

# Fx-DS55

## OPTICAL TRANSMITTER

### Application



- ▶ Electrical to optical conversion of SAT-IF video signals
- ▶ The 1550nm versions enable the usage of optical amplifiers (EDFAs) as boosters or repeaters in order to realize FTTx networks

### Features

- ▶ SBS suppression with very high SBS threshold
- ▶ Bandwidth 950...5450 MHz
- ▶ All-electronically adjustments gain, output power, OMI,
- ▶ Automatic load control (ALC) for constant  $OMI_{\text{otrms}}$
- ▶ Front panel RF test point -20 dB
- ▶ Dual, hot-plug-in power supply modules for 100...240 VAC or  $\pm 36... \pm 72$  VDC
- ▶ Web and SNMP Interface
- ▶ LC display and LED status indication
- ▶ General purpose I/O interface for remote functions
- ▶ Very thin, only 1 U design for mounting into 19", ETSI or JIS racks



**General Technical Data**

Wavelength	[nm]	Type 1550 : 1540 ... 1560nm Type 1310 : 1290 ... 1330nm
Optical output power	[dBm]	Type 80: +8 ±0.5
Side mode suppression	[dB]	> 30
Relative intensity noise (optical return loss > 40 dB)	[dBc/Hz]	< -155
SBS suppression <sup>1) 3) 4)</sup> (measured for 25 km fiber length)	[dBm]	Type 1550: ≥ +18.0
Opt. connector		Any type of high return loss connectors rear side mounted
Input impedance	[Ω]	50
Frequency range	[MHz]	950 ... 5450
Frequency response	[dB]	±2
Return loss	[dB]	≥ 6
IM2, IM3 (2 tone measurement, OMI= 20% per carrier)	dBc	≥ 40
Nominal input level	[dBm]	-20
Optical fibre		Standard single mode 9/125 μm
RF-connector/ impedance		SMA-female, 50Ω, rear side mounted
Control interface		Ethernet 10/100 interface
Climatic specification Operation Storage		ETS 300 019, class 3.1 ETS 300 019, class 1.2
EMI		EN50083-2, EN50083-2 /A1
Safety		EN 50083-1 and EN 60950, Laser class 1M according IEC 60825-1 (eyesafe for normal viewing)
Power supply Dual redundant, hot pluggable		100 ... 240 VAC, or 36 ... 72 VDC
Power consumption 110 VAC 48 VDC		< 25/34 VA (1/2 power supplies) < 21/25 W (1/2 power supplies)
Enclosure dimensions		19" / 1 rack unit [U] (optionally compatible to ETSI or JIS standards)
Weight	[kg]	9 (including two power supplies)

**Ordering Information**

For more information on this product please contact BKtel communications. Properties for ordering optical transmitter Fx-DS55:

	80	+7.0 dBm
I/O ports	0	No
	1	Yes
	1550	1550 nm
Optical connector	1	E2000
	2	SC/APC
	3	FC/APC-NTT
	4	FC/APC-JDS
	5	SC/APC with shutter
RF input / optical output	F	on front side
	R	on rear side
Version	0	BKtel
	OEM	OEM
Power supply	230/230	2 x (100...240 VAC)
	48/48	2 x (36...72 VDC)
	230	1 x (100...240 VDC)
	48	1 x (36...72VDC)
	230/48	mixed 230 VAC / 48 VDC

### Available Types

Fx-DS55-1550-80

Fx-DS55-1310-80

