



RUBIDIUM FREQUENCY SOURCE

The Rhino Rubidium Frequency Source is designed for both laboratory and field use where GPS reception may be unavailable, such as indoors or in large cities.

The Rhino outputs the following buffered (50Ω) reference signals:

- 10 MHz (8 individually buffered outputs)
- 19.6608 MHz (IS-95 clock multiple)
- 1 PPS (1 pulse per second)
- 1/2 PPS (odd/even second)
- Adj. PPS (phase adjustable - to CDMA base station offsets 0-511)



The Rhino includes an internal 8-channel GPS (Global Positioning System) receiver that can be used to synchronize the 1 PPS, 1/2 PPS and Adj. PPS signals to IS-95 base station GPS time. An internal battery allows the Rhino to be synchronized and then be moved without loss of synchronization. All functions are controllable via RS-232 from a PC.

FOR LABORATORY USE

The Rhino provides precision reference frequencies including many used by popular CDMA test equipment. An internal battery protects against loss of lock during AC power interruptions, or the unit may be unplugged and moved to another location without losing synchronization.

FOR FIELD USE

The Rhino is a precision frequency source for field use. It is also ideal in situations with limited or no GPS coverage. It directly connects to upgraded BVS equipment (currently the Super Eagle, Eagle and Falcon PN Scanners). The internal battery conditions vehicle power and acts as an un-interruptible Power Supply (UPS) for the Rhino and the PN scanners.

The Rhino is just one of many exceptional design solutions from Berkeley Varitronics. Call us today for more information:
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Rhino RUBIDIUM FREQUENCY SOURCE

MODEL 33000 SPECIFICATIONS

CLOCK REFERENCE SOURCE

- Internal rubidium atomic clock stability 1E - 10/day (after 48 hours warm-up time)

OUTPUTS

- 10 MHz 8 Outputs (BNC, Female) 50 Ω individually buffered
Sine wave
1 VPP nominal
- 1PPS (BNC, Female) 1 pulse per second
50 Ω buffered
TTL level
- 1/2 PPS (BNC, Female) Odd/Even Second (1 pulse, high-level, per even second)
50 Ω buffered
TTL level
- Serial Port (DB-9, Male) RS-232

CDMA SPECIFIC OUTPUTS

- 19.6608 MHz (BNC, Female) 16 x 1.2288 MHz
50 Ω buffered
TTL level
- Adj. PPS (BNC, Female) Phase adjustable PPS
Can be set to align with CDMA base station offsets
Base station 0-511 or PN offset 0-32,767
50 Ω buffered TTL level

POWER

- DC 12 - 14 VDC @ 5 Amps
- AC 110 VAC 50-60Hz @ 1 Amp
- Internal Battery Powers unit for up to 30 minutes

LED INDICATORS

- Power Green
- GPS Lock Green
- Clocks Locked Green
- Rubidium Lock Green
- Battery Low Amber
- Error Red

PHYSICAL

- Dimensions 12" x 8" x 5"
- Weight 12 lbs.



Rhino Back Panel