

Model JT-DO1



GPS-Disciplined IRIG-B DCLS Timecode Generator

The JT-DO1 GPS-disciplined IRIG-B timecode generator produces timecode in IRIG-B007, DC level-shift format with BCD ToY, BCD Year, and Straight Binary Seconds data. Time and Date information is provided by an onboard GPS receiver with integral antenna, and the IRIG-B output signal is synchronized to the GPS 1 pulse per second output. The JT-DO1 generates IRIG timecode only when the PPS signal is present.

A buffered PPS output is provided along with the IRIG-B output and both outputs can drive a 50 Ω load. Time, date, and status information are reported over a serial port operating at 115,200 N-8-1. Three status LEDs are provided to indicate Power, Lock to PPS, and the third flashes in sync with the PPS pulse. A reset button is accessible through a small opening in the front panel, suitable for a paperclip or similar probe. Power and Serial connections are made through pluggable screw terminals on the back panel.

POWER	Min	Typ	Max
Supply Voltage	4.5		18 VDC
Current Consumption	Hi-Z or no load on outputs		60 mA
	Both outputs into 50 Ω		160 mA

ENVIRONMENTAL

Operating temperature	-20	+75	$^{\circ}\text{C}$
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COMMUNICATION

Serial format	115,200 N-8-1
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TIMING ACCURACY	Clear Sky	≤ 20 ns
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	Indoors	≤ 500 ns
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