

Features

- Audio, data, and contact closures over one or two fibers
- Two full-duplex, broadcast-quality audio channels
- Four full-duplex data channels
- Two full-duplex contact closure channels
- Adjustment-free installation and operation
- Compact, modular design



ADS 1200

Audio, data, and contact closure transceiver

Description

The ADS 1200 series offers a range of fiber optic transceivers with four data channels, two audio channels, and two contact closure channels, 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, 2- or 4-wire RS-485, TTY, Manchester, and Bi-phase, providing for connection to a wide range of control interfaces and PTZ data from all types of camera interfaces.

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

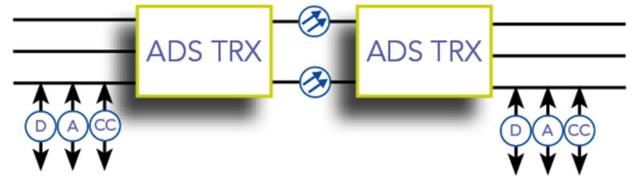
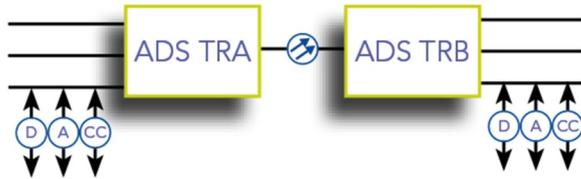
Rack-mount ADS 1200 units are designed to be slotted into MC 10 or MC 11 power supply cabinets. Stand-alone ADS 1200 units are to be powered with a PSA-UN12DC.

The wide operating temperature range of these units makes the ADS 1200 series well-suited for environmentally harsh applications such as traffic monitoring, video surveillance in city centers, and airport security.



Technical Specifications

ADS 1200



Audio

Number of channels	2 full duplex
Bandwidth	40 Hz to 15 kHz
Sampling rate	16-bit
Input/output level	0 dBV (+6 dBV maximum)
Total harmonic distortion	<1% at nominal level
Signal-to-noise ratio	>62 dBA
Input impedance	>50 k Ω or 600 Ω balanced
Output impedance	<50 Ω balanced
Connector type	RJ-45

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 Bi-phase
Data format	Asynchronous, serial
Date rate per channel	DC to 64 kbit/s
Sample rate per channel	512 ksamples/s
Connector type	RJ-45

Contact Closures

Number of channels	2 full duplex
Input	5 V 10 k Ω pull-up input
Input activation	<0.75 V (<1.5 k Ω to ground)
Output	Fail-safe, potential-free
Switch rating	1 A at 30 Vdc
Connector type	RJ-45

Management

LED status indicators	
DC	Power-on indicator (green)
Sync	Full-duplex link (green), local (red) or remote (yellow) synchronisation error
D1, D3	RS-4xx data activity on input (red/green = 1/0)
D2, D4	RS-232 data activity on input (green/off = 1/0)

Technical Specifications

ADS 1200

Power

Power consumption	<4 W
Rack-mount units	MC 10 and MC 11 power supply cabinets
Stand-alone units (/SA)	11 to 15 Vdc (PSA-UN12DC or PSR-12DC)

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)	>100,000 hours
Safety and EMC	IEC/EN 60950, IEC/EN 60825, IEC/EN 61000, EN 50130-4, EN 50081-1, EN 55022, FCC part 15, UL

Mechanical

Dimensions (h x w x d)	128 x 35 x 190 mm (5 x 1.4 x 7.5 in)
Housing	Rack-mount or stand-alone
Weight	450 g (15.9 oz)

Optical

	ADS 1200 TRX	ADS 1210 TRA/TRB	ADS 1240 TRX	ADS 1250 TRA/TRB
Fiber type	2x MM (62.5 µm)	1x MM (62.5 µm)	2x SM (9 µm)	SM (9 µm)
Output wavelength	850 nm	850 nm / 1310 nm	1310 nm	1310 nm / 1550 nm
System link budget	20 dB*	20 dB* at 850 nm	25 dB	25 dB at 1310 nm
Link length	6 km	6 km	55 km	55 km
Minimum link loss	0 dB	0 dB	0 dB	0 dB
Output power	>-15 dBm*	>-15 dBm* / -15 dBm*	>-7 dBm	>-7 dBm / >-7 dBm
Input sensitivity	-35 dBm	-35 dBm / -35 dBm	-32 dBm	-32 dBm / -32 dBm
Connector type	ST	ST	FC	FC

*For 50/125 µm fiber, subtract 4 dB.

Ordering Information

Models	Description	Fiber Type
ADS 1200 TRX	Dual fiber audio/data multiplexer	2x MM
ADS 1210 TRA	One fiber audio/data multiplexer, A-side	1x MM
ADS 1210 TRB	One fiber audio/data multiplexer, B-side	1x MM
ADS 1240 TRX	Dual fiber audio/data multiplexer	2x SM
ADS 1250 TRA	One fiber audio/data multiplexer, A-side	1x SM
ADS 1250 TRB	One fiber audio/data multiplexer, B-side	1x SM
ADS 12xx /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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