

# OPTICAL MULTI-FORMAT TRANSMITTER



## AT A GLANCE

- Fully integrated optical frontend that converts electrical RF signals into IQ modulated optical signals
- Ideal for generation of various modulation formats (e.g. QPSK and m-QAM)

### Features

- High-bandwidth dual-polarization IQ modulation
- Automated BIAS control
- Built-in or external laser source
- Device specific calibration files enable software-based pre-distortion
- Fast and simple switching between modulation formats
- USB & Ethernet interface for remote control
- SCPI style remote control command set, LabView® drivers supplied

### Applications

- Test and measurement in optical communication
- Generation of various optical modulation formats (e.g. QPSK, m-QAM)
- Reference Transmitter
- Multi-channel transmission experiments for system design tests

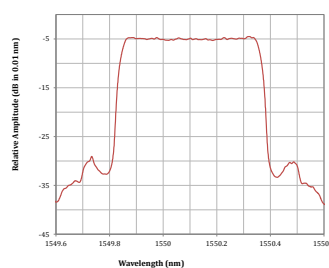
| Parameter                                                                     | Specification                                                   |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Wavelength Range [nm]                                                         | 1526 - 1610                                                     |
| Wavelength Range [THz]                                                        | 191.3 - 196.25                                                  |
| XY Polarization Imbalance [dB]                                                | < 1                                                             |
| Gain Imbalance [dB]                                                           | < 1                                                             |
| DC Extinction Ratio [dB]                                                      | > 18                                                            |
| IQ Offset [dB]                                                                | < -20                                                           |
| Electrical RF Connectors                                                      | 2.4 mm, female                                                  |
| Insertion Loss [dB]<br>(maximum transmission point setting, no RF modulation) | < 12 dB                                                         |
| EVM, 32GBaud DP-QAM16 [%]                                                     | < 10                                                            |
| Input Power Range [dBm]                                                       | 8 - 18                                                          |
| Maximum Ambient Temperature Gradient [K/hr]                                   | +/-1                                                            |
| Output Connector                                                              | FC/APC, FC/PC, SC/PC                                            |
| Optical Fiber                                                                 | Polarization - maintaining PANDA type Fiber, PER > 20dB, 25typ. |
| E/O Bandwidth 3dB / 6dB [GHz]                                                 | > 25 / > 40                                                     |

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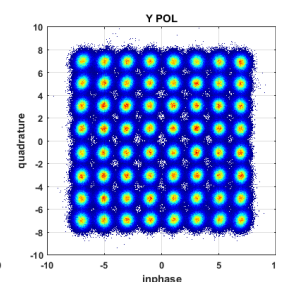
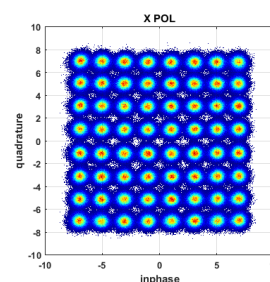
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64 GBaud - 64 QAM



EVM 5.5% / 5.7%



In cooperation with:

