

Preliminary data-sheet of 50G, 20 km, C-band DWDM Quasi Coherent SFP Transceiver  
 BFC\_SFP50\_20F-001-TXX-RYY
**Applications**

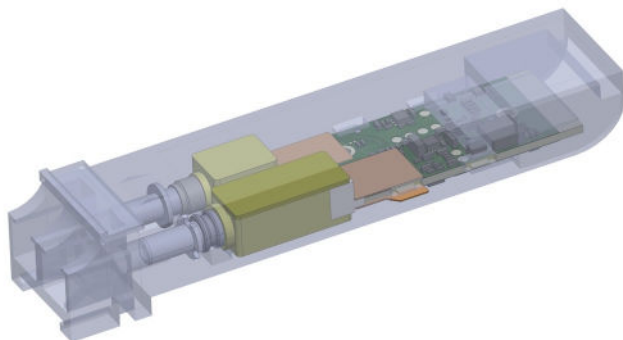
- Mobile fronthaul
- DWDM networks

**Features**

- Unique high sensitivity long range quasi-coherent detection technology
- Transmission capability up to 50 Gb/s (net data rate using PAM4 modulation)
- Transmission distance up to 20 km standard single mode fiber (SSMF)
- Built-in analogue dispersion compensation
- 100 GHz ITU grid, C-Band
- SFP-56 package, dual LC connectors
- Operating case temperature -40°C to +85°C
- Compliance: RoHS, SFP, MSA

**Electrical and optical characteristics**

Parameter	Min	Typ	Max	Unit	Condition
Data rate		25 Gbps 50 Gbps			Net data rate, NRZ modulation Net data rate, PAM4 modulation
Receiver Sensitivity		-15		dBm	Tc=25degC, BER < 2E-4 with PRBS 2e31-1
20 km Optical path penalty		2		dB	Measured with data rate at 50Gb/s, Tc=25degC, BER < 2E-4 with PRBS 2e31-1
Optical Center Wavelength		1550		nm	As per ITU-T 694.1 ITU channel number for transmitter (TXX) and receiver (RYY) should be specified when ordering
CDR chip		N/A			Semtech GN 2256
Power consumption		2.25 < 3.0		W W	25°C ambient temperature I-Temp (-40°C to +85°C)



**CAUTION: This device is susceptible to damage as a result of electrostatic discharge.**

Take proper precautions during both handling and testing. It is highly recommended to follow relevant guidelines such as JEDEC 108-A.

**Disclaimer:** The information and specifications provided in this datasheet is subject to change without notice. Bifrost Communications ApS cannot be held responsible for any consequences of any errors or missing information in the data provided in this document.

**Ordering information** - please contact [info@bifrostcommunications.com](mailto:info@bifrostcommunications.com)