# Doteck

**Doteck A1 Series** 

1-channel Video and 2-channel Audio fiber optic

**Transmission System** 

Doteck
Doteck
A1 Series Video and Audio Fiber Optic Receiver

### Features

Con Street

(1) PAL(625/50) and NTSC(525/60) standard auto-recognition

(2) The technical specifications are better than broadcast quality

(3) Video 10bit A/D conversion, audio 20bit A/D conversion

(4) Video AGC(auto gain control) functionality, poor video signal input tolerance

(5) Audio output balance/unbalance can be transformed automatically, ESD(Electric Static Discharge) functionality, more safer , more stable

(6) Transmission distance up to 120km without relay

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

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

(9) PCB boards made with environment friendly Pb-free and RoHS compliant

(10) Convenient instructions of LED status, video/audio activity, optical link, power supply etc.

#### Introduction

Doteck A1 series is high performance digital fiber optic transmission system. The transmitter input 1-channel composite analog video and 2-channel analog audio. The receiver output 1-channel composite analog video and 2-channel analog audio.

The quality of video, audio non-compressed transmission with digital designs is much superior to the analog transmission based on amplitude frequency modulation designs.

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

Analog video	
Channel	1
Bandwidth	7MHz
Signal resolution	10Bit

#### Technical Specifications

Input level0.6-1.6Vp-pOutput level1Vp-pVideo standard525/625 linesColor delay<10nsDifferential gain<1.0%Differential phase<1 degreeSNR(weighted)>70dBImpedanceBNCAnalog audioConnectorBNCAnalog audio2Operating modeBalance, unbalanceSignal resolution20BitLevel17.4Vp-p(+18dBm)Frequency response20Hz-20KHz@-0.2dBTHD<0.2%SNR(weighted)>88dB@1KHzChannel insulation>90dB@1KHz, >90dB@20KHzImpedance600QConnectorXLRPhysicalDimension(H×W×D, mm)19-inch 1RU44×433×346(mm)Mini box44×216.5×230(mm)Dual power supply130-260VAC, 50/60HzPower consumption<10WOperation temperature0-50°CRelative humidity0-95%, non-condensingLED status indicatorPower, optical link, video/audio activityFiber optic linkFiber optic link1Wavelength1310nm/1550nm		
Video standard525/625 linesColor delay<10ns	Input level	0.6-1.6Vp-p
Color delay<10nsDifferential gain<1.0%	Output level	1Vр-р
Differential gain<1.0%Differential phase<1 degree	Video standard	525/625 lines
Differential phase<1 degreeDifferential phase<1 degree	Color delay	<10ns
SNR(weighted)>70dBImpedance75ΩConnectorBNCAnalog audioEChannel2Operating modeBalance, unbalanceSignal resolution20BitLevel17.4Vp-p(+18dBm)Frequency response20Hz-20KHz@-0.2dBTHD<0.2%	Differential gain	<1.0%
Impedance75ΩImpedance75ΩConnectorBNCAnalog audioEChannel2Operating modeBalance, unbalanceSignal resolution20BitLevel17.4Vp-p(+18dBm)Frequency response20Hz-20KHz@-0.2dBTHD<0.2%	Differential phase	<1 degree
ConnectorBNCAnalog audioChannel2Operating modeBalance, unbalanceSignal resolution20BitLevel17.4Vp-p(+18dBm)Frequency response20Hz-20KHz@-0.2dBTHD<0.2%	SNR(weighted)	>70dB
Analog audioChannel2Operating modeBalance, unbalanceSignal resolution20BitLevel17.4Vp-p(+18dBm)Frequency response20Hz-20KHz@-0.2dBTHD<0.2%	Impedance	75Ω
Channel2Operating modeBalance, unbalanceSignal resolution20BitLevel17.4Vp-p(+18dBm)Frequency response20Hz-20KHz@-0.2dBTHD<0.2%	Connector	BNC
Operating modeBalance, unbalanceSignal resolution20BitLevel17.4Vp-p(+18dBm)Frequency response20Hz-20KHz@-0.2dBTHD<0.2%	Analog audio	
Signal resolution20BitLevel17.4Vp-p(+18dBm)Frequency response20Hz-20KHz@-0.2dBTHD<0.2%	Channel	2
Level17.4Vp-p(+18dBm)Frequency response20Hz-20KHz@-0.2dBTHD<0.2%	Operating mode	Balance, unbalance
Frequency response20Hz-20KHz@-0.2dBTHD<0.2%	Signal resolution	20Bit
THD<0.2%SNR(weighted)>88dB@1KHzChannel insulation>90dB@1KHz, >90dB@20KHzImpedance600ΩConnectorXLRPhysicalDimension(H×W×D, mm)44×433×346(mm)19-inch 1RU44×433×346(mm)Mini box44×216.5×230(mm)Dual power supply130-260VAC, 50/60HzPower consumption<10W	Level	17.4Vp-p(+18dBm)
SNR(weighted)>88dB@1KHzChannel insulation>90dB@1KHz, >90dB@20KHzImpedance600ΩConnectorXLRPhysicalDimension(H×W×D, mm)44×433×346(mm)19-inch 1RU44×216.5×230(mm)Dual power supply130-260VAC, 50/60HzPower consumption<10W	Frequency response	20Hz-20KHz@-0.2dB
Channel insulation>90dB@1KHz, >90dB@20KHzImpedance600ΩConnectorXLRPhysicalDimension(H×W×D, mm)19-inch 1RU44×433×346(mm)Mini box44×216.5×230(mm)Dual power supply130-260VAC, 50/60HzPower consumption<10W	THD	<0.2%
Impedance600ΩConnectorXLRPhysicalDimension(H×W×D, mm)19-inch 1RU44×433×346(mm)Mini box44×216.5×230(mm)Dual power supply130-260VAC, 50/60HzPower consumption<10W	SNR(weighted)	>88dB@1KHz
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Dimension(H×W×D, mm)19-inch 1RU44×433×346(mm)Mini box44×216.5×230(mm)Dual power supply130-260VAC, 50/60HzPower consumption<10W	Connector	XLR
19-inch 1RU44×433×346(mm)Mini box44×216.5×230(mm)Dual power supply130-260VAC, 50/60HzPower consumption<10W	Physical	
Mini box44×216.5×230(mm)Dual power supply130-260VAC, 50/60HzPower consumption<10W	Dimension(H $\times$ W $\times$ D, mm)	
Dual power supply130-260VAC, 50/60HzPower consumption<10W	19-inch 1RU	44×433×346(mm)
Power consumption <10W	Mini box	44×216.5×230(mm)
Operation temperature0-50°CRelative humidity0-95%, non-condensingLED status indicatorPower, optical link, video/audio activityFiber optic linkFiber typeSingle mode1	Dual power supply	130-260VAC, 50/60Hz
Relative humidity0-95%, non-condensingLED status indicatorPower, optical link, video/audio activityFiber optic linkSingle modeNumber of fiber1	Power consumption	<10W
Relative humidity0-95%, non-condensingLED status indicatorPower, optical link, video/audio activityFiber optic linkSingle modeNumber of fiber1	•	<b>0-50</b> ℃
Fiber optic link   Fiber type Single mode   Number of fiber 1	• •	0-95%, non-condensing
Fiber typeSingle modeNumber of fiber1	LED status indicator	Power, optical link, video/audio activity
Number of fiber 1	Fiber optic link	
	Fiber type	Single mode
Wavelength 1310nm/1550nm	Number of fiber	1
	Wavelength	1310nm/1550nm

Distance	0-40km, or 0-80km, or 0-120km optional
Connector	FC/PC, or SC/PC

## Doteck

### **Doteck Digital Technologies**

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