



## Series 4



The COE Series 4 is a digital 4 channel video multiplexer, with optional duplex auxiliary channel, for use with optical fibre networks

There is a need in the Security and Transportation surveillance markets for a product which enables the most efficient use of fibre infrastructure. Such products should be high quality, cost effective and designed to cope with harsh environmental conditions. The COE Series 4 product range is designed to exceed those needs by combining video and data signals on a single optical fibre in a high performance and robust package.

### System Features and Benefits

- Plug and Play design philosophy** - Simple installation with no electrical or optical adjustment required by the user
- Four, 10-bit encoded, real time, uncompressed video channels** - High quality video specification, with consistent and predictable performance
- Full optical budget up to 20dB** - System is rarely loss limited, and no user adjustment being required over the life of the product
- High speed telemetry channel** - Supports latest CCTV and alarm comms systems
- User selectable data formats** - Field selection allows for fast configuration of telemetry format
- COE AL-BUS\*** - Telemetry link equipped with special anti-lock data bus system to prevent data lock up, suitable for a wide variety of OEM product
- Separate alarm relay output** - Allows remote monitoring of link status
- Comprehensive status indication via LEDs** - Allows simple verification of system operation
- Laser based transmission** - for system stability and high optical budget
- Fully specified for PAL, NTSC and S-Video** - Works on all common video standards
- Ruggedised product** - environmental specification is suitable for industrial and transportation field environments
- Available in rack mount card or standalone boxed units** - Flexible housing options to suit a variety of installation requirements

\* AL-BUS is a proprietary data bus system developed by COE

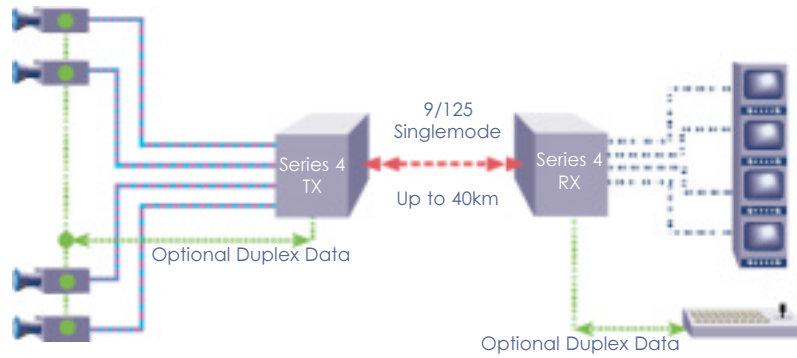
### System Overview

The Series 4 is available in Eurocard or boxed format with all connections provided via two part connectors for ease of installation and maintenance. No user adjustments are required as automatic management of the 10bit digital circuitry is featured throughout, providing stability over time, temperature and path loss. A 19" rack unit is available to power up to 10 modules via a UAC input power supply. With the latest in optical components transmission distances of 40km on Singlemode, or up to 4km on multimode\*\* fibre may be realised.

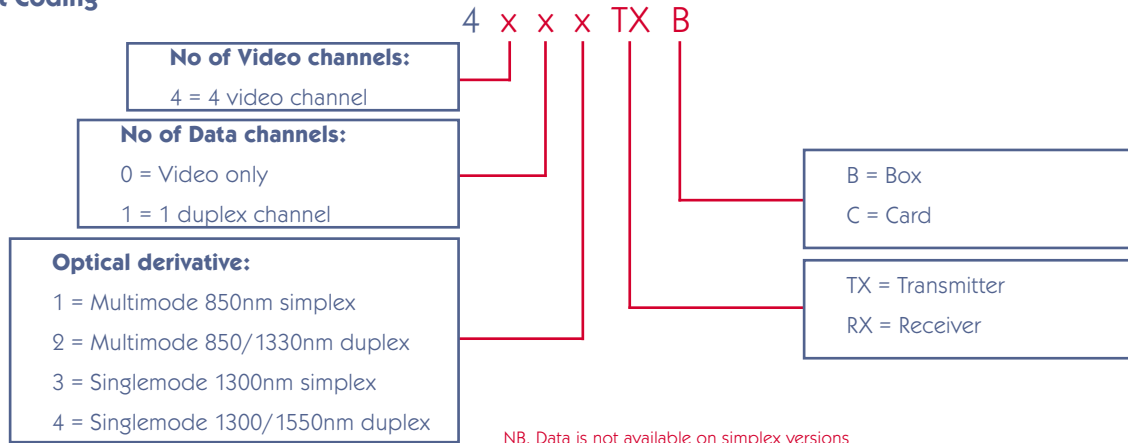
\*\* Distance maybe limited by fibre bandwidth



## System Example



## Product Coding



**410RKUAC** = 'Commercial' Grade 3U, 19" Chassis for up to 10 single cards, complete with UAC input PSU - (0 to +50°C)

**410TRKUAC** = 'Industrial' Grade 3U, 19" Chassis for up to 10 single cards, complete with UAC input PSU - (-30 to +70°C for 'T' version)

## Performance and Specifications (Subject to change)

### Video (typical)

No of channels	4 simplex composite or 2 simplex S-video
Channel bandwidth	6.5MHz
Resolution	10 bit
Video input level	1V pk-pk with +3dB overload point
Impedance	75 Ohms BNC (Hi-Z switchable)
Signal/Noise ratio	65dB
Diff phase	0.5 deg
Diff gain	0.5%
K rating	<1%

### Environmental

Operating temperature	-40°C to +74°C
Storage temperature	-40°C to +75°C
Chassis operating temp	0 to +50°C (-30 to +70°C for 'T' version)
Relative humidity	0 - 95% (non-condensing)

### Power requirements

All Series 4 variants	11-13VDC@<500mA
Fully loaded rack	90VA

### Mechanical

Eurocard	6HP x 3U x 160mm (Single card)
Boxed variants	165 x 141 x 50mm
Rack	3U x 19" x 285mm
Weight (Boxed Module)	550g (boxed module)

### Optical Performance

Singlemode path loss	0 - 20dB
Connector type (singlemode)	FC/PC
Multimode path loss	0-12dB
Connector Type	*STII <sup>®</sup>

### Aux channel (data) - for duplex transmission

Number of channels	1
Data Rate	Up to 128kbs async
Data Formats supported	RS232, RS422, RS485 2W & 4W (Switchable)

\* ST is a registered Trademark of AT&T



In line with the company policy of continuous improvement, COE reserves the right to vary descriptions and specifications without notice.

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