SIQURA

TETRA 4300

4-channel digital video, audio, data, CC and Fast Ethernet

DESCRIPTION

The TETRA is a compact and versatile combination of 4x video, audio, data, contact closures, and Ethernet over one fiber. The Tetra 4300 can be effectively deployed in almost any CCTV application

FEATURES

Four-channel digital video

Uncompressed 10-bit digital video

Two CD-quality full-duplex audio channels

Four full-duplex data channels

Two full-duplex contact closure channels

10/100 Base-TX Fast Ethernet (IEEE 802.3)

No signal degradation over long distances

Adjustment-free operation

Description

Four-channel digital video multiplexers and demultiplexers with two-way audio, data, CC and FE.

Offering a compact and versatile combination of video, audio, data, contact closures and Ethernet, the Tetra 4300 can be deployed in almost any CCTV application. The multiplexer simultaneously transmits four camera signals, two audio signals, four data signals, two CC signals and one 10/100Base-TX Fast Ethernet interface over one single-mode or multimode optical fiber. Uncompressed 10-bit digitizing, oversampling and digital filtering ensure a very high video channel transmission performance. With its wide operating temperature range the Tetra 4300 series can be used for a variety of purposes, including traffic monitoring, city surveillance and airport security.

Video

Number of channels	4
Video format	NTSC, PAL
Input/output level	1 Vpp (3 dB)
DC restore (clamping)	On or off (selectable)
Bandwidth (-3 dB)	6 Mhz
Sampling resolution	10-bit
Video sampling rate	27 MSamples/s, 2x oversampled
Differential gain	<2%
Differential phase	<1°
Group delay	40 ns
Signal-to-noise ratio	63 dBw
Connector type	75 BNC (gold-plated center pin)

Audio

Number of channels	2 (full duplex)
Bandwidth	20 Hz to 20 kHz
Sampling rate	16-bit
Input/output level	0 dBV (+6 dBV maximum)
Total harmonic distortion	75 dBA
Input impedance	47 k or 600 balanced
Output impedance	47 balanced
Connector type	RJ-45

Data

Number of channels	4 (full duplex)
Data interfaces	2x RS-232, 2x RS-422/485 (2- or 4-wire)
Interface support	Current loop, TTY, TTL, Manchester, Bi-phase
Data format	Asynchronous, serial
Data rate	
D1 (RS-422/RS-485)	DC to 256 kbit/s
D3 (RS-422/RS-485)	DC to 128 kbit/s
D2/D4 (RS-232)	DC to 115.2 kbit/s
Sampling rate	
D1	3 MSample/s
D2/D3/D4	1.5 MSample/s
Connector type	RJ-45

Contact closures

Number of channels	2 (full duplex)
Input	+5 V pull-up 10 k
Input activation	0.75 V (250,000 hours
Safety and EMC	IEC/EN 60950-1, IEC/EN 60825, IEC/EN 61000, EN 50130-4, EN 50081-1, EN 55022, FCC part 15

Fast Ethernet

Specs

Fast Ethernet

Number of channels	1 (full duplex)
Data interface	0/100 Base-TX Fast Ethernet
Connector type	RJ-45

Management

LED status indicators	
- DC	Power-on indicator (green)
- NV	No video on input or output (red)
- Sync	Full-duplex link (green), local (red) or remote (yellow) synchronization error
- D1/D3	RS-4xx data activity on input (red/green = 1/0)
- D2/D4	RS-232 data activity on input (green/off = 1/0)

Environmental

Operating temperature	-40 °C to +74 °C (-40 °F to +165 °F)
Storage temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Relative humidity	250,000 hours
Safety and EMC	IEC/EN 60950-1, IEC/EN 60825, IEC/EN 61000, EN 50130-4, EN 50081-1, EN 55022, FCC part 15

Powering

Power consumption	<12 W (2 A inrush)
Rack-mount units	MC 10 and MC 11 power supply cabinets
Stand-alone units (/SA)	11 to 15 Vdc (PSA-UN12-FC or PSR-12DC)

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Mechanical

Dimensions (h x w x d)	128 x 71 x 190 mm (5.0 x 2.8 x 7.5 in)
Weight	900 g (30.4 oz)
Housing	Rack-mount or stand-alone

Optical

Device type	TETRA 4310 TX/RX	TETRA 4350 TX/RX
Fiber type	1x MM (62.5 µm)	1x SM (9 µm)
Output wavelength	1310 nm / 1550 nm	1310 nm / 1550 nm
System link budget	16 dB at 1310 nm	19 dB at 1310 nm
Link length	2 km*	20 km**
Minimum link loss	0 dB	0 dB
Output power	-4 dBm/ -8 dBm	-4 dBm/ -8 dBm
Input sensitivity	-20 dBm / -20 dBm	-23 dBm / -23 dBm

Specs

Optical	
Connector type	SC
*Range may be limited by fiber bandwidth **Range limited by return path @ 1550 nm	

Ordering information	
Tetra 4310 TX	4-ch dig video mux, Ethernet, audio, data & CC, MM, RM
Tetra 4310 RX	4-ch dig video demux, Ethernet, audio, data & CC, MM, RM

Tetra 4350 TX:4-ch dig video mux, Ethernet, audio, data & CC, SM, RM	
Tetra 4350 RX	4-ch dig video demux, Ethernet, audio, data & CC, SM, RM
Tetra 43XX /SA	Stand-alone version of rack-mount models