

MODEL 6115G GPS SYNCHRONIZED IRIG B TIME CODE GENERATOR

FEATURES

- Twelve channel GPS receiver with active antenna.
- IRIG B time code generator.
- Front Panel Time Display.
- Five IRIG B serial outputs.
- Can be synchronized to GPS, IRIG B or external 1PPS clock reference.
- Parallel Status/Control Port and RS-232 Data Port.
- Powered by 28 Volts DC.



DESCRIPTION

The Model 6115G is a twelve channel GPS synchronized IRIG B time code generator designed to provide a precise IRIG B serial time code output as well as a 1PPS time pulse. The unit automatically acquires all in-view satellites upon power up and locks an internal IRIG B time code generator to the GPS time reference. If the GPS lock is lost the 6115G will automatically switch to an internal clock and continue generating the output IRIG B signal. No discernible change in the IRIG B output will occur due to this transition.

The 6115G may also be used as a stand-alone unit to generate an IRIG B signal. The time-of-year may be set by the user via front panel switches. An LCD readout displays the days, hours, minutes and seconds. In the event of a power failure the 6115G will no longer output a serial time code however the time will continue to advance by automatically switching to a battery backed-up internal clock. The IRIG output will resume, without resetting, upon reapplication of power.

The unit is housed in a 8.5" wide x 8.5" deep x 2.5" high aluminum enclosure and is powered by 9 to 36 VDC, 1.5 Watts

Model 6115G GPS Synchronized IRIG Time Code Generator

SPECIFICATIONS

Frequency Stability

When powered (not locked) 1 part in 10^6 . (0 to +55°C)
2.5 parts in 10^6 (-30 to +70°C)

On Battery backup 1 part in 10^4 . (0 to +55°C)

Clock backup life (un-powered) 1 year minimum.

GPS Performance

Channels: 12 Parallel channels, tracks all satellites in view.
Time-to-first-fix <15 seconds typical (warm start), <90 seconds typical (cold start).

UTC Time Mark Synchronized with Global Reference Standard.
Reacquisition: 2 seconds typical.

IRIG B Output Standard IRIG B serial time code IAW IRIG Standard 200-98.
Accuracy when locked to GPS: 100nsec.

External Clock Input TTL, positive 1PPS signal

RS-232 Port EIA RS-232C, 8 pit, no parity, 1 stop bit. Baud Rate selectable from 300 to 38400. Provides unit status and time output.

Power 9 to 36 VDC, 1.5 Watts.

Temperature (Operating)
Operating 0°C to +55°C
Nonoperating -20 to +70

Humidity 95% non-condensing

Package
Size 8.5" wide x 8.5" deep x 2.5" high.
Weight 2.5 lbs.