Condor™

DUAL CHANNEL CDMA PN SCANNER

The Condor™ is a portable, PN scanner used to measure and record coverage (Ec/Io) of IS-95B and CDMA 2000 base stations. Condor measures active 1XRTT networks operating in BOTH PCS and Cellular frequencies using a precision dual band receiver. CDMA transmitters such as Berkeley's Crocodile™ or Gecko™ may be set to different base station PN offsets and the Condor will measure and record their true Ec/Io signal. These CDMA signals are then grouped and displayed on a laptop PC via USB or RS-232 ports according to user parameters. Condor includes internal GPS receiver for LAT and LON recording, but does not require GPS acquisition for operation.

KEY APPLICATIONS:

- Measures correlated signal strength (Ec/Io) of all 512 IS-95B base stations
- Verification of neighbor lists
- Optimization of Cell sites
- Verifies PN assignments
- Confirms handoff thresholds
- Analysis of coverage areas
- Measures pilot pollution

FEATURES:

- Scans all 512 base stations (IS-95B & CDMA 2000 / 1XRTT) in less than one (1) second
- Measures BOTH PCS & Cellular CDMA correlated signal strength (Ec/Io) ±1.0 dB
- Derives Base Station ID and UTC from Sync Channel
- Demodulates Sync and Paging channels using BVS' proprietary LSI chips
- Decodes layer III messages from paging channel
- Built-in graphic LCD for display of vital parameters
- Complete data output via both USB and RS-232 ports to any laptop PC
- Includes 8-channel differential GPS receiver, however does not require GPS reception
- "Dead reckoning" navigational option available

Condor is just one of many exceptional design solutions from Berkeley Varitronics Systems. Call us today for more information:

(732) 548-3737 / Fax: (732) 548-3404
Internet: www.bvsystems.com
Email: info@bvsystems.com

wireless products
BERKELEY VARITRONICS SYSTEMS

Condor™ DUAL PN SCANNER

SPECIFICATIONS

CONDOR™ RF PERFORMANCE:

FREQUENCY RANGE	PCS Cellular	1930-1990 MHz (Bands A-F) 869.04-893.97 MHz (A and B Bands)
IF BANDWIDTH	1.25 MHz	
MEASUREMENT ACCURACY	Ec/Io	± 1 dB @ 25 C° ± 2 dB (0 to 50 C°)
RECEIVER NOISE FIGURE	< 7.5 dB Pilot Tracking	
ANTENNA INPUT SENSITIVITY	-117 dBm PCS Tracking	
MINIMUM SIGNAL ACQUISITION	-115 dBm Pilot Acquisition	
MAXIMUM SAFE INPUT	+13 dBm	

CDMA PROCESSING:

PN GENERATOR SEQUENCES	IS-95 I and Q Pilot
MINIMUM Ec/Io	-20 dB
CORRELATION LENGTH	1024 chips (for both I and Q)
MINIMUM PILOT POWER DETECTABLE	-20 dB
BASE STATIONS SCAN RATE	< 1 sec.
DISPLAY UPDATE RATE	< 1 sec.
BASE STATION IDENTIFICATION	Direct IS-95 & 1XRTT BS ID demodulation
TIMING ACCURACY	Absolute (derived from the sync signal)
TIMING JITTER	± 200 ns

GENERAL SPECIFICATIONS:

SOFTWARE	Condor Data Logger & Chameleon CDMA™ included
DATA RETENTION	PC laptop storage via USB and RS-232 ports
OPERATING TEMPERATURE RANGE	0 to 50 C°
STORAGE TEMPERATURE RANGE	-40 to 50 C°
DIMENSIONS	W=6.5” L=8.5” D=3.25”
WEIGHT	5 pounds
POWER	External 1A @ +12VDC
INTERNAL GPS (included)	Motorola 8-channel differential capable receiver

Berkeley Varitronics Systems, Liberty Corporate Park, 255 Liberty Street, Metuchen, NJ 08840 USA
Phone 732-548-3737 • Fax 732-548-3404 • Internet: www.bvsystems.com • E-mail: info@bvsystems.com