

## ADS 1200

### Features

- Full-duplex RS-422/485, RS-232 and audio over one or two fibers
- Adjustment-free operation and installation
- Cost-effective
- SNM™ compatible
- Compact, modular design

### Description

The ADS 1200 series offers a range of fiber optic transceivers with four data channels, two audio channels and two contact closures, all full-duplex, providing a solution for almost every application.

The two audio channels offer broadcast quality, while the two contact closure channels have potential-free outputs. Each data channel is fully independent and offers transmission speeds from DC to 64 kb/s. Available data interfaces are RS-232, RS-422, 4- or 2-wire RS-485, TTY, Manchester and biphase, providing for connection to a wide range of cameras and control interfaces.



The rack-mounted ADS transceivers are available in one- or two-fiber versions for both single-mode and multimode applications. The flexibility thus provided allows configurations ranging from simple point-to-point links to dedicated drop-and-insert rings.

Rack-mountable ADS transceivers are designed to be slotted into MC 11 power-supply cabinets. ADS 1200 equipment is SNM™ compatible.

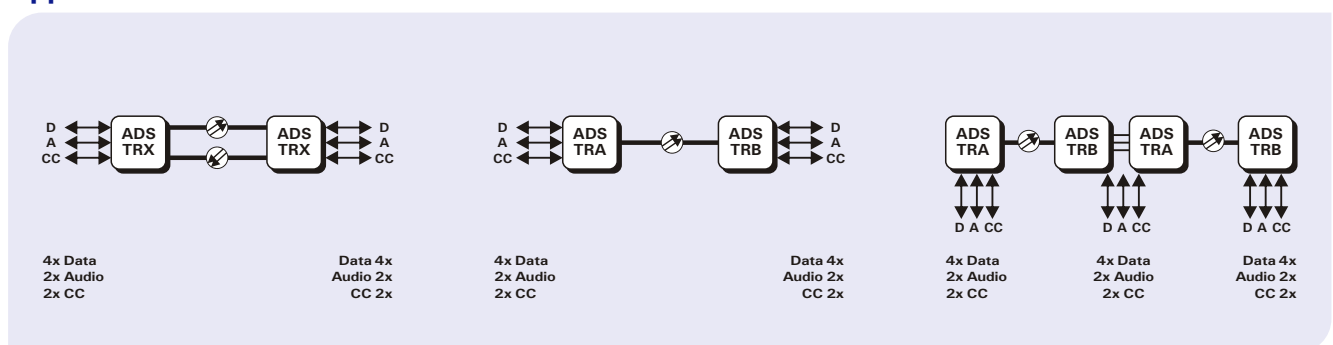
Stand-alone units (/SA version) are to be powered with a PSA 12 DC.

### Ordering information

Model	Description	Fiber type	Wavelength(s)	Budget	Housing	Managed
ADS 1200 TRX	Dual fibre audio-data multiplexer	2xMM	850 nm	19 dB <sup>1</sup>	rack-mount	SNM
ADS 1210 TRA ADS 1210 TRB	Single fibre audio-data multiplexer A-side Single fibre audio-data multiplexer B-side	1xMM	850/1300 nm	19 dB <sup>1</sup>	rack-mount	SNM
ADS 1240 TRX	Dual fibre audio-data multiplexer	2xSM	1310 nm	25 dB	rack-mount	SNM
ADS 1250 TRA ADS 1250 TRB	Single fibre audio-data multiplexer A-side Single fibre audio-data multiplexer B-side	1xSM	1310/1550 nm	25 dB	rack-mount	SNM
ADS 12xx /SA	Stand-alone versions				stand-alone	SNM

<sup>1</sup>): For 50/125  $\mu$  fiber subtract 4 dB.

### Applications



## Technical Specifications

### Data

Number of channels	4 (full-duplex)
Data interfaces	2x RS-232 2x RS-422/485 (2- or 4-wire)
Interface support	Current loop, TTY, TTL, Manchester and biphase
Data format	Asynchronous, serial
Data rate per channel	DC to 64 kbit/s
Sample rate per channel	512 ksamples/s
Connector type	RJ45

### Contact Closure

Number of channels	2 (full-duplex)
Input	+5 V pull-up, 10 k $\Omega$
Activation threshold	0.75 V
Output (potential-free)	Normally open, fail-safe
Switch rating	2 A at 30 Vdc
Connector type	RJ45

### Audio

Number of channels	2 (full-duplex)
Bandwidth	40 Hz to 15 kHz
Sampling rate	16 bit
In-/output level	0 dBV (+6 dBV max.)
Tot. harmonic distortion	< 1% at nominal level
SNR	> 62 dBA
Input impedance	> 50 k $\Omega$ or 600 $\Omega$ balanced
Output impedance	< 50 $\Omega$ balanced
Connector type	RJ45

### Powering

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

### Management

LED status indicators	
DC	Power-on indicator (green)
SYNC	Full duplex link (green), local (red) or remote module error (yellow)
D1, D3	RS-4xx data activity on input (red/green = 1/0)
D2, D4	RS-232 data activity on input (green/off = 1/0)
Network Management	SNM™ compatible
SNM™ variables	PS Voltages, module temperature, alarm status, configuration, etc.

### Environmental

Operating temperature	-40 to +74°C
Relative humidity	< 95% (no condensation)
MTBF	> 100,000 h
Safety & EMC	IEC/EN 60950, IEC/EN 60825, IEC/EN 61000 EN 50130-4, EN 50081-1, IEC/EN 55022, FCC-15

### Mechanical

Dimensions (h $\times$ w $\times$ d)	128 x 35 x 190 mm
Weight (approximately)	450 g
Housing	Rack-mount or stand-alone

Optical	ADS 1200	ADS 1210		ADS 1240	ADS 1250	
	TRX	TRA	TRB	TRX	TRA	TRB
Fiber type	2x MM	1x MM		2x SM	1x SM	
System budget	19dB <sup>1</sup>	19 dB <sup>1</sup> @ 850 nm		25 dB	25 dB @ 1310 nm	
Min. link loss	0 dB	0 dB		0 dB	0 dB	
Output power	> -16 dBm <sup>1</sup>	> -16 dBm <sup>1</sup>	> -24 dBm <sup>1</sup>	> -7 dBm	> -7 dBm	> -7 dBm
Output wavelength	850 nm	850 nm	1300 nm	1310 nm	1310 nm	1550 nm
Input sensitivity	< -35 dBm	< -35 dBm	< -35 dBm	< -32 dBm	< -32 dBm	< -32 dBm
Connector type	ST	ST		FC	FC	

<sup>1</sup>): For 50/125  $\mu$  fiber subtract 4 dB.

