

## **Doteck 3G Series**

# **3G-SDI Thumb Type 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, need not select by hand
- (3) Compliant with the standards of SMPTE424, SMPTE292M, SMPTE259M, SMPTE297M, SMPTE310M, SMPTE305M(SDTI)
- (4) Compliant with the standard of DVB-ASI(EN50083-9)
- (5) Auto adaption to the speed of 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 automatic cable equalization function, compensation for cable

transmission loss

(8) Convenient instructions of LED status, data rate, optical link, power supply

etc

(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, light weight, small size and

easy to carry

Introduction

Doteck 3G series digital video fiber optic transmission system can transmit one

3G-SDI(2970Mbps) high definition digital video, or one HD-SDI(1485Mbps)

high definition digital video, or one SDI(270M) standard definition digital video

or one DVB-ASI stream through one single mode fiber or multimode fiber with

the standards of SMPTE424M, SMPTE259M, SMPTE297M, SMPTE310M,

SMPTE305M(SDTI).

Due to the advanced digital fiber optic transmission technology, almost you

need not make any adjustments, simple to set up, easy to operate.

Doteck 3G series transmitter equipped with auto-cable equalization circuit, and

cable driver circuit available at receiver.

Doteck 3G 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** 

**3G-SDI** input

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Signal standard	SMPTE424M, SMPTE292M, SMPTE259M,
	SMPTE297M, SMPTE305M, SMPTE310M,
	DVB-ASI
Channel	1
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	>15dB(2970Mbps)
Impedance	<b>75</b> Ω
Connector	BNC
3G-SDI output	
Channel	1
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	<b>75</b> Ω
Connector	BNC
Physical	
Dimension(H×W×D, mm)	18.8×16.6×51(mm)
Power supply	5V/2A
Power consumption	<5W
Operation temperature	0-50℃
Relative humidity	0-95%, non-condensing
LED status indicator	Power, video activity
Fiber optic link	
Fiber type	Single mode

Number of fiber	1
Wavelength	1310nm/1550nm
Distance	0-20km, or 0-40km optional
Connector	ST/PC

## Doteck

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