

Better RF Data Better Decisions

WIRELESS NETWORK OPTIMIZATION SOLUTIONS

SeeGull[®] LX CDMA/ EV-DO Scanning Receiver

PCTEL's SeeGull LX series scanning receiver provides unparalleled precision and user-defined options for measuring and optimizing CDMA/EV-DO networks. The SeeGull LX CDMA/EV-DO scanning receiver provides simultaneous measurements for both CDMA2000 and CDMA EV-DO networks without sacrificing performance. With features including network synchronization, temporal analyzer, code domain (Walsh Code), and spectrum analysis measurements, the SeeGull LX provides RF engineers with the tools necessary to cost effectively identify and resolve interference, perform critical indoor measurements, monitor and tune base station performance, and expand RAN infrastructure.

- Top N PN Measurements
- PN & User List Measurements
- Narrow & Wide RSSI Scanning
- Layer 3 PCH Decoding
- Spectrum Analysis Measurements
- Built-in GPS receiver



TECHNICAL SPECIFICATIONS

Standard Specifications	
Standards	CDMA2000 1xRTT CDMA EV-DO Revision A

Performance	
RSSI Measurement Bandwidth	30 KHz (Narrow) 1.25 MHz (Wide)
RSSI Measurement Rate	150 ch/sec (Narrow) 200 ch/sec (Wide)
RSSI Absolute Accuracy	± 1 dB Basic RF Input Power Range
Relative Accuracy	± 1 dB
PN False Detection Rate	< 0.1%
Top N PN Scan Mode Min. Detection Level	CDMA2000: -20 dB (Ec/Io) EV-DO: -18 dB (Ec/Io)
Top N PN Scan Mode Measurement Time	CDMA2000: 1.5 sec Typical EV-DO: 3.8 sec Typical

RF Specifications	
RF Frequency Ranges (Forward Channels)	
450 CDMA/EV-DO	461.31 - 468.99 MHz
850 CDMA/EV-DO	869 - 894 MHz
1900 CDMA/EV-DO	1930 - 1990 MHz
2100 CDMA	2110 - 2170 MHz
Frequency Accuracy	± 0.05 ppm GPS Locked ± 0.1 ppm GPS Unlocked (ambient)
Frequency Accuracy Holdover Mode	± 5 ppb GPS Locked ± 10 ppb GPS Unlocked (ambient)
Internally Generated Spurious Response	-110 dBm Maximum
Conducted Local Oscillator	-75 dBm Maximum
RF Input Power Range	-15 dBm Maximum (in-band) -5 dBm Maximum (out-of-band)
Protection Against Spurious Response Interference	+88 dB Minimum
Desensitization	Adjacent Channel > 46 dB Alternate Channel > 55 dB

Physical		
LX Single & Dual Band		
Input Power	+8 to +16 VDC (Neg Ground) 1.0A max @ 12 VDC	
Size	6.5" L x 5.25" W x 1.375" H 165mm L x 133mm W x 35mm H	
Weight	1.3 lbs. 0.6 kg	
Input/Output	(1) RF Input (1) GPS Input (1) Data/Power	SMA Female (50 Ω) SMB Male (50 Ω) DB-9S Connector
LX Dual Mode		
Input Power	+8 to +16 VDC (Neg Ground) 2.5A max @ 12 VDC	
Size	8.5" L x 4.0" W x 5.58" H 216mm L x 102mm W x 142mm H	
Weight	4 lbs. 2.5 kg	
Temperature Range	Operating: 0 °C to +50 °C Storage: -40 °C to +85 °C	
Input/Output	(2x) RF Input (1x) GPS Input (1x) Data/Power	SMA Female (50 Ω) SMB Male (50 Ω) DB-9S Connector
Certifications	RoHS CE	

Ordering Information	
Part Number	Description
LX Models	
06013	CDMA2000 450 LX
06010	CDMA2000 850 LX
06011	CDMA2000 1900 LX
06054	EV-DO 450 LX
06050	EV-DO 850 LX
06051	EV-DO 1900 LX
LX Dual Band Models	
06012	CDMA2000 850/1900 Dual Band LX
06052	EV-DO 850/1900 Dual Band LX
LX Dual Mode Multi-Band Models	
06038	Dual Mode CDMA/EV-DO 450
06035	Dual Mode CDMA/EV-DO 850
06036	Dual Mode CDMA/EV-DO 1900
06032	Tri-Band CDMA 850/1900 EV-DO 850
06033	Tri-Band CDMA 850/1900 EV-DO 1900
06034	Quad-Band CDMA/EV-DO 850/1900

PCTEL RF Solutions products are protected under the following U.S. patents:
7,272,126; 7,236,746; 7,050,755; 7,013,113; 6,950,665; 6,931,235; 6,917,609; 6,816,709; 6,609,001

