

SPECIFICATIONS

RFL ®9850 TX

Transmit Carrier Frequency: 300 to 3200 Hz, adjustable in 1-Hz steps.

Transmit Bandwidth: Can be set to 50, 60, 85, 120, 240, 300, or 600 Hz.

Transmit Output Level: Adjustable from -40 dBm to 0 dBm in 0.25-dB steps.

Distortion: Less than 7 percent when operating within the stated carrier frequency range, bandwidth, and baud rate limits.

Frequency Characteristics: See Table 1.

**Table 1. Frequency characteristics,
RFL 9850 TX Programmable FSK Tone Transmitter**

Baud Rate	Freq. Shift	Bandwidth	Remarks
50	±25	50	Slow-speed control spacing
50/60/75	±30	60	CCITT R.35 and control spacing
85/110	±42.5	85	43A1/Western Electric Telegraph
100/120	±60	120	240-Hz spacing (CCITT R.37)
200/300	±120	240	480-Hz spacing (CCITT R.38A)
300	±150	300	600-Hz spacing
600	±300	600	1200-Hz spacing

Keying Modes:

Two-Frequency (2F): Available at all bandwidths, at speeds up to 600 baud.

Three-Frequency (3F): Available at all bandwidths up to 120 Hz, at speeds up to 120 baud.

Input Keying: RS-232C, MIL-STD-188, TTL, CMOS, dry contact, or isolated keying loop.

Output Impedance: Strap-selectable, 600Ω nominal or 60,000Ω minimum, isolated and balanced.

Clear-To-Send Delay: Programmable from 5 ms to 255 ms in 1-ms increments.

Carrier Level: Adjustable from -40 dBm to 0 dBm in 0.25-dB increments. Variation is less than 1.0 dB over full temperature range and power supply variation.

Spectral Purity:

Harmonic Content: 50 dB below carrier, at a carrier level of -10 dBm.

Spurious Signals At Adjacent Channels: 40 dB below carrier.

Transmit MARK Polarity: Can be set to either high or low frequency. (See PROGRAMMING section of this Instruction Data Sheet for more information.)

Visual Indicators: LED indicators on front panel for MARK IN, SPACE IN, and RS-232 signals RTS and CTS.

Environmental Requirements:

Operating Temperature: -30°C to +70°C (-22°F to +51.8°F).

Relative Humidity: 95% maximum, non-condensing @ 40°C.

Input Power Requirements:

+5-Volt Supply: 225 mA typical; add 100 mA when using RFL 9800 DSP Programmer.

+5I- Volt Supply: 40 mA typical.

-1.5-Volt Supply: 25 mA typical.

Dimensions: 25.4 mm wide x 128 mm high x 248 mm deep; occupies six horizontal units (6E) in a Single-Euro (3U) chassis.