

V.32 Data Modem

Specifications

Data Rates:	CCITT V.32 compatible 9600 or 4800 bps; CCITT V.22bis compatible 2400 or 1200 bps; Bell 103J compatible 300 bps (4-wire supports 9600 and 4800 bps only).
Operation:	Full duplex over 2-wire dial-up or 2- or 4-wire leased lines
Modulation:	QAM (9600, 4800 and 2400 bps); Trellis (9600 bps); PSK (CCITT V.22 1200 bps); FSK (Bell 300 bps)
Carrier Frequency:	1800 Hz, CCITT V.32; 1200 Hz Originate, 2400 Hz Answer, CCITT V.22bis
Transmitter	
Output Levels:	Programmable 0 to -15 dBm in 1 dB increments for leased line. An external programming resistor option may be selected for dial-up.
Carrier Detect Level:	Dynamic
Line Equalization:	Automatic Adaptive
Timing:	Internal, external or receive
Internal Transmit	
Clock Frequency:	Selected bit rate $\pm 0.01\%$
Testing:	V.54 Remote Loopback control, 511 PN Pattern (per V.52)
Environmental:	0 to 50° C, 95% relative humidity, non-condensing
Mechanical:	Width: 7.0 in., Height: 2.5 in., Depth: 9.6 in.
Power Requirements:	115 VAC $\pm 10\%$, 47-63 Hz, 10 Watts, maximum
Certification:	Appropriate FCC and DOC certifications in place or pending. UL and CSA certifications in place or pending where applicable.

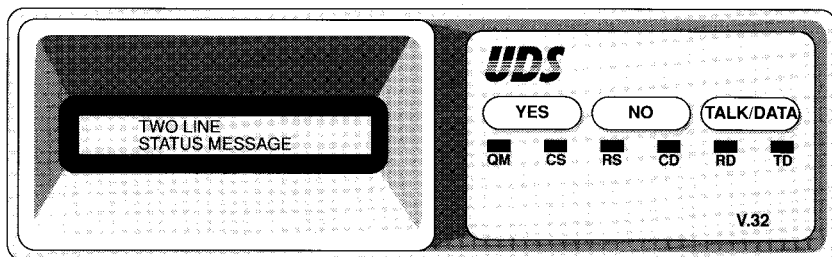
Easy-to-use controls and indicators For easy set-up and use, the UDS V.32 can be completely programmed using three front panel keys and a liquid crystal display. Pressing the keys as prompted by the menu programs all modem parameters including strap options. The display is also used for system status, keeping the user informed on call status and modem operations.

Controls:

☐ **Yes:** Push "Yes" to answer affirmatively to questions on the LCD.

☐ **No:** Push "No" to answer negatively to questions on the LCD.

☐ **Talk/Data:** Push "Talk/Data" to end the programming sequence and to determine whether the telephone line is to be connected to the telset or to the modem.



Indicators

☐ **QM (Quality Monitor):** On when the signal quality of the modem has diminished. QM is only indicated when the probable bit error rate (BER) is greater than 1×10^{-4} .

☐ **CS (Clear to Send):** On when the DCE (Data Communications Equipment — the modem) is ready to accept data from the terminal (DTE).

☐ **RS (Request to Send):** On when the DTE (Data Terminal Equipment — PC or terminal) provides a request to send signal.

☐ **CD (Carrier Detect):** On when the received audio signal is detected.

☐ **RD (Receive Data):** On when the modem is receiving data. The RD indicator is on for a space (off for a mark) at the receive data output activity.

☐ **TD (Transmit Data):** On when the modem is transmitting data. TD is on for a space (off for a mark) at the transmit data input, to indicate transmit input data activity.