What makes the GPSD-2 10MHz Reference Different ?



GPS Disciplined Frequency Reference GPSD-2 module

Low Cost Low Consumption Stable Oven Controlled Crystal Oscillator (OCX0) with Neo6 GPS Receiver and Arduino Nano. Stable firmware from popular GPSD-1 (SOLD OUT).

- Low cost High Stability
- Fast Warm-up OCXO < 10ppb after 5min
- GPS disciplined to better than 5ppb
- Last GPS calibration applied at start-up < 10ppb after OCXO warm-up
- Outputs > +0 dBm Other levels and Fifth output available as option
- Sine Square as option
- Wide range power supply 12 to 28 Vdc or USB 2.0 3.0 (5V 1A max)
- Low power startup <500mA @12V <300mA @26V
- Low power Consumption <150mA @12V <250mA @26V
- Previous calibration values used at start-up. No wandering or instability
- No GPS discipline until after start-up delay and valid GPS lock
- Frequency is measured against GPS 1PPS timing pulses over 30 sec periods
- No "coarse" discipline adjustments applied until large error confirmed
- Frequency for "fine" calculated over ten count periods (rolling error)
- "Fine" discipline adjustments applied in steps transparent to digital operation
- LED status indicators for Power; GPS valid; Frequency accuracy; and Reference locked
- USB serial NMEA RMC sentences 9600 baud for time, location, and bearing calculation
- Quasi RS-232 Serial NMEA RMC 9600 Baud for IC9700 (and others) time and position
- Provides supply for active GPS antenna
- Packaged in extruded aluminium enclosure