

# SFP GEPON трансивер FoxGate

Хит



Производитель: [FoxGate](#)

Модули: [SFP PON \(GEPON\)](#)

Технология: [WDM \(одноволоконные\)](#)

## Описание

FoxGate 1,25 Gbps, 1490 nm Tx / 1310 nm Rx, SC, SFP, 20 km – SFP GEPON трансивер для установки в оптический линейный терминал. Трансивер обеспечивает двунаправленную передачу данных с симметричной скоростью 1,25 Гбит/с по одному оптическому волокну в пассивной оптической сети (PON) на расстояние до 20 км.

Трансивер соответствует стандарту IEEE 802.3ah-2004.

**Длины волн:** передача 1490 нм, прием 1310 нм

**Тип оптического разъема:** SC

## Характеристики

### Предельно допустимые параметры:

| Parameter                   | Symbol | Min. | Max. | Unit |
|-----------------------------|--------|------|------|------|
| Storage Temperature         | Ts     | -40  | +85  | °C   |
| Supply Voltage              | VCC    | 0    | 4.0  | V    |
| Operating Relative Humidity |        | 5    | 95   | %    |

### Рекомендуемые условия эксплуатации:

| Parameter            | Symbol | Min. | Typical | Max. | Unit |
|----------------------|--------|------|---------|------|------|
| Power Supply Voltage | Vcc    | 3.13 | 3.3     | 3.47 | V    |
| Power Supply Current | Icc    |      |         | 300  | mA   |

|                       |                     |   |           |     |      |
|-----------------------|---------------------|---|-----------|-----|------|
| Operating Temperature | Tc                  | 0 |           | +70 | °C   |
| Relative Humidity     | RH                  | 5 |           | 95  | %    |
| Date Rate             | Upstream/Downstream |   | 1.25/1.25 |     | Gbps |

## Эксплуатационные характеристики (электрические):

| Parameter                              | Symbol | Min. | Typ. | Max  | Unit | Notes                 |
|----------------------------------------|--------|------|------|------|------|-----------------------|
| Transmitter                            |        |      |      |      |      |                       |
| LVPECL Compatible Inputs(Differential) | Vin    | 200  |      | 1600 | mVpp | AC coupled internally |
| Power Supply Current                   | Icc_Tx |      |      | 200  | mA   |                       |
| Input Impedance (Differential)         | Zin    | 90   | 100  | 110  | ohms | Rin > 100 kohms @ DC  |
| Tx Disable                             |        | 2    |      | Vcc  | V    |                       |
| Tx Enable                              |        | 0    |      | 0.8  |      |                       |
| Tx Fault_High                          |        | 2.4  |      | Vcc  | V    |                       |
| Tx Fault_Normal                        |        | 0    |      | 0.4  |      |                       |
| Receiver                               |        |      |      |      |      |                       |
| LVPECL Outputs (Differential)          | Vout   | 400  |      | 1600 | mVpp | DC coupled outputs    |
| Power Supply Current                   | Icc_Rx |      |      | 150  | mA   |                       |
| Rx_LOS                                 | High   | 2    |      | Vcc  | V    |                       |
|                                        | Low    | 0    |      | 0.8  | V    |                       |

## Эксплуатационные характеристики (оптические):

| Parameter                        | Symbol                 | Min. | Typical   | Max. | Unit |
|----------------------------------|------------------------|------|-----------|------|------|
| 9µm Core Diameter SMF            |                        |      | 20        |      | km   |
| Date Rate (Upstream/Downstream)  |                        |      | 1.25/1.25 |      | Gbps |
| Transmitter                      |                        |      |           |      |      |
| Centre Wavelength                | λc                     | 1480 | 1490      | 1500 | nm   |
| Spectral Width (-20dB)           | Δλ                     |      |           | 1    | nm   |
| Side Mode Suppression Ratio      | SMSRR                  | 30   |           |      | dB   |
| Average Output Power             | Pout                   | 2.5  |           | 7    | dBm  |
| Extinction Ratio                 | ER                     | 9    |           |      | dB   |
| Tolerance to Tx back reflection  |                        | -15  |           |      | dB   |
| Rise/Fall Time(20%□80%)          | tr/tf                  |      |           | 160  | ps   |
| Output Optical Eye               | IEEE 802.3ah Compliant |      |           |      |      |
| Optical Output Power with TX OFF | P_off                  |      |           | -40  | dBm  |
| Receiver                         |                        |      |           |      |      |
| Centre Wavelength                | λc                     | 1260 | 1310      | 1360 | nm   |

|                                   |             |     |    |     |     |
|-----------------------------------|-------------|-----|----|-----|-----|
| Receiver Sensitivity              | Pmin        |     |    | -30 | dBm |
| Receiver Overload                 | Pmax        | -6  |    |     | dBm |
| Receiver Burst-Mode Dynamic Range |             | 15  | 20 |     | dB  |
| Receiver Reflectance              | CR          |     |    | -20 | dB  |
| LOSS Assert Level                 | LOSA        | -44 |    |     | dBm |
| LOSS De-Assert Level              | LOSD        |     |    | -32 | dBm |
| Signal Detect Hysteresis          |             | 0.5 |    | 6   | dB  |
| Receiver Settling Time            | Ts          |     |    | 400 | ns  |
| Damage Threshold for Receiver     | Pin, damage | 3   |    |     | dBm |
| Maximum Receiver Reflectance      | Rx_r        |     |    | -20 | dB  |