

Diarcy Technologies

Low-Cost Frequency Standard, GPS Disciplined with Optional PPS Output

DS-2000/DS-4000

Providing Electronic Solutions for Today's Difficult Problems

Electronic Specifications

Frequency Output: 4 to 35 MHz, set at factory
Frequency Accuracy: < 10 ppb (parts per billion), typ.
Internal Oscillator: Stratum III OCXO
Standard Output Power: 0 dBm \pm 1 dB into 50 Ω

Warm-Up Time: < 10 minutes
Spurious Signals: > 50 dBc, 65 dBc, typ.
Harmonics: > 50 dBc, 65 dBc, typ.

Description

The DS-2000 is a low-cost, highly-accurate frequency source which can be used as a Calibration Standard, Laboratory Signal Generator, Synchronization Source, Cellular Base Station Reference, Phased-Locked Loop Reference Signal, and more.

The DS-4000 adds a logic-level PPS output.

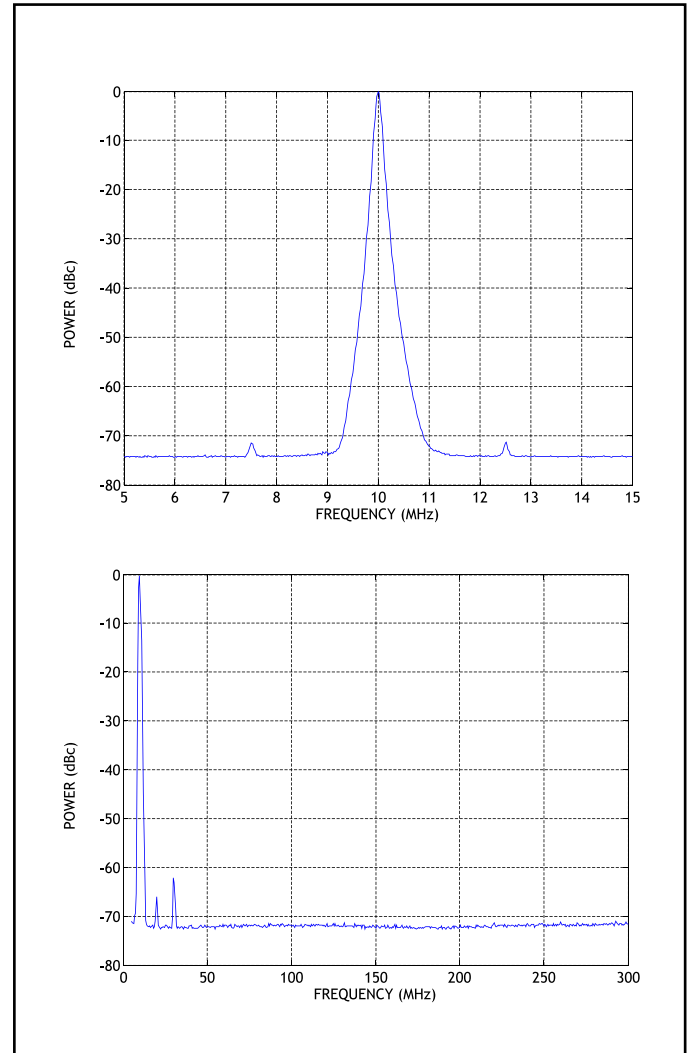
Accuracy is limited by GPS timing accuracies, typically resulting in better than 10 parts per billion (0.1Hz out of 10MHz). Visual indicators show GPS and unit status.

Custom Options

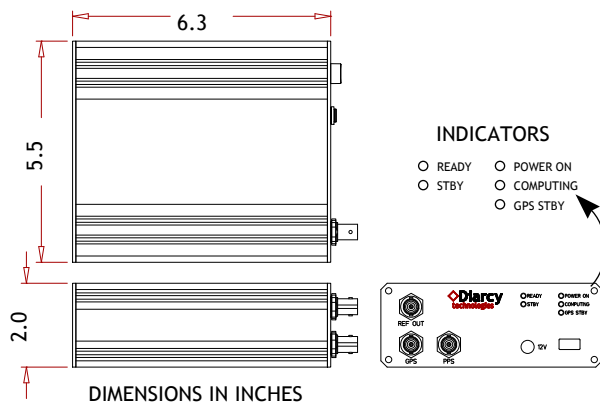
Standard Power Output: 0 dBm into 50 Ω
Available Power Output: -10 dBm to +10 dBm into 50 Ω
Multiple Outputs: 3 or 5 Rear Outputs. Other configurations available -- please call.
Optional PPS Output: 3.3V or 5V logic-level at 24mA, min.

Developed Frequencies (many more available, call us):
4.096 MHz 8.192 MHz 16.384 MHz
5.000 MHz 10.000 MHz 19.440 MHz
6.144 MHz 12.288 MHz 20.000 MHz

Typical Spectral Responses



Enclosure Outline & Physical Specifications



Power Supply: 11 to 14 VDC
Supply Current: < 300 mA at 12 VDC (warm-up)
Power Jack: 2.1mm/5.5mm DC Jack
AC Power Adapter included

GPS Antenna Bias: 5 VDC at 120 mA, max. (3.3 VDC, opt.).
GPS Active Antenna required (not included, but available)
RF Connectors: BNC Jack (RF Output, PPS Output, GPS Input)

Size: 2" x 5.5" x 7", overall
Weight: < 2 lbs.
Enclosure Finish: Black Powder Coat

For ordering information, contact Diarcy Technologies \square Austin, TX 78727 USA
+1.512.238.6840 \square Skype: diarcy.technologies \square contact_us@diarcy.com \square www.diarcy.com

SPECIFICATIONS ARE SUBJECT TO CHANGE

DS-2000/DS-4000

Low-Cost Frequency Standard, GPS Disciplined with Optional PPS Output

Ordering Information and Options

Base Part Numbers Single Front Output: DS-2000-xx.xxx-[P/N]xx-Gx-[Zxxx]
 Three Rear Outputs: DS-2030-xx.xxx-[P/N]xx-Gx-[Zxxx] (No Front Output)
 Five Rear Outputs: DS-2050-xx.xxx-[P/N]xx-Gx-[Zxxx] (No Front Output)

 Single Front Output with PPS Output: DS-4000-xx.xxx-[P/N]xx-Gx-[Zxxx]
 Three Rear Outputs with PPS Output: DS-4030-xx.xxx-[P/N]xx-Gx-[Zxxx] (No Front Output)
 Five Rear Outputs with PPS Output: DS-4050-xx.xxx-[P/N]xx-Gx-[Zxxx] (No Front Output)

Options:

Specify Frequency (MHz): 4 MHz to 35 MHz, any frequency to within 1 Hz resolution
 Specify Output Power (dBm): -10 to +10 dBm into 50Ω, set to ± 1dB
 (Negative powers specified by 'N', Positive powers specified by 'P')
 Specify GPS Antenna Bias: +5VDC Standard, +3.3VDC Optional
 Z-suffix: Custom Options not specified here

Examples:

Output Frequency at 16.384 MHz at -5dBm using a 3.3VDC GPS Antenna Bias would be:
 DS-2000-16.384-N5-G3.3

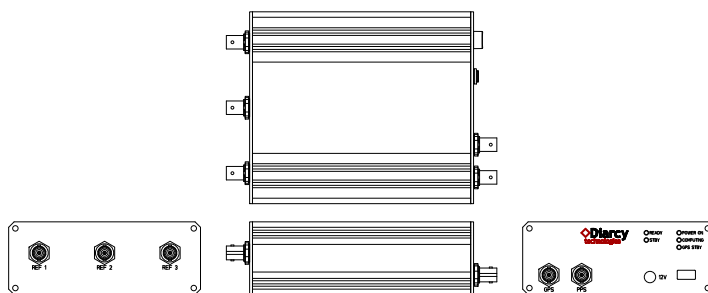
Output Frequency at 8.192 MHz at +10dBm using a 5VDC GPS Antenna Bias would be:
 DS-2000-8.192-P10-G5

Active GPS Antenna required, not included but available at additional cost
 AC Power Adapter, included

Availability:

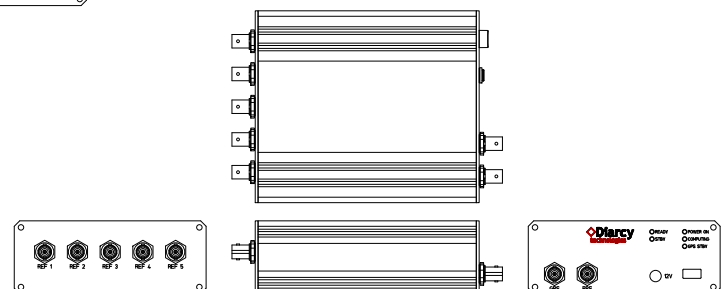
Stock to 3 weeks, typical

For 10.000000 MHz Frequency Standards, see our DS-1000 and DS-3000 models
 For RF Frequency Standards (35 MHz to 4000 MHz), see our DCW-5000 and DCW-6000 models



DS-4030 Option
3 Rear Outputs

Models with Rear Outputs:
 Size: 2" x 5.5" x 7.5", overall
 Weight: < 2 lbs.
 Enclosure Finish: Black Powder Coat



DS-4050 Option
5 Rear Outputs

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