

8010 GPS Based Time Code Generator / Master Clock

The 8010 is a GPS (Global Positioning System) Master Clock and Time Code Generator. The unit displays nine digits (Day of Year, Hour, Minute & Second) of UTC (Coordinated Universal Time) as received via the internal 8 channel GPS receiver. Simultaneously, the 8010 generates several types of time code (SMPTE/EBU, IRIG-B & RS232C/ASCII) and an extremely accurate 1PPS signal (+/-45ns). These outputs allow the 8010 to easily interface with new or existing computer, automation and clock systems.

Features:

- IRIG-B or IRIG-E, ASCII (RS-232C) Outputs
- Dual 1 PPS Output (20% and 50% Duty Cycles)
- Rugged Rack Mount Enclosure
- Six .56" Amber LED Displays
- GPS "Lock" Indicator
- < 500 Micro-Second Accuracy
- Time Zone Offset
- Automatic Daylight Savings Time Correction
- Digital, Video & Analog Slave Clocks Available
- Legally Traceable to UTC (Universal Coordinated Time)
- Loss of GPS Signal Output
- Switchable Between 12 & 24 Hr
- Indoor/Outdoor Antenna with 18' Cable
- 220-240 VAC (110-120 VAC is standard); UL and DC options



The 8010 is a low-cost yet very accurate GPS Master Clock/Time Code Generator. The unit receives time and date information from Global Positioning System satellites and supplies this data to the user in the form of different types of time code ... IRIG-B or IRIG-E, ASCII (RS-232C). Six amber LED displays (.55") provide a digital display of the Hours, Minutes and Seconds data. Two (2) One Pulse Per Second outputs and a GPS "Lock" output are also standard features. An eight-channel receiver is employed that is capable of tracking up to eight (8) satellites simultaneously, although reception of only one is required for time data to be output. Several options are available that allow the unit to meet most any demand required of a Master Clock or Time Code Generator.

Specifications

Electrical: 117 VAC, 50/60 Hz
Power: 15 Watts Typical
Enclosure: Rack Mount
Mechanical: 1.75" x 19"; 10" Deep
Displays: Nine Digits, Yellow LED, .56" High
Accuracy: 1 PPS @ <500µS
Drift: 33mS/day (if no GPS signal)
Outputs: Output drives 100 Slaves @ 4000'
 1 PPS: TTL, 20% Duty Cycle
 1 PPS: TTL, 50% Duty Cycle
 IRIG-B (or 'E'): 3 Vpp(mark amplitude)600.
 RS-232C: ASCII Date & Time @ 9600 Baud, 8 Data, No Parity, 1 Stop

GPS Receiver: Internal 8-Channel
Antenna: Indoor/Outdoor with 19' Cable

Quartzlock Quartzlock is a registered trademark
 Specification subject to change without notice
 This issue replaces all previous issues
 This specification does not form any part of a contract

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