

# **Doteck LB Series**

# L-Band fiber optic Transmission System (Bi-directional)





#### **Features**

- (1) Variety of technical 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

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

## **Applications**

- (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

## Introduction

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 signals got by LNB to optical signal, support bi-directional transmission of one channel L-band satellite signal on one optical fiber, via a single fiber to achieve full transparency, high quality, long distance transmission. It is also used in fiber optic assignment in satellite building and satellite L-band up/down link, use agile and convenient installation.

## **Technical Specifications**

| RF parameters   |                     |
|-----------------|---------------------|
| Frequency range | 950~2150MHz         |
| Level input     | -45~-20dBm          |
| Level output    | -30~-25dBm          |
| Smoothness      | ±1.0dB(950~2150MHz) |
| Channel         | 1(Bi-directional)   |
| Input impedance | <b>75</b> Ω         |
| RF return loss  | ≥10dB               |
| RF connector    | F-type              |
| Intermodulation | ≤-40dBc             |
| Noise figure    | 42dB                |

| Link gain             | 0-10dB                     |  |
|-----------------------|----------------------------|--|
| Physical              |                            |  |
| Dimension(H×W×D, mm)  | 44×433×346(mm)             |  |
| Power supply          | 130-260VAC, 50/60Hz        |  |
| Power consumption     | <10W                       |  |
| Operation temperature | 0-50℃                      |  |
| Relative humidity     | 0-95%, non-condensing      |  |
| Fiber optic link      |                            |  |
| Wavelength            | 1310nm/1550nm              |  |
| Number of fiber       | 1 or 2                     |  |
| Connector             | FC/APC                     |  |
| Distance              | 0-20km, or 0-60km optional |  |



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