

Features

- 4-channel digital video multiplexer with two-way PTZ data
- High-quality, uncompressed digital video (SNR >63 dBw)
- No latency, no compression artifacts
- No signal degradation over long distances
- Adjustment-free operation
- Compact rack-mount or stand-alone
- SNM™ compatible

Description

Providing a compact and cost-effective combination of signal quality and ease of use, the TETRA 4000 will simultaneously transmit four camera signals over one single-mode or multimode optical fiber.

Uncompressed 9-bit digitizing, over-sampling and digital filtering ensure a very high transmission performance of the video channels, exceeding the requirements of the EIA RS-250-C short-haul specifications, without the artefacts of compressed images.

Preliminary product data

TETRA 4000



9-bit

The wide operating temperature range of these units make the TETRA 4000 system extremely well suited for environmentally harsh applications such as traffic monitoring, incident management, video surveillance in city centers, airport security etc.

The TETRA 4000 comes as a Eurocard cassette, suitable for an MC 10 or MC 11 power-supply cabinet, or as a stand-alone unit (/SA version). LED indicators give an instant overview of the system's status.

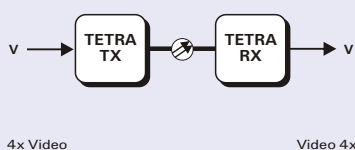
Smart Network Management (SNM™) provides status information of all transmission parameters.

Ordering information

Model	Description	Fiber	Wavelengths	Budget	Housing	Managed
TETRA 4010 TX TETRA 4010 RX	4-channel digital video multiplexer 4-channel digital video demultiplexer	MM	1310 nm	18 dB ¹	rack-mount	SNM
TETRA 4050 TX TETRA 4050 RX	4-channel digital video multiplexer 4-channel digital video demultiplexer	SM	1310 nm	20 dB	rack-mount	SNM
TETRA xxxx /SA	Stand alone version of the TETRA models					

¹): Due to fiber bandwidth the maximum transmission distance may be limited to 3.5 km. For 50/125 μ fiber subtract 4 dB.

Applications



TETRA 4000

Technical Specifications

Video

Number of channels	4
Video format	PAL/NTSC
In-/output level	1 V _{pp} (±3 dB)
DC restore (clamping)	On or off (selectable)
Bandwidth (-3 dB)	6 MHz
Sampling resolution	9-bit
Sampling rate	27 Msamples/s, 2x over-sampled
Differential gain	< 2%
Differential phase	< 1°
Group delay	< 33 ns
SNR	> 63 dB (weighted)
Connector type	BNC 75 Ω (gold-plated centerpin)

Powering

Power consumption	< 6 W (1 A inrush)
Rack-mount units	MC 10 and MC 11 power-supply cabinets
Stand-alone units (/SA)	11 to 16 Vdc (PSA 12 DC/25 or PSR 12 DC)

Management

LED status indicators	
DC	Power-on indicator (green)
NV	No video on in- or output (red)
SYNC	Full duplex link (green), local (red) or remote synchronization error (yellow)
Network Management	SNM™ compatible
SNM™ variables	PS Voltages, module temperature, module status, optical levels, configuration, etc

Environmental

Operating temperature	-40 to +74°C
Relative humidity	<95% (no condensation)
MTBF	>250,000 h
Safety & EMC	IEC/EN 60950-1, IEC/EN 60825, IEC/EN 61000, EN 50130-4, EN 50081-1, EN 55022, FCC part 15

Mechanical

Dimensions (hxwxh)	128 x 35 x 190 mm
Weight (approximately)	490 g
Housing	Rack-mount or stand-alone

Optical	TETRA 4010 TX-RX	TETRA 4050 TX-RX	
Fiber type	1x MM	1x SM	
System budget	> 21 dB	> 23 dB	
Min. link loss	0 dB	0 dB	
Output wavelength	1300	1310	
Output power	-4 dBm	-4 dBm	
Input sensitivity	-22 dBm	-24 dBm	
Connector type	SC	SC	

