## Doteck

## **Doteck LB Series**

## L-Band fiber optic Transmission System









#### Features

(1) Variety of technique specifications and design shows the characteristics of satellite L-Band fiber optic link products in current market and it's the best solution with lowest cost.

(2) Bandwidth at 950~2150MHz, can transmit analogue or digital signal from L-Band of all satellites.

(3) TG transmitter, and AGC amplifier inside.

(4) Perfect laser APC, ATC controls circuit guaranteeing the laser's long service life and high stable operating.

(5) Transmitter could send 13VDC or 18VDC to LNB.

(6) All the working specifications are controlled by microprocessor. It is used in the project with high requirement.

(7) Prevent from electromagnetism, RF and thunder and lightning interference strongly.

(8) All components, including connectors, are ordered from public-known manufacturers in the world, high stability and reliability ensurance.

(9) Enclosure box material is made of aluminum, elegant appearance, and light weight.

(10) A variety of installation options: 19-inch 1U box, mini box etc.

#### Application

- (1) Satellite L-Band fiber optic assignment system
- (2) Ocean ship satellite fiber optic assignment system
- (3) Satellite L-Band Up/Down fiber optic link

#### Function

Doteck LB series L-Band fiber optic transmission is working under the bandwidth of 950~2150MHz, which could convert all L-Band analogue or digital satellite signal (SAT-IF) got by LNB to optical signal, and transmit by fiber optic full transparently, high quality and long distance. It is also used in fiber optic assignment in satellite building

and satellite L-Band Up/Down link.

Custom design requirement, please contact Doteck.

### Specification

IF Feature	
Operating Bandwidth	950~2150MHz
Level Input	-25 ~ -14dBm
Level Output	-15 ~ -40dBm
Smoothness	±1.0dB(950~2400MHz)
Input Impedance	75Ω
RF Return Loss	12dB
RF Connector	F-Metric Standard
C/IM3 <sup>1)</sup>	≥55 dB
Noise Intension	>115 dB/Hz
Max-Link Gain	≥25dB(from -40dBm RF input testing)
Max-Link Loss	>28(P <sub>0</sub> =15dBm, 1310nm)
Mini-Link Loss	>10(P <sub>0</sub> =-3dBm)
Normal Feature	
Power Supply	50 - 260VAC,50-60Hz
Power Consumption	≤50A
Operating Temperature	<b>0∼+50</b> ℃
Humidity	5~95% RH Non-condensing
Size(W)x(D)x(H) (mm) 1U standard box Mini-box	44×433×340(mm) 44×132×210(mm)
Optical Feature	
Wavelength	1310nm/1550nm
Side-Mode	>35dB
Suppression Ratio	

Noise Intension	≤-155dB
Return Loss	≥55dB
Number of Fiber	1
Connector	FC/APC
Distance	0-40Km, or 0-60km, or 0-80km optional

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