

## FOT-C O-BAND CWDM FORWARD PATH OPTICAL TRANSMITTER



- DOCSIS 3.1 compatible frequency range
- Up to 5 CWDM channels in a single fiber
- Independent local electronic configuration interface
- Remote management and configuration
- Front or rear optical interface

### TECHNICAL SPECIFICATIONS

#### Optical parameters

|  |                              |
|--|------------------------------|
| Wavelength [nm]                        | 1291, 1311, 1331, 1351, 1371 |
| Output optical power [mW]              | 4...20 (6...13dBm)           |
| Relative intensity noise (RIN) [dB/Hz] | <-155                        |
| Optical connector                      | SC/APC, EURO2000             |
| Laser type                             | DFB Cooled                   |

#### RF parameters

|   |                         |
|---|-------------------------|
| Frequency range [MHz]   | 47...1218               |
| Return loss [dB]  | >16                     |
| Flatness [dB]   | ±0.5                    |
| Nominal RF input level (BC / NC) [dBµV]                             | 80 <sup>(1)</sup> / 100 |
| RF input level range (BC and NC) [dB]                               | ±8                      |
| RF offset range [dB]  | -6...+3                 |
| RF equaliser range [dB]   | 0...6                   |
| RF testpoint (3.2% OMI) [dBµV]                                      | 75±1                    |
| Port-to-port isolation (NC to BC) [dB]                              | >50                     |
| CTB [dBc]   | -65 <sup>(2)</sup>      |
| CSO [dBc]   | -59 <sup>(2)</sup>      |
| CNR [dB]  | >51 <sup>(2)</sup>      |
| Noise-to-power ratio (NPR) maximum / Dynamic range of NPR > 42 [dB] | 48 / 10 <sup>(3)</sup>  |

#### General parameters

|   |                          |
|---|--------------------------|
| Power consumption (typical / maximum) [W] | 4.7 / 5.8 <sup>(4)</sup> |
| Operational temperature range [°C]        | 0...+50                  |
| Dimensions [mm]                           | 230x130x35               |
| Weight [kg]                               | 0.5                      |

(1) 92 ITU-T J.83 Annex A 256 QAM channels between 258 MHz and 1002 MHz

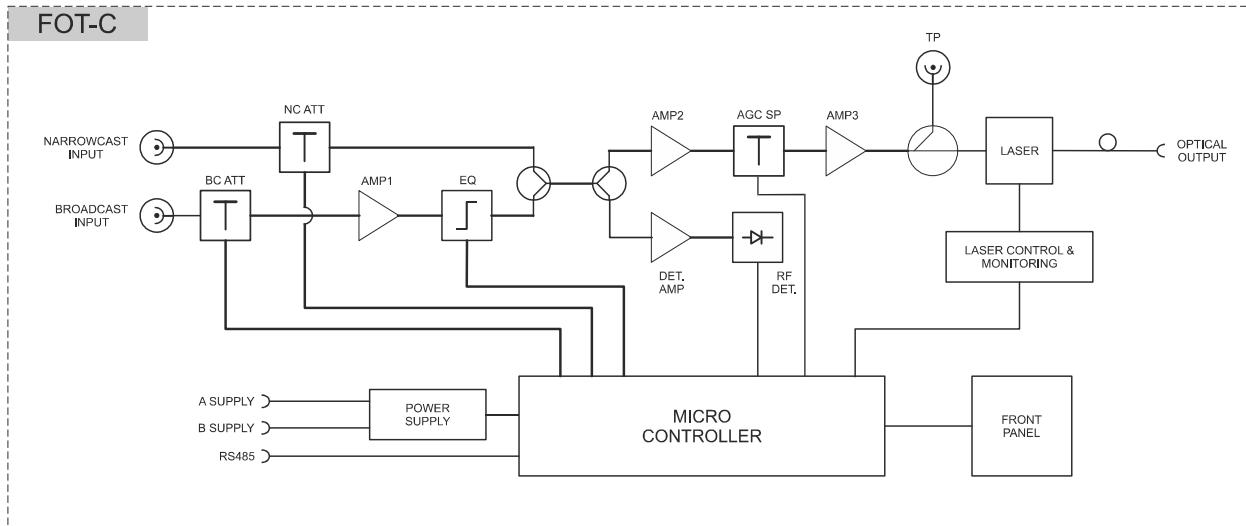
(2) Test conditions: OMI=3.2%, 79 NTSC channels

(3) Measured with flat full spectrum load between 47 and 1218 MHz, after an optical link of 0 km, received power -2 dBm

(4) Typical value measured at a TEC current of 0.3 A, maximum value measured at a TEC current of 1 A

**Specifications are subject to change without notice!**

## BLOCK DIAGRAM



## ORDERING INFORMATION

|   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | O | T | - | C | 3 | X | X | - | X | X | - | X |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

### Output power

|    |              |
|----|--------------|
| 04 | 4mW / 6dBm   |
| 06 | 6mW / 8dBm   |
| 08 | 8mW / 9dBm   |
| 10 | 10mW / 10dBm |
| 13 | 13mW / 11dBm |
| 16 | 16mW / 12dBm |
| 20 | 20mW / 13dBm |

### Optical interface position

|   |                               |
|---|-------------------------------|
| F | Front side (Recommended type) |
| R | Rear side                     |

### Optical connector

|    |                           |
|----|---------------------------|
| SA | SC/APC (Recommended type) |
| EU | EURO2000                  |

### Output wavelength

|    |                            |
|----|----------------------------|
| 29 | 1291 nm                    |
| 31 | 1311 nm (Recommended type) |
| 33 | 1331 nm (Recommended type) |
| 35 | 1351 nm (Recommended type) |
| 37 | 1371 nm                    |

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