

Features

- Full-duplex RS-422/485, RS-232, and audio over one or two fibers
- Adjustment-free operation and installation
- 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, 2 or 4-wire RS-485, TTY, Manchester, and Biphasic, 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 this provides 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 10 or MC 11 power supply cabinets.

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

The bidirectional RS-485/422 data interface supports PTZ data from all types of camera interfaces including RS-485, TTY, Manchester, Bi-phase, and SensorNet. In addition, the module offers an isolated alarm contact closure output such as door contacts, anti-tamper contacts, etc.

Their wide operating temperature range makes these compact, stand-alone transmitters suitable for use in outdoor camera housings and camera connection boxes, for example. UTF receivers are also available as stand-alone units.

Ordering Information

Model	Description	Fiber Type
ADS 1200 TRX	Dual fiber audio/data multiplexer	2xMM
ADS 1210 TRA	One fiber audio/data multiplexer, A-side	1xMM
ADS 1210 TRB	One fiber audio/data multiplexer, B-side	1xMM
ADS 1240 TRX	Dual fiber audio/data multiplexer	2xSM
ADS 1250 TRA	One fiber audio/data multiplexer, A-side	1xSM
ADS 1250 TRB	One fiber audio/data multiplexer, B-side	1xSM
ADS 12xx /SA	Stand-alone version of the rack-mount models	

# ADS 1200

## Technical specifications

# Audio and data transceiver



<b>Data</b>		<b>Contact Closure</b>	
Number of channels	4 (full-duplex)	Number of channels	2 (full-duplex)
Data interfaces	2x RS-232, 2x RS-422/485 (2 or 4-wire)	Input activation	0.5 mA
Interface support	Current loop, TTY, TTL, Manchester, and BI-phase	Output	Fail-safe, potential-free
Data format	Asynchronous, serial	Switch rating	2A at 30 VDC
Data rate per channel	DC to 64 kbit/s	Connector type	RJ-45
Sample rate per channel	512 ksamples/s		
Connector type	RJ-45		
<b>Audio</b>		<b>Environmental</b>	
Number of channels	2 (full-duplex)	Operating temperature	-40° C to +74° C (-40° F to +165.2° F)
Bandwidth	40 Hz to 15 kHz	Storage temperature	-55° C to +85° C (-67° F to +185° F)
Sampling rate	16 bit	Relative humidity	<95% as long as there is no condensation
In-/output level	0 dBV (+6 dBV maximum)	MTBF	>100,000h
Total harmonic distortion	<1% at nominal level	Safety and EMC	IEC/EN 60950, IEC/EN 60825, IEC/EN 61000, EN 50130-4, EN 50081-1, IEC/EN 55022, FCC part 15
SNR	>62 dBA		
Input impedance	>50 kΩ or 600Ω balanced		
Output impedance	<50Ω balanced		
Connector type	RJ-45		
<b>Management</b>		<b>Physical Specifications</b>	
LED status indicators		Dimensions (h x w x d)	128 x 35 x 190 mm (5 x 1.38 x 7.48 in.)
DC	Power-on indicator (green)	Weight (approx.)	450g (15.87 oz.)
NV	No video on input or output (red)	Housing	Rack-mount or stand-alone
SYNC	Full-duplex link (green), local (red) or remote synchronization 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, module status, optical levels, configuration, etc.		
<b>Power Requirements</b>			
Power consumption	<12W (2A inrush)		
Rack-mount units	MC 10 and MC 11 cabinets		
Stand-alone units (/SA)	11 to 16 VDC (PSA-12 DC/25 or PSR-12 DC)		

Optical	ADS 1200 TRX	ADS 1210 TRA / TRB	ADS 1240 TRX	ADS 1250 TRA / TRB
Fiber type	2x MM (62.5)	1x MM (62.5)	2x SM (09/125)	SM (62.5/125)
Output wavelength	850 nm	1850 nm / 1300 nm	1310 nm / 1550 nm	1310 nm / 1550 nm
System link budget	19 dB <sup>1</sup>	19 dB <sup>1</sup> @ 850 nm	-7 dBm / -7 dBm	-30 dBm / 30 dBm
Link length	6 km	6 km	50 km	50 km
Minimum 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
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 μm fiber, subtract 4 dB



The quality management system utilized in the development, production, sales and support of this product is ISO 9001:2008 certified by LRQA.

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