Doteck

Doteck 3G8 Series

8-channel 3G-SDI Digital Video fiber optic Transmission System



Features

(1) Pathological test passed with UK HD video test and measurement manufacturer PHABRIX

(2) 3G-SDI/HD-SDI/SDI/ASI signal auto recognition, not need select by hand

(3) Compliant with the standards of SMPTE424M, SMPTE292M, SMPTE259M, SMPTE297M, SMPTE310M, SMPTE305M

(4) Compliant with the standard of DVB-ASI

(5) Auto adaption to the speed of 3G/HD/SD-SDI 143M, 177M, 270M, 360M,

540M, 1483.5M, 1485M, 2970Mbps, or DVB-ASI

(6) When signal input, with automatic cable equalization function, and when signal output, with driver function

(7) With re-clocking function at transmitter and receiver

(8) Perfect LED indicators design, very convenient to monitor transmitter and receiver work well or not

- (9) PCB boards made with environment friendly Pb-free
- (10) PCB boards made with multilayer design, to ensure stable and reliable

signal transmission

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

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

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

Introduction

Doteck 3G8 series digital video fiber optic transmission system can transmit eight 2970Mbps 3G-SDI high definition digital video, or eight 1485Mbps HD-SDI high definition digital video, or eight 270Mbps SDI standard definition digital video or eight DVB-ASI streams through one single mode fiber or multimode fiber with the standards of SMPTE424M, SMPTE292M, SMPTE259M, SMPTE297M, SMPTE305M, SMPTE310M.

Doteck 3G8 series transmitter provides 8-channel 3G/HD/SD-SDI input, and 8-channel loop-through for local monitoring. The receiver output 16-channel parallel 3G/HD/SD-SDI digital video.

Doteck 3G8 series transmitter and receiver all have re-clocker chips to regenerate the signal.

Doteck 3G8 series transmitter equipped with auto-cable equalization circuit, and cable driver circuit available at receiver.

Doteck 3G8 series, both at the transmitter and receiver, signal jitter elimination circuit available, to ensure high quality signal transmission over long distance fiber cable.

Doteck 3G8 series uses 5V power supply system, low power consumption.

Technical Specifications

3G-SDI input	
Signal standard	SMPTE424M, SMPTE292M, SMPTE259M,
	SMPTE297M, SMPTE305M, SMPTE310M,
	DVB-ASI
Channel	8 plus 8 loop-through
Signal level	>380mVp-p
Auto-cable	>100m@2970Mbps, (Belden 1694A cable)
equalization	>200m@1485Mbps, (Belden 1694A cable)
	>350m@270Mbps, (Belden 1694A cable)
Input return loss	>10dB@2970Mbps
Impedance	75 Ω
Connector	BNC
3G-SDI output	
Channel	16
Signal level	800mVp-p±10%
3G-SDI Rise/Fall time	<135ps@2970Mbps
HD-SDI Rise/Fall time	<270ps@1485Mbps
SDI Rise/Fall time	<0.6ns@270Mbps
3G-SDI Jitter	<0.3UI(101ps)@100KHz
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
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 or 8	
Wavelength	1310nm/1550nm	
Distance	0-40km, or 0-80km optional	
Connector	FC/PC, or SC/PC	

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