SeeGull® EX Series
High Performance Scanning Receivers

Unsurpassed Combination of Speed, Dynamic Range, and Accuracy

Simultaneous Measurements Across Multiple Technologies

Advanced Pilot Measurements For Todays Wideband Wireless Protocols

Layer 3 Message Decoding

Durable Compact Design
Benefits

- Ideal for RF Coverage Measurements
- High Accuracy and Resolution
- Network Independent for Non Intrusive Testing
- Reliable and Durable for Field Use
- Significant Reduction in Network Testing Time
- Simultaneous Measurements Across Multiple Technologies

Features

Simultaneous Support for Dual Technologies Including:
- WCDMA / GSM
- CDMA2000 / EV-DO
- TD-SCDMA / GSM

Support for Broadband Technologies:
- WiMAX
- LTE

Measurement Modes Include:
- Top N Pilot Sector Scanning
- Layer 3 Decoding
- RSSI Scanning Across Multiple Bandwidths
- Spectrum Analysis

Accurate Identification of Signal Origin (BTS Sectors)

Built-in High Performance GPS

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SeeGull® EX Series Scanning Receivers

Are Your Customers Satisfied With The Quality of Your Network?

This question resonates throughout every aspect of managing a wireless network. Yet, for RF engineers, this question is particularly important. Without a reliable RF network, wireless service can not be sustained. What’s more, when RF performance is optimized, all other components of the business are easier to manage and resources are used more efficiently.

A well tuned RF network allows network operators to:

- Deploy Less Infrastructure
- Provide Better Service
- Reduce Support Burden
- Increase Profitability
- Deploy Less Infrastructure
- Reduce Support Burden
- Increase Profitability

Using state-of-the-art technology, the compact and lightweight SeeGull EX offers unbeatable performance in a scanning receiver that is ideal for network planning, deployment and optimization.

The SeeGull EX scanning receiver provides:

- Unparalleled Scanning Speed
- Improved Pilot Detection Capability
- High Throughput
- High Dynamic Range
- Exceptional Value
- High Throughput
- USB Interface
- Exceptional Value

This race car illustrates how the superior performance of SeeGull EX with high scanning speed and high dynamic range brings your network into focus.
Unsurpassed Speed
Makes SeeGull EX the Right Choice

Higher scanning speed gives a greater density of coverage and signal quality measurements. This is critical to:

- RF Model Tuning and Optimization
- To feed Automated Cell Planning (ACP) and other propagation models with accurate sector coverage data
- Detection of interference, fading and multi-path

Simultaneous Measurements
Across Multiple Technologies

The SeeGull EX performs simultaneous data collection across technologies (including as WCDMA/GSM, TD-SCDMA/GSM and CDMA/EV-DO) and on multiple channels, typical of today’s complex, multi-technology overlay networks

The scanning receiver’s ability to perform simultaneous measurements across technologies assures the engineer that the data quality, performance, and drive test data density are not compromised. This performance standard eliminates the need to use multiple scanning receivers during any drive test, or the need to perform redundant drive tests in a given market area, which reduces operating costs and simplifies data management.

Wide Dynamic Range and Accurate Pilot Measurements

The high quality measured data provided by SeeGull EX scanning receivers, delivers information that:

- Identifies all sectors and true areas of overlapping to optimize Handover Areas
- Detects all sectors present in a given area including the detection of scrambling codes with low Ec/Io, identifying sources of Interference
- Uncovers those sectors with low power at the edge of their coverage or overpowering sectors outside the expected area

The SeeGull EX’s high dynamic range mode enables reliable RF data collection over a larger area with fewer false pilot measurements. RF engineers get more data on legitimate interferers, ensuring the ability to make the appropriate network adjustments. This robust approach to pilot selection ensures the accuracy of the data.

SeeGull EX Applications

Planning & Deployment
- Optimize Coverage
- Minimize Interference
- Tune Propagation Models
- Perform Site Surveys

Network Optimization
- Contain Interference
- Refine Neighbor Lists
- Fine Tune Capacity and Throughput

Troubleshooting
- Locate Coverage Holes
- Fix Network Configuration Errors
- Detect “Soft” Base Station Problems

Quality of Service
- Evaluate the RF Impact of Quality
- Measure the Effects of RF Parameter Changes
About Us

Application

Decoding WCDMA Layer 3 Messages Enables Neighbor List Management

Solving network problems associated with mobility and handoffs/handovers requires going beyond the physical RF coverage and interference environment to examining communications between the handset and the network infrastructure. With the ability of the SeeGull EX to capture and decode Layer 3 messages, RF engineers can optimize handoff candidates, improving both the quality of service and resource utilization.

About RF Solutions Group

PCTEL RF Solutions Group is a recognized leader in high performance RF data collection components and systems used worldwide by leading drive test system OEMs, network operators, and engineering services companies to measure, monitor and optimize wireless networks. Its SeeGull® line of multi-standard demodulating Scanning Receivers, CLARIFY® Interference Management System, and InSite® Data Collection software provide a diverse set of tools that allow RF engineers to measure and optimize Radio Access Networks for all leading wireless technologies. PCTEL RF Solutions Group is certified ISO 9001:2000.

PCTEL RF Solutions Group, headquartered in Germantown, Maryland, offers its products through leading drive test tool vendors and directly through PCTEL. For more information, go to: www.rfsolutions.pctel.com.

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

About PCTEL

PCTEL, Inc. (NASDAQ:PCTI), is a global leader in propagation and optimization solutions for the wireless industry. The company designs and develops software-based radios for wireless network optimization and develops and distributes innovative antenna solutions. PCTEL's MAXRAD® antenna solutions address public safety applications, unlicensed and licensed wireless broadband, fleet management, and network timing. Its portfolio includes a broad range of antennas for WiMAX, Land Mobile Radio, GPS, telemetry, RFID, WiFi, indoor cellular, and mesh networks. The company’s SeeGull® scanning receivers, receiver-based products and CLARIFY® interference management solutions are used to measure, monitor and optimize cellular networks. PCTEL's products are sold worldwide through direct and indirect channels.