Industrial multimode modem

AJ 2885P-SDM SCADA

Features

- Modem designed for harsh environments
- Modulation according to ITU-T V8, V34 (2400 to 33,600 BPS), V32Bis, V32, V22Bis, V22, V27, V29, V33 (4W), V23, V21 and Bell 202 T
- Dial-up PSTN and 2 / 4 wires Leased Line (LL)
- LL with automatic back_up over PSTN, according to a set-up of authorized/prohibited periods
- Management of the quality of transmission
- Data compression and Error correction NMP4-5, V42, V42Bis
- Full and half duplex mode V13, V23, BELL 202T (alternate and full duplex 1200/1200)
- User interface: V28 / RS232 and V11/X21, V35
- Line rate: 300 to 33,600 bps
- Terminal rate: 300 to 115,200 bps , Autobaud with AT command
- AT, V25Bis async, HDLC, BSC dial-in command
- Automatic dial backup, and leased line retrieve
- DTMF detection
- LCD : 2 lines with 3 buttons
- Configuration memories : 5 factory and 5 users
- Central site : AMS-16 chassis and management card CFIP: centralized management with alarm, SNMP
- Relay for alarm and remote action,
- Access security : login pass word, call-back, answer-back
- Phone and login list of 100 numbers.
- Metallic enclosure
- Power supply: AC 100 - 240V, DC 48, 24 or 12 V

THE UNIVERSAL PROFESSIONAL MODEM

The AJ 2885 P is the major professional analog modem from CXR Anderson Jacobson, leader in the modem design since the 70's. This range of modems guarantees the communication performance, security and reliability, and offers all features required for mission critical applications throughout the industry.

The AJ2885P modem ensures the reliable data transport at rates up-to 33,600 bps, the transmission of fax up-to 14,400 bps and provides a rate of 115,200 bps to the data terminal.

AJ2885P-SDM

Reliable data transmissions

This version is designed to meet the stringent requirements of severe environments (disturbed lines, high voltage environments, strong climatic conditions). CXR Anderson Jacobson has concentrated all its modem development experience in this new industrial equipment, 2885P SDM. This modem delivers reliable data transmissions over the switched public network PSTN or over 2 or 4 wires leased lines.

High speed and multimode

The 2885P runs a maximum terminal speed of up-to 115.2 kbps. It supports all modem transmission standards from V21 (300 bps) up to V34 (33,6 Kbps) in asynchronous and synchronous modes.

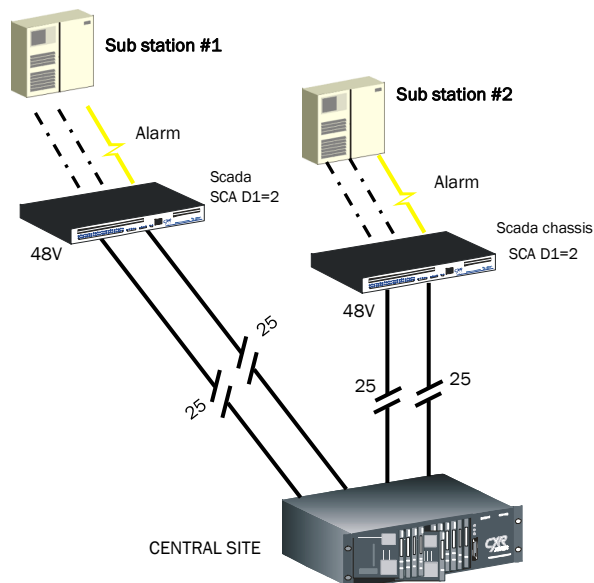### LCD display and keypad model

The 2885P-SDM modem can be entirely controlled via an RS232 terminal, or from the front panel. A three button keypad and an intuitive menu interface make it possible to configure all modem parameters. When connected, this LCD displays the main connection diagnostic information. This front panel interface is especially well suited for synchronous applications. The remote modem can also be controlled through this LCD and keypad interface.

Access Security

Password: access to the modem commands for configuration and maintenance, is protected by two levels of passwords. **Call back:** based on a password exchange, the 2885P modem answers a call, and calls back the remote part according to a list of 100 numbers and passwords. This mode applies on both asynchronous and synchronous modes of operation. **Answer back:** both modems exchange and check a password to enable the communication.

Automatic dial back-up and leased line look back

The 2885P modem can monitor the leased line quality and connect over the dial-up network when the leased line quality gets too bad. IT can get back over the leased line when a convenient line quality is restored. The backup connection over the dial-up network is controlled from a time schedule over week days and weekend.

Adapted to the industrial applications

The 2885P-SDM modem comes in a metallic enclosure that suit industrial application for best mechanical end electromagnetic characteristics. IT comes with line protections for an optimized reliability and immunity to hazardous line conditions. The 2885P modem can come with a choice of power supply options, wide band AC and DC supply input - 12, 24 or 48 Vdc.

The alarm relay of the 2885P-SDM activates as an alarm when the leased line connection is lost. It can also be controlled remotely via AT commands to provide some tele-action through dry relay contacts.

Rack mount card with SNMP management

The 2885P-FPR card fits in a 19'' chassis for central site applications. The AMS-16 chassis delivers 16 modem slots, power supply redundancy and an SNMP management card.

SCADA MODEL

The SCADA chassis has two independent slots for one or two 288P-SDM modems in a 19'' shelf. It gives a full redundancy of modems, power supplies and the transmission.

Multimode industriel modem

Smart Solutions for Smart Networks

www.cxr.com

PRODUCT SPECIFICATIONS

- Modes of transmission: V34 (n x 2400 from 2400 to 33600 bps), V32Bis (14400, 12000, 9600, 7200 Trellis coding), V32 (9600, 4800), V22Bis (2400), V22 (1200), V23 (1200/75 and 75/1200 asynchronous, and 1200/1200 asynch/ synch over 4wires LL on Bxx and Txx models), Bell 202T (1200/1200 over 4 wires LL) on Bxx and Txx models), V21 (300), V29 & V33 (14400, 9600, 4800 over 4 wires LL on Txx model).

- PSTN access: 2 wires, RJ11

- Leased Line access: 2 or 4 wires, RJ11

- Impedance: 600 Ohms, symmetrical

- Mode or operation : full duplex or half duplex (V23 or V13 in V22, V22Bis, V32, V32Bis, V34)

- Synchronous mode: Internal clock, external or slaved (reception)

- Asynchronous data : 8, 9, 10 or 11 bits

- Error correction and data compression in asynchronous: MNP4, MNP5, V42, V42Bis

- Transmission level: 0 to –24 dBm per step of 2 dBm

- Receiver range : -10 to –43 dBm

- Flow control: RTS-CTS or Xon-Xoff (character DTE/DCE and transparent modes)

- User interface : RS232 / V24-V28, or X21/V35 per jumpers. Signals : TD, RD, RTS, CTS, DSR, DTR, CD, TCK, RCK, XCK, RI, TI, LAL, RDL, Backup indicator,

- Tests : according to V54, B2 remote loop, B3 local loop, distant loop V42, local and distant test loop. Test activated via AT command or V24 signals (LAL / RDL).

- Command mode: AT or V25Bis asynchronous or synchronous BSC / HDLC

- Dialer: AT, V25Bis (asynchronous, synchronous), DTR / 108-1, front panel button

- Front panel : LEDs DTR, DSR, CD, TD, RD, Line, 3 buttons keypad, 2 lines of 16 characters LCD

- Operating temperature 10+55°C, Stocking -10 – 70°C

- Hygrometry : 90%, non condensing

- Size: 295x170x40 mm (D x W x H)

- Power consumption : 2 W (FTV) to 6 W (TDI)

2885P   ORDERING INFORMATION

AJ 2885P-FTV : dial-up only desktop modem, multimode V21 to V34 (33.6 kbps), asynchronous and synchronous, user interface RS232 / V24-V28, fax mode at 14.4 kbps. External 100/230Vac to 5V power supply adapter.

All other models include :
Same features, plus : RS232 / V24-V28 and X21/ V35 terminal interface, 2 and 4 wires Leased Line with automatic back-up. No fax mode.

AJ 2885P-FPx : fax at 14.4Kbps. Desktop. Power supply according to the X option bellow.

AJ 2885P-BPx : Bell 202 T, V23 full duplex 1200/1200 bps over 4 wire LL in synchronous and asynchronous modes. Desktop. Power supply according to the X option bellow.

AJ 2885P-TPx : Bell 202T, V23 full duplex 1200/1200 bps, V29 (4.8 - 9.6 kbps) and V33 (14.4 kbps) over 4 wires LL in asynchronous and synchronous. Desktop. Power supply according to the X option bellow.

Option 'x' :
V : Plastic case with external power suply 110/230 Vac
C : Plastic case with internal DC 48v power
R: Rack card for AMS4 and AMS16 (no LCD)

2885P-SDy: includes LCD and keypad, alarm relay. Metallic case and power according to 'y' choice.
AJ 2885P-TDy : Bell 202T, V23 full duplex 1200/1200 bps, V29 (4.8-9.6 kbps) and V33 (14.4 kbps) over 4 wires LL in asynchronous and synchronous. LCD and keypad, alarm relay. Metallic case and power according to 'y' choice.

Option 'y' :
M : Internal AC 100-240Vac 50-60Hz
N : Internal DC 48 Vdc

Options :
OPT TROP : special protection for high hygrometry environment
OPT 12V,24V or 36V : DC power supply
CA 100766 : X21/V11 cable DB25 to DB15

Features and specifications are subject to change without notice .