# TUNABLE OPTICAL CHANNEL DROP UNIT

**Xtract** 

1450 to 1650 nm





Xtract features a square flat-top tunable filter allowing clean DWDM optical channel extraction.

# **Ideal Tool for Channel Selection and Extraction** from DWDM Signals

Xtract accurately isolates a DWDM channel for BERT or Q-factor measurements. It features automatic channel detection with a relative wavelength accuracy of  $\pm 15$  pm.

#### **Clean Channel Extraction**

Xtract's square flat-top filter shape prevents any corruption of the data. This ensures proper signal conditioning before additional testing of the selected channel.

#### **Covers all the Transmission Bands**

Xtract operates from 1450 to 1650 covering the E-, S-, C- and L-bands.

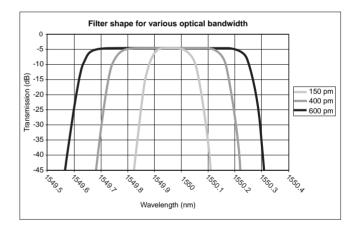
### Ready for Next Generation DWDM Transport Systems

Xtract is suitable for systems with very high channel density as well as up to 40 Gb/s modulation rate. The fixed bandwidth of the filter, from 100 to 700 pm, is user-defined at the time of order.

#### Variable Bandwidth

Xtract offers a variable bandwidth as an option. Without altering the remarkable optical features of the filter, this capability enables you to

adapt perfectly the filter bandwidth to the modulation of the signal. This allows you to validate complex simulations of your component and system designs with reliable results.



# **Xtract, Tunable Filter Specifications**

| Optical Specifications              | Wavelength range                            | 1450-1650 nm                                     |
|-------------------------------------|---|--|
|                                     | Autopositionning accuracy                   | ±0.015 nm  |
|                                     | Wavelength resolution                       | 0.005 nm   |
|                                     | Center wavelength linearity <sup>2,7</sup>  | ±0.05 nm   |
|                                     | Center wavelength stability <sup>1,7</sup>  | <±0.05 nm  |
|                                     | Insertion loss <sup>2</sup>                 | 6 dB (5.5 dB typ.)                               |
|                                     | Polarization dependent loss <sup>3</sup>    | ±0.2 dB  |
| Optical Bandwidth<br>Specifications | Fixed optical bandwidth (FWHM) <sup>4</sup> | From 100 to 700 pm (variable bandwidth optional) |
|                                     | Flatness <sup>5</sup>                       | 0.2 dB   |
|                                     | Crosstalk <sup>6</sup>                      | 40 dB (50 dB typ.)                               |
| Interface                           | Optical connector                           | FC-APC on SMF-28TM fiber                         |
| General Specifications              | Operating temperature range                 | +15 to +35°C (+60 to +85°F)                      |
|                                     | Power supply                                | 100 to 240 V (50 to 60 Hz)                       |
|                                     | Dimensions (W x H x D)                      | 448 x 133 x 370 mm <sup>3</sup>                  |
|                                     | Weight                                      | 10 kg  |

<sup>&</sup>lt;sup>1</sup> Over one hour

# **Ordering Information**

For the most current ordering information, please visit our website.

<sup>&</sup>lt;sup>2</sup> From 1500 to 1600 nm

<sup>&</sup>lt;sup>3</sup> At 1500, 1550 and 1600 nm

<sup>&</sup>lt;sup>4</sup> Fixed bandwidth: user-defined at the time of order (optical bandwidth accuracy is ±10 pm at 1550nm), larger bandwidth available on customer request (up to 1 nm)

<sup>&</sup>lt;sup>5</sup> 120 pm <FWHM <700 pm

<sup>&</sup>lt;sup>6</sup> Measured 60 pm away from the -3 dB points

<sup>&</sup>lt;sup>7</sup> After 2 hour warm-up at 23°C ± 2°C