>
<tr>
<th>Operating modes</th>
<th>DWDM, drift</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display modes</td>
<td>Graph (trace + overview) DWDM table and graph + table</td>
</tr>
<tr>
<td>Measurement parameters</td>
<td>Channel #, power, wavelength, drift</td>
</tr>
</tbody>
</table>

#### Operating modes

- **Display modes**: Graph (trace + overview)
- **DWDM table and graph + table**

#### Spectral Measurement Ranges

<table>
<thead>
<tr>
<th>Wavelength range</th>
<th>1528.77 nm to 1567.95 nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>±0.060 nm (±7.5 GHz)</td>
</tr>
<tr>
<td>Readout resolution</td>
<td>0.01 nm</td>
</tr>
<tr>
<td>Resolution bandwidth FWHM</td>
<td>&gt; 0.15 nm</td>
</tr>
<tr>
<td>Minimum channel spacing</td>
<td>0.4 nm/50GHz</td>
</tr>
</tbody>
</table>

#### Power Measurement Ranges

<table>
<thead>
<tr>
<th>Dynamic range</th>
<th>−65 to +10 dBm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise floor RMS</td>
<td>−75 dBm</td>
</tr>
<tr>
<td>Absolute accuracy</td>
<td>±0.6 dB</td>
</tr>
<tr>
<td>Linearity</td>
<td>±0.1 dB</td>
</tr>
<tr>
<td>Readout resolution</td>
<td>0.01 dB</td>
</tr>
<tr>
<td>Scanning time (full band)</td>
<td>&lt; 4 s</td>
</tr>
</tbody>
</table>

#### 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

<table>
<thead>
<tr>
<th>Weight</th>
<th>0.35 kg (0.7 lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>128 x 134 x 40 mm (5.04 x 5.28 x 1.57 in)</td>
</tr>
<tr>
<td>Temperature</td>
<td>−5 to +50°C (23 to 122°F) Storage −20 to +60°C (−4 to 140°F)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCC-4056C DWDM Optical Channel Checker with SFP/SFP+ bays, C-band, APC, SC mounted FC enclosed</td>
<td>2331/12</td>
</tr>
<tr>
<td>Tunable SFP SW-option for OCC-4056C</td>
<td>2331/94.01</td>
</tr>
</tbody>
</table>

#### 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

<table>
<thead>
<tr>
<th>Plan</th>
<th>Objective</th>
<th>Technical Assistance</th>
<th>Factory Repair</th>
<th>Priority Service</th>
<th>Self-paced Training</th>
<th>5 Year Battery and Bag Coverage</th>
<th>Factory Calibration</th>
</tr>
</thead>
<tbody>
<tr>
<td>BronzeCare</td>
<td>Technician Efficiency</td>
<td>Premium</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SilverCare</td>
<td>Maintenance &amp; Measurement Accuracy</td>
<td>Premium</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tbody>
</table>

*5-year plans only*