Siretta
Enabling Industrial IoT

Siretta SNYPER Family

"Enabling advanced IoT Cellular Solutions"

What will we cover?

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- Why survey?
- Overview of cellular networks
- Frequency bands
- Network selection
- Review of the SNYPER family: Model Variants/What each model does/Regional Support
- Who uses SNYPER analysers
- Understanding the results

Why survey?

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- Determine the optimum network operator
- Determine the optimum antenna placement
- Determine the most reliable / available provider
- Cellular base stations have a finite range
  - Typically 7km radius for a rural area
  - Typically 250m radius for busy central city area
- Being in range does not mean that you will get adequate reception
  - Geographical and environmental conditions will affect network performance

The SNYPER Family

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SNYPER Models

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- SNYPER-LTE+ (EU) – European LTE base model
- SNYPER-LTE+ (USA) – North American LTE base model
- SNYPER-LTE+ Spectrum (EU) – European LTE model with LiveSCAN and storage
- SNYPER-LTE Graphyte (EU) – European LTE model with LiveSCAN, storage & logging
- SNYPER-LTE Graphyte (USA) – North American LTE model with LiveSCAN, storage & logging
- SNYPER-LTEM (GL) – Global LTE Cat M (LTE Cat NB IoT) base model

What all SNYPER products offer

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- Collects all of the information provided by all of the surrounding beacons in the area
- Collects all individual cell tower data/ID
- ‘SIM Free’ operation for all functionality
- Provide access to Cloud Survey
- Provides full network summary reports
- Time Stamps all recorded surveys
- Provides USB downloads
- Files available as graphical HTML and CSV files

SNYPER-LTE+

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- 2G/3G & 4G Support in Europe and US regions
- Provides the ability to save single surveys on the device
- Provides date/time named individual folders for each survey
- Provides HTML summary, CSV summary and complete CSV survey log for each survey
- Enables remote debugging

SNYPER-LTE+ Spectrum

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- 2G/3G & 4G Support in Europe and US regions
- Ability to save multiple survey results on the device (Up to 84 total surveys)
- LiveSCAN function to perform local site surveys and directional antenna alignment
- Provides unlimited LiveSCAN surveys on individual base-stations recorded
- Ability to provide complete site signal surveys
- Ability to locate cell tower locations
- Ability to provide individual cell tower signal averages

SNYPER-LTE Graphyte

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- 2G/3G & 4G Support in Europe and US regions
- Ability to record multi-cycle surveys
- Options to record multi-cycle surveys over hours / days & weeks
- Provide complete cell tower averages over entire survey cycle
- Ability to determine network performance and availability
- Provide LiveSCAN survey logs
- Provide full survey log for multi-cycle survey for compl post processing

SNYPER-LTEM Model

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- Provides single network availability results for global LTE Cat M and GSM / 2G networks
- Provides the ability to save single surveys on the device
- Provides date/time named individual folders for each survey
- Perform LTE Cat M, LTE Cat NB IoT and GSM / 2G surveys individually
- HTML report summary, CSV report summary and complete survey log for each survey
- Enables remote debugging

New Product

Network Technology Support

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- LTE (LTE Cat 1) / LTE4 (LTE Cat 4)
  - Standard 4G/LTE functionality
  - LTE Cat 1 provides download rates up to 10Mbps
  - LTE Cat 4 provides download rates up to 150Mbps
  - Provides fallback to 3G / 2G
- LTEM (LTE Cat M / LTE Cat NB IoT)
  - IoT 4G/LTE functionality
  - LTE Cat M provides download rates up to 1Mbps
  - LTE Cat NB IoT provides download rates up to 250kbps
  - Provides fallback to 2G

Why LTE Cat M / LTE Cat NB IoT

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- GSM / 2G network is still being used in millions of applications globally
- GSM / 2G network is EoL and being replaced with LTE Cat M / LTE Cat NB IoT
- GSM / 2G network is built on old analogue technology
- GSM / 2G network is very high power and inefficient
- GSM / 2G has a lower link budget sensitivity than LTE Cat M / LTE Cat NB IoT
- GSM / 2G does not have advanced power saving modes (eDRX and PSM)

Who uses SNYPER Analysers?

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- Cellular Equipment Installers
- Project Managers & Consultants (Industrial IoT Deployments)
- SIM Allocation Logistics Manager
- Service Engineers
- Utility Company Sales Engineers
- Product Development

Key Customer Considerations:

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- Network Technology (2G/3G/LTE Cat 1/LTE Cat 4/LTE Cat M/LTE Cat NB IoT)
- Product and Connection Reliability
- Network Signal Strength and Performance
- Base-station Availability (Antenna / Network Service Consultation)
- Product Logic Intelligence

Support Materials

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- What is available on the Siretta Website
  - Detailed Product Pages
  - Product Datasheets
  - Product Hardware User Manuals
  - Product Brochures
- Product Support
  - Quick Start Guides
  - Modem Application Notes
  - FAQ
  - Dedicated FAE Support