

Features

- 8-channel digital video multiplexer with 2-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 OCTA 4000 will simultaneously transmit eight 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.

The wide operating temperature range of these units make the OCTA 4000 system extremely well suited for

Preliminary product data

OCTA 4000

9-bit



environmentally harsh applications such as traffic monitoring, incident management, video surveillance in city centers, airport security etc.

The OCTA 4000 comes as a twin 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 |
|------------------------------|--|-------|-------------|--------------------|------------|---------|
| OCTA 4010 TX OCTA 4010 RX | 8-channel digital video multiplexer 8-channel digital video demultiplexer | MM | 1310 nm | 18 dB ¹ | rack-mount | SNM |
| OCTA 4050 TX OCTA 4050 RX | 8-channel digital video multiplexer 8-channel digital video demultiplexer | SM | 1310 nm | 20 dB | rack-mount | SNM |
| OCTA xxxx /SA | Stand-alone version of the OCTA 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



OCTA 4000

Technical Specifications

Video

| | |
|-----------------------|---|
| Number of channels | 8 |
| Video format | PAL/NTSC |
| In-/output level | 1 Vpp (± 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 (hxwx d) | 128 x 71 x 190 mm |
| Weight (approximately) | 900 g |
| Housing | Rack-mount or stand-alone |

| Optical | OCTA 4010 TX-RX | OCTA 4050 TX-RX | |
|-------------------|--------------------|--------------------|--|
| Fiber type | 1x MM | 1x SM | |
| System budget | > 17 dB | > 19 dB | |
| Min. link loss | 0 dB | 0 dB | |
| Output wavelength | 1310 | 1310 | |
| Output power | -4 dBm | -4 dBm | |
| Input sensitivity | -27 dBm | -24 dBm | |
| Connector type | SC | SC | |

