



AL4200S

Analog Data/Fax/Voice Socket Modem with a solid discrete telephone line interface, including a hook relay, for Embedded and M2M applications. Exchangeable with ISDN, LAN and GSM Socket Modems.

Benefits:

- Solid modem quality. V.56bis testing standard used, which defines a series of line impairment combinations based on worldwide telephone line surveys. The TAS equipment was used for testing, with live-line torture tests validating the modem quality. Test results are readily available

Functions:

- Standard AT-Command Set according ITU-T V.250.
- Data: V.92, V.34, V.32, V.22bis, V.22, V.23, V.21, Bell 212A and Bell 103.
- Fax: V.17, V.29, V.27ter and V.21. G3 Fax supported.
- UART interface with speeds up to 230.4 kbps.
- Automatic Format and Speed sensing.
- Flow control and speed buffering.
- V.42, MNP error correction and V.44, V.42bis and MNP5 data compression.
- Fax class 1 (T.31), class 2 and 2.0 (T.32) protocols and commands supported.
- Telephony / TAM functions with voice commands according V.253.
- Voice coding with 8-bit linear/A-law/u-law, 16-bit, AD-PCM and G.729 with 7200, 8000 and 11025 sampling rates.

- Full duplex Speakerphone (FDSP) supports full-duplex analog voice interface.
- Leased-line operation on 2-wire copper with approved long distance performance.
- Hook Relay with a standard 4-wire Line / Phone telephone network interface.
- Worldwide operation (complies to TBR21 and other country requirements.)

Specifications:

- Compact Size: 64.5 X 26.5 X 6 mm.
- Typical Power use: 750 mW @ 5V
- Single 5.0 VDC supply. (3.3V optional)
- Serial ITU-T V.24 (EIA/TIA-232-E) with 5V tolerant TTL interface.
- Approved for Europe (CE). R&TTE directive. Meets spec. TS103021-1/2.
- Safety according EN60950.
- EMC according EN55022, EN55024.
- Lightning protection according K.21 and FCC Part 68 (on board).
- Conforms to the RoHS directive.
- 2 Year warranty.

Ordering No:



AL4200S
AL4200S-3V

Pin Diagram				Pin No	Name	Pin No	Name
1	TIP	SPKR	64	1	TIP	64	SPEAKER
2	RING	AGND	63	2	RING	63	ANALOG GND
3	TIP2	MIC	62	3	TIP2	62	MICRO IN
4	RING2	VCC	61	4	RING2	61	VCC
		NC	60	5 - 23	NO PIN	60	NC
		SPK-N	59			59	SPKR -
		SPK-P	58			58	SPKR +
		MIC-N	57			57	MICRO -
		MIC-P	56	24	RESET	56	MICRO +
24	RESET	DGND	41	25	GPIO	42...55	NO PIN
25	GPIO	DTR	40	26	DGND	41	DGND
26	DGND	DCD	39	27	NC	40	DTR
27	NC	CTS	38	28	NC	39	DCD
28	NC	DSR	37	29	NC	38	CTS
29	NC	RI	36	30	NC	37	DSR
30	NC	TXD	35	31	NC	36	RI
31	NC	RXD	34	32	NC	35	TXD
32	NC	RTS	33	33	RTS	34	RXD

Operating Conditions	Symbol	Limits	Units
Supply Voltage 5V Version	VDD	+ 4.75 to + 5.25	VDC
Supply Voltage 3V Version	VDD	+ 3.15 to + 3.45	VDC
Operating Ambient Temperature	T _A	0 to + 70	°C
Extended ambient temperature (optional)	T _A	-25 to + 70	°C

Power Requirements	Typical Current (mA)	Max. Current (mA)
Normal Mode: On-hook, idle, waiting for ring	125	130
Off-hook, normal data connection	140	145
FDSP Mode: Off-hook, 8Ω Speaker at SPKR +/-	190	195

Product Documentation	Doc Nr.
Designers Guide	AL4200S-E00-105
AT Command Manual	AL4200S-A00-100
Additional Documentation	www.xmodus.ch

Contact Information	
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