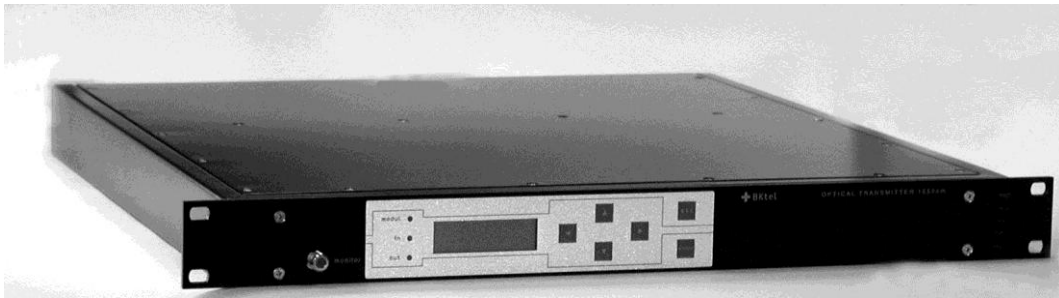


ES10LC-1x85 / ES10LC-2x60

OPTICAL TRANSMITTER 1550 NM



Application

- ▶ Externally modulated 1550 nm DFB laser transmitter for electrical to optical conversion of multichannel CATV signals like AM-VSB, FM and QAM signals
- ▶ Enables the usage of optical amplifiers (EDFAs) as boosters or repeaters in order to realize large scale HFC networks
- ▶ Excellent performance in order to realize links exceeding 100 km

Features

- ▶ Low noise, narrow linewidth CW-DFB laser
- ▶ One (8.5 dBm) or two (2x6.0 dBm) optical outputs
- ▶ Automatic RF gain control: CW, video, manual mode
- ▶ SBS threshold 16.5 dBm to increase transmission distance
- ▶ Front panel RF test point -20 dB
- ▶ RS485 interface
- ▶ LC display and LED status indication
- ▶ Very thin, only 1 RU design for mounting into 19" racks

Technical Data

Wavelength	[nm]	1540 ... 1560
Optical power	[dBm]	1 x 8.5 min (ES10LC-1x85) 2 x 6 min (ES10LC-2x60)
Side mode suppression	[dB]	>30
Relative intensity noise (opt. return loss < -40 dB)	[dBc/Hz]	typ. <-160
Nom. Input level per TV channel	[dBμV]	80
RF monitor output level	[dB]	-20
dynamic range of AGC	[dB]	+3 ... -6
SBS-Suppression	[dBm]	+16.5 dBm
RF-Frequency Range	[MHz]	47 -862
Flatness	[dB]	<±0.75
Return loss	[dB]	> 20 (47 MHz) – 1,5 dB/oct., min. > 15

Channel plan		PAL-D 84
CNR*) TX/RX (typ.)	[dB]	53
CNR*) Link (typ.)	[dB]	51
CSO Tx/Rx (typ.)	[dBc]	65
CSO (typ.)	[dBc]	65
CTB (typ.)	[dBc]	65

*) Nbw = 4 MHz

Opt. Connector		FC/APC, rear side mounted
RF-connector/ impedance		F-female, 75Ω□, rear side mounted
Control interface		RS485 interface
Climatic Specification		
Operation		ETS 300 019, class 3.1
Storage		ETS 300 019, class 1.2
Power Supply		85 ... 265 VAC
Power Consumption	[W]	≤50
Enlosure		19" / 1 RU
Weight	[kg]	9.4

Test Configurations

	Booster EDFA	Fibre Length	RX
Tx/Rx	no	no	0 dBm
Link (EDFA NF = 5 dB, RX lth = 4 pA/√Hz)	16 dBm	40 km	0 dBm
T _{ambient} = 25 °C			

Ordering Information

For more information on this product please contact BKtel communications.