



# o2ePXIe

## Optical-to-Electrical Converter

o2ePXIe's modular design allows for seamless integration with the PXIe mainframe and it can be used with any combination of our optical test modules. The o2ePXIe is a high bandwidth, broadband optical to electrical converter available in a range of configurations. Choose from 1 or 2 channels, AC or DC coupling, various conversion gain and operating wavelength ranges.

### Key Features

- AC or DC coupled
- 1 or 2 channels
- Various conversion gain and operating wavelength range

To find out more, get in touch with us today.

### Coherent Solutions Ltd

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## Technical Specifications

| General Specifications      | o2ePXIe                                        |  |  |  |
|-----------------------------|------------------------------------------------|--|--|--|
| Bus Connection              | PXIe                                           |  |  |  |
| PXI slots                   | 1                                              |  |  |  |
| Dimensions (HxWxD)          | 130 mm x 20mm x 215 mm<br>(5.1" x 0.8" x 8.5") |  |  |  |
| Weight                      | ~ 1 kg<br>(~2.2 lbs)                           |  |  |  |
| Operating temperature range | 5 °C to 45 °C<br>(41 °F to 113 °F)             |  |  |  |
| Storage temperature range   | -40 °C to 70 °C<br>(-40 °F to 158 °F)          |  |  |  |

  

| Model Number               | 1001                                                      | 1101                         | 1201                                                                                    | 1301                         |
|----------------------------|-----------------------------------------------------------|------------------------------|-----------------------------------------------------------------------------------------|------------------------------|
| Bandwidth                  | 9.5 GHz (typ)<br>8.5 GHz (min)                            | 25 GHz (typ)<br>24 GHz (min) | 35 GHz (typ)<br>30 GHz (min)                                                            | 50 GHz (typ)                 |
| Wavelength                 | 750 -1650nm                                               | 950 - 1650nm                 | 800 - 1650nm                                                                            | 1200 - 1650nm                |
| Calibrated wavelength      | 850, 1310, 1490,<br>1550                                  | 1310, 1490, 1550             | 850, 1310, 1490,<br>1550                                                                | 1310, 1490, 1550             |
| Optical connector type     | FC/PC, FC/APC, SC/APC, SC/PC                              |                              |                                                                                         |                              |
| Number of channels         | 1 or 2                                                    |                              |                                                                                         |                              |
| RF coupling                | DC                                                        | AC                           | DC                                                                                      |                              |
| RF connector               | SMA (3.5 mm)                                              | K (2.92 mm)                  | 2.4 mm                                                                                  | V (1.85 mm)                  |
| RF impedance               | 50 ohms                                                   |                              |                                                                                         |                              |
| Fiber                      | 50u core MMF                                              | SMF-28                       | 50u core MMF                                                                            | SMF-28                       |
| Damage level average power | 7 dBm                                                     | 4 dBm                        | 7 dBm                                                                                   | TBD                          |
| Optical return loss        | 16 dB                                                     | 30 dB<br>at 1550 nm          | 14 dB                                                                                   | 30 dB at 1550 nm             |
| PDL at 1550 nm             |                                                           | 0.25 dB max<br>at 1550 nm    |                                                                                         | 0.1 dB (typ)<br>0.2 dB (max) |
| Conversion gain            | 450 V/W (typ)<br>at 1550 nm<br>250 V/W (typ)<br>at 850 nm | 900 V/W (typ)<br>at 1550 nm  | 100 V/W (typ)<br>at 1550 nm<br>100 V/W (typ)<br>at 1310 nm<br>70 V/W (typ)<br>at 850 nm | 90 V/W (typ)<br>at 1310 nm   |
| Low frequency cutoff       | 0 Hz                                                      | < 100 KHz                    | 0 Hz                                                                                    |                              |
| Noise equivalent power     | 0.15 fW/Hz                                                | 0.18 fW/Hz                   | 0.18 fW/Hz                                                                              | 0.16 fW/Hz                   |
| Average power reading      | Yes                                                       |                              |                                                                                         |                              |

Notes: PRELIMINARY SPECS AS OF JANUARY 2018.

## Order Information

**02ePXIe - XXXX - X - XX**

### Model number

**1001** = 9.5 GHz, DC coupled,  
conversion gain of 450 V/W

**1101** = 25 GHz, DC coupled,  
conversion gain of 450 V/W

**1201** = 35 GHz, DC coupled,  
conversion gain of 450 V/W

**1301** = 50 GHz, DC coupled,  
conversion gain of 450 V/W

### Connector Type

FC = FC/PC

FA = FC/APC

SC = SC/PC

SA = SC/APC

### Number of channels

1 = 1 channel

2 = 2 channels

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