

Doteck

Doteck DMB Series

HD-SDI Digital Video and Audio fiber optic Transmission System



Features

- (1) Pathological test passed with UK HD video test and measurement manufacturer PHABRIX
- (2) HD-SDI/SDI/ASI signal auto recognition, not need select by hand
- (3) Compliant with the standards of SMPTE292M, SMPTE259M, SMPTE297M, SMPTE310M, SMPTE305M
- (4) Compliant with the standard of DVB-ASI
- (5) Auto adaption to the speed of HD/SD-SDI 143M, 177M, 270M, 360M, 540M, 1483.5M, 1485Mbps, or DVB-ASI
- (6) Audio 20-bit encoder/decoder
- (7) When signal input, with automatic cable equalization function, and when signal output, with driver function
- (8) With re-clocking function at transmitter and receiver
- (9) Perfect LED indicators design, very convenient to monitor transmitter and receiver work well or not
- (10) PCB boards made with environment friendly Pb-free

(11) PCB boards made with multilayer design, to ensure stable and reliable signal transmission

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

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

(14) Dual switching power supply design, wide voltage range, reliable long-term running

Introduction

Dotek DMB series HD-SDI digital video and audio fiber optic transmission system can transmit one HD-SDI (1483.5M, 1485Mbps) high definition digital video or one SD-SDI (143M, 177M, 270M, 360M, 540Mbps) standard definition digital video over one single mode fiber or multimode fiber.

Due to the advanced digital fiber optic transmission technology, you need not make any adjustments, simple to set up and easy to operate.

Dotek DMB series transmitter provides one HD-SDI video and 2-channel audio input, and one loop-through for local monitoring. The receiver output 2-channel parallel HD-SDI digital video and 2-channel audio.

Dotek DMB series transmitter equipped with auto-cable equalization circuit, and cable driver circuit available at receiver.

Dotek DMB series, both at the transmitter and receiver, signal jitter elimination circuit available, to ensure high quality signal transmission over long distance fiber cable.

Technical Specifications

HD-SDI input	
Signal standard	SMPTE292M, SMPTE259M, SMPTE297M, SMPTE305M, SMPTE310M, DVB-ASI

Channel	1 plus 1 loop-through
Signal level	>380mVp-p
Auto-cable equalization	>200m@1485Mbps, (Belden 1694A cable) >350m@270Mbps, (Belden 1694A cable)
Input return loss	>10dB@1485Mbps
Impedance	75 Ω
Connector	BNC
HD-SDI output	
Channel	2
Signal level	800mVp-p \pm 10%
HD-SDI Rise/Fall time	<270ps@1485Mbps
SDI Rise/Fall time	<0.8ns
HD-SDI Jitter	<0.2UI(134ps)@100kHz <1.0UI(673ps)@10Hz
SDI Jitter	<0.2UI(740ps)@10Hz <0.2UI(740ps)@1KHz
Impedance	75 Ω
Connector	BNC
Analog audio input	
Channel	2
Signal resolution	20 Bit
Frequency response	20Hz-20KHz@-0.5dB
Operating mode	Balanced or unbalanced
Max input level	17.4Vp-p (+18dBm)
Analog audio output	
Channel	2
Signal resolution	20 Bit
Frequency response	20Hz-20KHz@-0.5dB
Operating mode	Balanced or unbalanced
Max output level	17.4Vp-p(+18dBm)
SNR(weighted)	>90dB

THD	<0.2%
Physical	
Dimension(H×W×D, mm)	44×433×346(mm)
Dual power supply	130-260VAC, 50/60Hz
Power consumption	<10W
Operation temperature	0-50℃
Relative humidity	0-95%, non-condensing
LED status indicator	Power, optical link, video activity
Fiber optic link	
Fiber type	Single mode
Number of fiber	1
Wavelength	1310nm/1550nm
Distance	0-40km, or 0-80km, or 0-100km optional
Connector	FC/PC, or SC/PC

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