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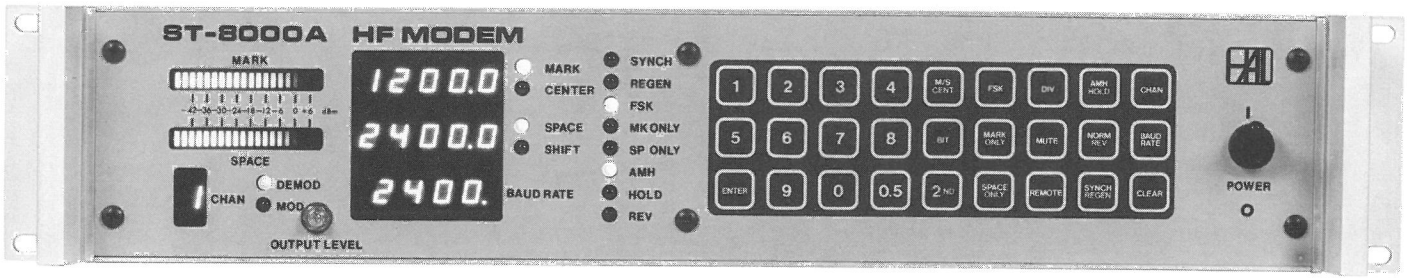
ST-8000A/DBIN



HAL ST-8000A/DBIN modem is an enhanced version of the standard HAL ST-8000A FSK modem. The "DBIN" version includes additional detection and waveform generation circuitry and software to communicate with devices using "duobinary FSK emissions" as implemented in the Lenkurt model 26C data set and other devices and systems that employ this unique 1200/2400 baud waveform. The ST-8000A/DBIN modem includes internal buffering of the transmit and receive clock signals to assure that synchronous conditions are maintained. The ST-8000A/DBIN modem is often used as a 2400 baud interface between devices using the duobinary waveform and the STU-III series of phone equipment.

The ST-8000A/DBIN will interoperate at 1200 or 2400 baud full-duplex with another ST-8000A/DBIN, a Lenkurt Model 26C data set, or other devices and systems that use the duobinary waveform. However, standard versions of the ST-8000A FSK modem do not include the duobinary features and are not interoperable with the ST-8000A/DBIN.

The ST-8000A/DBIN is housed in a rack-mountable aluminum cabinet. The cabinet is 3.5 inches high by 19 inches wide by 18 inches deep. The modem may be operated from power line sources of 115 VAC ±10% at frequencies from 47 to 440 Hz. The modem requires a total of 30 Watts of AC power.

The ST-8000A/DBIN meets U.S.A. (UL-1950) and European (EN 60 950) safety testing requirements and FCC (U.S.), VDE (Germany), and BSI (United Kingdom) requirements for RFI suppression. The design Mean-Time-Between-Failure (MTBF) of ST-8000A/DBIN is greater than 20,000 hours. The ST-8000A/DBIN may be operated over the temperature range of 0 to 50 degree C, up to 95% humidity (non-condensing), and up to 10,000 ft. elevation.

SPECIFICATIONS

Waveform:	Duobinary FSK	
Data Rate:	1200/2400 Baud	
Data Format:	Full Duplex	
Demodulator	Input Impedance:	600 or 10,000 ohms
	Input Level:	-45 to +6 dBm
	Demodulator Mark:	1200 Hz
	Demodulator Space:	2400 Hz
Modulator	Output Impedance:	600 ohms
	Output Level:	-10 to 0 dBm
	Modulator Mark:	1200 Hz
	Modulator Space:	2400 Hz
Clock Buffer	TX and RX Clock:	64 bits

All other data specifications are the same as for the standard ST-8000A FSK Modem.