

# Redundant Programmable 2.5GHz RF over Fiber Link

## Redundant Programmable 2.5GHz RF over Fiber link specifications

| Electrical                                          | Unit                 | Specification | Specification |
|-----------------------------------------------------|----------------------|---------------|---------------|
|                                                     |                      | LNA "OFF"     | LNA "ON"      |
| Frequency Range                                     | MHz                  | 10 - 2500     | 10 - 2500     |
| Adjustable Link Gain (nominal value) <sup>[1]</sup> | dB                   | 7             | 37            |
| Attenuator 31 dB (Tx, Rx) <sup>[2]</sup>            | dB                   | 0.5           | 0.5           |
| Gain Flatness                                       | dB                   | ±1.4          | ±1.4          |
| Input P1 dB <sup>[3]</sup>                          | dBm                  | 0             | -30           |
| Noise Figure <sup>[3]</sup>                         | dB                   | 29            | 9             |
| SFDR <sup>[3]</sup>                                 | dB/Hz <sup>2/3</sup> | 101           | 97            |
| Gain Flatness any 36 MHz                            | dB                   | ±0.25         | ±0.25         |
| Maximum Input No damage                             | dBm                  | 20            | 20            |
| Spurious                                            | dBm                  | -85           | -70           |
| VSWR Input / Output                                 | dBm                  | 1.7:1         | 1.7:1         |
| Input / Output impedance                            | Ohm                  | 50            | 50            |
| <b>Optical and Electrical</b>                       |                      |               |               |
| Laser diode wavelength                              | μm                   | 1.31 or 1.55  | 1.31 or 1.55  |
| Optical Power in the fiber                          | mw                   | 2.3 ±0.5      | 2.3 ±0.5      |
| <b>Mechanical and Environmental Parameters</b>      |                      |               |               |
| Operating temperature                               | °C                   | -20 to +70    | -20 to +70    |
| Storage temperature                                 | °C                   | -40 to +85    | -40 to +85    |
| EMC and Safety                                      | -                    | CE & FCC      | CE & FCC      |

[1] LNA 'ON' or 'OFF' is selected by RFOptic manufacturing or by using the RFoF user software.

[2] 'No Attenuation' is the default for Tx and Rx units. Attenuation values can be selected by the user software.

[3] Noise Figure, Input P1 dB, Input IP3, and SFDR measured at 1.5GHz, can be selected by 'LNA Off/ON' and Tx Attenuator.

[4] For additional information of this product, see brochure of *Programmable 2.5GHz RF Over Fiber*.

## Simplified Block Diagram of a Redundant Programmable RFoF link

