

UP-THE-FIBER 4210 MM

Miniature digital video transmitter, data, CC

DESCRIPTION

Siqura's Up-the-Fiber™ (UTF) digital line of equipment provides high-quality, 9-bit digitized video transmission with bidirectional data at the highest quality/price ratio. The module also offers an isolated alarm contact closure channel to transport, e.g., anti-tamper or door contact, from the camera to the central site. UTF 4210 MM systems work with one multi-mode optical fiber.

FEATURES

9-bit video with 63 dBw SNR

PTZ data channel

EasyC-s for unique time-saving PTZ connection and configuration

Compact transmitter (45x45x25 mm)

Dual receivers for high-density receiver nodes

Alarm contact (CC)



Description

Up-the-Fiber™ 4210 series receivers can handle one or two video, data, and CC channels. The UTF module supports EasyC–s. With EasyC–s, a group of receivers uses only one external data connection, simplifying system implementation and maintenance. The data port only needs to be configured on the receiver; the transmitter automatically follows.

The bidirectional RS-485/422 data interface supports PTZ data from all types of camera interfaces including RS-485, TTY, Manchester, Bi-phase, and SensorNet. UTF receivers are also available as stand-alone units (/SA).

Their wide operating temperature range makes the compact, stand-alone transmitters suitable for use in outdoor camera housings and camera connection boxes. All miniature standalone models can be powered by the camera power supply (12 Vdc or 24 Vac). A PSR-12DC is recommended in case of extreme environmental conditions.

Video	
Number of channels	1
Video format	NTSC, PAL, SECAM
Input/output level	1 V _{pp} (+/-3 dB)
Bandwidth (-3 dB)	6 MHz
Sampling resolution	9-bit effective
Group delay	less than 20 ns
Differential phase	Max 1.0°
Differential gain	Max 2.0%
Signal-to-noise ratio	63 dBw
Connector type	75 BNC (gold-plated center pin)

Data	
Number of channels	1 (full duplex)
Data interfaces	RS-422/485 (2- or 4-wire)
Interface support	Current loop, TTL, TTY, Manchester, Bi-phase
Data format	Asynchronous, serial
Data rate	DC to 230 kb/s
Connector type	6-pin terminal
EasyC-s	Backplane data bus wiring and single-point configuring (RX)

Contact closures	
Number of channels	1
Input (TX)	+3.3 V pull-up, 2.2 k
Threshold	1.4 V
Output (RX)	Fail-safe, isolated; 100 mA / 50 V

LED status indicators	
TX models	
- Power	on (green), local synchronization error (red), remote synchronization error (yellow)
RX models	
- NV	no video on output (red)
- Sync	operational link (green), local synchronization error (red), remote synchronization error (yellow)

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	95% with no condensation
MTBF (mean time between failures)	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	
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Specs

Powering

Power consumption	3 W
Rack-mount units	MC 10 and MC 11 power supply cabinets
Stand-alone units (/SA)	12 Vdc
Miniature stand-alone transmitters	11 to 40 Vdc or 20 to 30 Vac

Mechanical

UTF 4210 TX-MSA	
- Dimensions (h x w x d)	45 x 45 x 25 mm (1.8 x 1.8 x 1.0 in)
- Weight	250 g (8.8 oz)
UTF 4210 RX-2	
- Dimensions (h x w x d)	128 x 35 x 190 mm (5 x 1.4 x 7.5 in)
- Weight	450 g (15.9 oz)

Optical (TX / RX)

Fiber type	1x MM(62.5 μm)
Output wavelength	1310 nm / 1550 nm
System link budget	19 dB / 19 dB
Link length	6 km (limited by fiber bandwidth)
Minimum link loss	0 dB
Output power	-15 dBm / -15 dBm
Input sensitivity	-34 dBm / -34 dBm
Connector type	SC

Ordering information

UTF 4210 TX-MSA	Miniature digital video transmitter with CC and 2-way data
UTF 4210 RX-2	Dual digital video receiver with CC and 2-way data
UTF 4210 RX-2 /SA	Dual digital video receiver with CC and 2-way data. Stand-alone version.

