

Better RF Data Better Decisions

WIRELESS NETWORK OPTIMIZATION SOLUTIONS

SeeGull[®] EX WCDMA/ GSM Scanning Receiver

The EX WCDMA/GSM scanning receiver enables simultaneous scanning and data collection for WCDMA/HSDPA and GSM/GPRS/EDGE networks. With industry leading high speed and high dynamic range, operators can drive once and collect all the data necessary to optimize and manage multiple networks as one system.

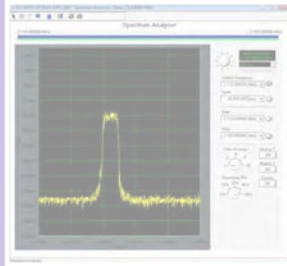
Optional measurement features such as Spectrum Analysis, BCH and BCCH for decoding Layer 3 messages, and C/I measurements enable network operators to efficiently manage their networks from pre-deployment through ongoing optimization.

- High Speed Top N Scrambling Code Scanning
- GSM Color Code (BSC) Scanning
- Multiple Concurrent Measurements
- RSSI & Immediate RSSI Reporting
- Spectrum Analysis Measurements
- Layer 3 BCH/BCCH Decoding
- High Accuracy C/I Measurements
- Built-in GPS Receiver



Spectrum Analysis Scanning

The optional spectrum analysis feature provides asynchronous measurements in 10/20/40/80/160 kHz RBW.



Spectrum Analysis using PCTEL InSite System

Performance	
RSSI Measurement Bandwidth	30/200 kHz (CW/Wide) - GSM 200/3840 kHz (CW/Wide) - WCDMA
RSSI Measurement Rate	150/500 ch/sec (CW/Wide) - GSM 500/240 ch/sec (CW/Wide) - WCDMA
RSSI Absolute Accuracy	± 1.0 dB in Basic RF Input Power Range
Relative Accuracy	± 1.0 dB
BSIC Detection	> 90% @ 2dB C/I
BSIC False Detection CPICH False Detection	< 0.1%
Minimal WCDMA SC Detection Level	High Speed Mode: -21.5 dB relative (Ec/Io) -116 dBm absolute
Minimal WCDMA SC Detection Level	High Dynamic and BCH Modes: -26 dB relative (Ec/Io) -120 dBm absolute
CPICH Measurement Time	High Speed Mode: 10 ms High Dynamic Range: 20 ms

RF Specifications	
RF Frequency Ranges (Forward Channels)	
850 WCDMA/GSM	869 - 894 MHz
900 WCDMA/GSM	925 - 959 MHz
1800 GSM	1805 - 1880 MHz
1900 WCDMA/GSM	1930 - 1990 MHz
2100 WCDMA	2110 - 2170 MHz
2100 WCDMA AWS	2110 - 2150 MHz
Frequency Accuracy	± 0.05 ppm GPS Locked ± 0.1 ppm GPS Unlocked (ambient)
Internally Generated Spurious Response	-110 dBm Maximum
Conducted Local Oscillator	-75 dBm Maximum

TECHNICAL SPECIFICATIONS

RF Specifications (cont.)	
RF Input Power Range	-15 dBm Maximum (in-band) -5 dBm Maximum (out-of-band)
Protection Against Spurious Response Interference	73 dB Minimum
Desensitization	Adjacent Channel > 55 dB Alternate Channel > 65 dB

Physical	
EX	
Input Power	+8 to +16 VDC (Negative Ground) 1.5A max @ 12 VDC
Size	8.7 L x 3.7 W x 2.7 H 221mm L x 94mm W x 68.5mm
Weight	1.8 lbs. 0.82 kg
EX Mini	
Input Power	+8 to +16 VDC (Negative Ground) 0.9 A Max @ 12 VDC
Size	8.7 L x 3.7 W x 1.9 H 221mm L x 94mm W x 48.3mm H
Weight	1 lbs. 0.45 kg
Temperature Range	Operating: 0 °C to +50 °C Storage: -40 °C to +85 °C
Input/Output	(2x) RF Input SMA Female (50 Ω) (1x) GPS Input SMB Male (50 Ω) (1x) Data USB 2.0, High Speed (1x) Power Custom 2.5mm Plug
Certifications	USB 2.0 RoHS CE

Ordering Information	
Part Number	Description
EX Models	
06101	GSM 900/1800 WDCMA 2100
06102	GSM 900/1800 WCDMA 2100/900
06103	GSM 850/1900 WCDMA 850/1900
06104	GSM 1900 WCDMA AWS
06105	GSM 850/1900 WCDMA AWS
EX Mini Models	
06110	WCDMA 2100
06111	WCDMA 900/2100
06112	WCDMA 850/1900
06113	WCDMA AWS
06116	WCDMA 850
06117	WCDMA 900
06118	WCDMA 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



PCTEL, Inc.
 RF Solutions Group
 20410 Observation Drive, Suite 200, Germantown, MD 20876 USA
 Phone: +1-301-515-0050 Fax: +1-301-515-0057 www.pctel.com

NIST, ISO, IEC, ANSI, NCSL, MIL-STD by www.raeservices.com

CERTIFIED ISO 9001:2000
 Specifications subject to change without notice
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