SUNNISKY 1550OMLT series
1550nm Exterior-Modulation-Laser Optical transmitter

SUNNISKY 1550OMLT series 1550nm Exterior-Modulation-Laser optical transmitter adopts the world famous company Japan Fujitsu（or Japan MITSUBISHI or America JDUS）DFB laser with the thermoelectricity refrigerator, and Japan Fujitsu（or America JDUS and UTP or Italy PIRELLI）LINBO3 Exterior-Modulator with the feature of high linearity, optic insulation, distributing feedback.
1550nm Exterior-Modulation-Laser optical transmitter **1550OMLT** series have two kinds as the different SBS value 13dBm and 17dBm.
With better performance suppresses technology -Stimulated Brillouin Scattering suppression (SBS, 激发性布里昂效应抑制技术), the SBS value of **SUNNISKY 1550OMLT-13-1** is better than 13dBm, it could output one path of optical signal as 2 or 3 or 4 or 5mW power to transmit about 80Km distance.
SUNNISKY 1550OMLT-17-2 with17dBm SBS value, could output dual paths of optical signal as 3 or 5 or 8mW power into 100Km long distance optical fiber.
So, **SUNNISKY 1550OMLT** series 1550nm Exterior-Modulation-Laser optical transmitter could fully transmit Video/image and Data and Voice signal for cable TV, Cable digital TV and telephone/Data communication over the long distance.

Feature

- 47~860MHz modulated bandwidth
- By aid of RF pre-distortion technology for working point of Exterior-Modulator and the built-in RF driver amplifier and control circuit, it could improve effectively the CTB and CSO parameters of total system, and obtain maximal CNR value under ensuring the excellent performances of CTB and CSO
- With the phase modulation technology of Exterior-Modulator, it could provide the maximum output optical power under the condition that ensuring better performance of CSO, in order to obtain the longest transmission distance
- The liquid crystal of VFD can display its working status and parameters at any time, and give out failure message and sound warning in time
- The optic power output circuit and control circuit for laser thermoelectricity refrigerator assure the best performance and high stability of this product with long-term work
- The built-in microprocessor can monitor the different work status of DFB laser and Exterior-Modulator, and guarantee that the laser works in 25±0.5℃ at all the time inside to ensure the steady power output at the same time
- The broadband AGC technology of RF input port could guarantee that AM optical signal has stable modulation degree. For example, when the RF input level is changed, the AGC will work at once to ensure its stability

Specification

Optical Wavelength	1550±20nm
SBS (Suppression Threshold)	**1550OMLT-13-1-X**: 13dBm **1550OMLT-17-2-X**: 17dBm
Output Port	**1550OMLT-13-1-X**: 1 **1550OMLT-17-2-X**: 2
Output Optical Power	**1550OMLT-13-1-2**: 2mW **1550OMLT-13-1-3**: 3mW **1550OMLT-13-1-4**: 4mW **1550OMLT-13-1-5**: 5mW **1550OMLT-17-2-3**: 3mW **1550OMLT-17-2-5**: 5mW

	1550OMLT-17-2-8: 8mW
RIN Noise Density	≤-160dB/Hz
Optical Fiber Connector Type	FC/APC
RF Input wideband	47~860MHz
RF Input Level	15~25dBmV/CH
OMI	3%±0.25
Input Impedance	75Ω
Input Return Loss	≤-16
Flatness In Band	±0.75dB
C/N	52dB (Typ.)
C/CTB(Composite Triple Beat@59PAL-D)	≤-65dBc (Typ.)
C/CSO(Composite Second Order@59PAL-D)	≤-60dBc (Typ.)
Power Supply	85~265V AC, 50/60Hz, 50W
Operating Temperature	0~+50℃
Storage Temperature	-20~+60℃
Operating Humidity	85%
Dimensions	483mm×520mm×44mm
Weight	About 8Kg

Note:

1): Test condition: ① 60$CH_{PAL-D;}$ ② 45Km optical fiber; ③ optical receiver with 0dB input optical power.

2): All specifications are subject to change without notice.

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