

## Features

- Four-channel digital video multiplexer
- Uncompressed 10-bit digital video
- No signal degradation over long distances
- Adjustment-free operation
- Compact stand-alone and rack-mount versions



## Tetra 4000 Four-channel digital video

### Description

Offering four video channels and extremely long distance transmission, the Tetra 4000 provides a compact and versatile multiplexing solution which can be effectively deployed in almost any CCTV application.

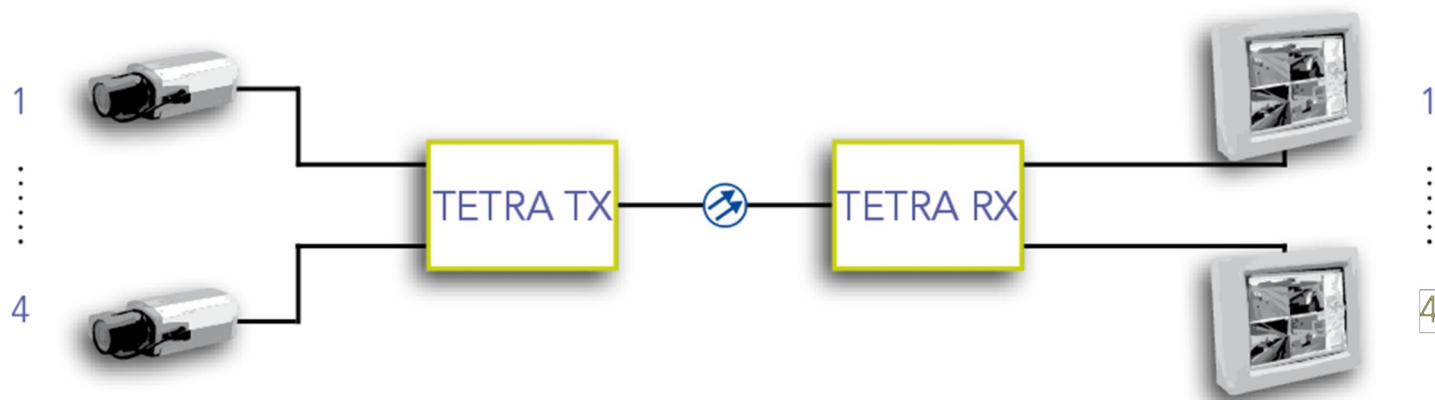
The multiplexer simultaneously transmits four camera signals over one single-mode or multimode optical fiber. Uncompressed 10-bit digitising, oversampling, and digital filtering ensure a very high video channel transmission performance, exceeding the requirements of the EIA RS-250C medium-haul specifications.

The wide operating temperature range of these units makes the Tetra 4000 series well-suited for environmentally harsh applications such as traffic monitoring, video surveillance in city centers, and airport security.

The Tetra 4000 comes as a single Eurocard cassette, suitable for an MC 10 or MC 11 power supply cabinet or as a stand-alone unit (/SA). LED indicators provide an instant overview of the system status, including power and system faults.

# Technical Specifications

## Tetra 4000



### Video

Number of channels	4
Video format	NTSC, PAL
Input/output level	1 Vpp ( $\pm 3$ dB)
Bandwidth (-3 dB)	6 MHz
Sampling resolution	10-bit
Video sampling rate	56 MHz
Differential gain	<2%
Differential phase	<1°
Group delay	<20 ns
Signal-to-noise ratio	>63 dB
Connector type	75 $\Omega$ BNC (gold-plated center pin)

### Management

LED status indicators	
DC	Power-on indicator (green)
NV	No video on input or output (red)
Sync	Operational link (green), local synchronisation error (red)

### 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)	>200,000 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	<2.6 W
Rack-mount units	MC 10 and MC 11 power supply cabinets
Stand-alone units (/SA)	12 to 15 Vdc (PSA-UN12DC or PSR-12DC)

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### Mechanical

Dimensions (h x w x d)	128 x 35 x 190 mm (5.0 x 1.4 x 7.5 in)
Weight	490 g (16.6 oz)
Housing	Rack-mount or stand-alone

### Optical

	<b>Tetra 4010</b> TX/RX	<b>Tetra 4050</b> TX/RX
Fiber type	1x MM (62.5 μm)	1x SM (9 μm)
Output wavelength	1310 nm	1310 nm
System link budget	20 dB	27.5 dB
Link length	4 km*	62 km
Minimum link loss	0 dBm	0 dBm
Output power	>-4 dBm	>-4 dBm
Input sensitivity	-24 dBm	-31.5 dBm
Connector type	ST (others optional)	SC (others optional)

\*Due to fiber bandwidth, the maximum transmission distance may be limited

### Ordering information

Models	Description	Fiber type
Tetra 4010 TX	4-channel digital video multiplexer	1x MM
Tetra 4010 RX	4-channel digital video demultiplexer	1x MM
Tetra 4050 TX	4-channel digital video multiplexer	1x SM
Tetra 4050 RX	4-channel digital video demultiplexer	1x SM
Tetra 40XX/SA	Stand-alone version of rack-mount models	



The quality management system used in the development, production, sales, and support of this product is ISO 9001:2008 certified by LRQA.

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