

The SNYPER family of wireless solutions improves connectivity and network analysis for parking management solutions



Companies at the heart of IoT communications know the importance of connection reliability. Those using the cellular network are using a well-established infrastructure, however, it is also crucial to be able to determine the best base-stations to align antennas with, or the most prevalent operator in the area with reasonably good or better signal quality.

In order to do this quickly and professionally, what is required is an instrument that has the capability to survey all local networks & download the results for analysis. It needs to be portable, robust, and easy to read and understand.

Siretta's family of SNYPER signal strength analysers fit this requirement, and provide the data from which decisions can be made. SNYPERs take cellular surveys of the local area and produce results that can either be viewed on the device, or by downloading to a PC. The downloaded results take two forms:

- CSV
- HTML(Graphical)

The CSV provides the spreadsheet data from multiple surveys, taken in the same geographical area so the user can perform the necessary analysis to determine the best/most suitable network operator for the survey location.

The HTML displays these results in a more graphical format through charts and summary data.

Siretta provides directional antennas as part of their offering so clients can use selected base-station signals detected by the SNYPER, to assist with the alignment of antennas.

The SNYPERs cellular coverage of LTE (4G) / UMTS(3G) and GPRS(2G) networks, for the European frequency bands make them ideal for surveying and commissioning wireless systems. The SNYPERs intuitive menus make them quick and simple to operate. There is plenty of battery life in their rechargeable batteries to conduct many surveys over a short period of time, and battery life can also be protected by setting the unit to automatically power down after a set period of inactivity. Their omni-directional antennas detect base-station signal "hotspots" within buildings or on remote sites.

One of Siretta's clients who has benefited from the use of the SNYPER family is the Metric Group, who design and manufacture parking management systems, including parking terminals, back office systems and integrated solutions.

The Metric brand is synonymous with parking in the UK and worldwide. They have installed more than 60,000 parking meters in over 45 countries.

The provision of a two-way communication link between the pay and display machine and the parking/management office is required. This allows terminal data to be passed over a 4G (mesh), 3G, 2G (GPRS), GSM, LAN networks giving the parking operator complete management of their terminals. Information is passed on all warnings and events for example low tickets, coin box status, machine alarms plus a comprehensive log of all transactions data for auditing and statistical analysis. The two-way

communication allows tariffs, configurations and clock synchronisation to be carried out remotely at the touch of a button or automated for complete peace of mind. Complete autonomous operation can be utilised by using the SMS text or email message facility to inform enforcement or maintenance personnel of the machine status directly to their mobile phone/device. The software is 100% browser based and can be utilised by operators on web enabled devices.

Therefore, a reliable cellular connection was critical to enable Metric's back office system to provide the data their customers rely on.

Metric already used Siretta's core cellular modem solution for their 24/7 connectivity and so when Siretta came along with the SNYPER family, it made the process of determining signal strength so much easier, and allowed Metric to quickly determine that they were using the best connection/most suited network operator between remotely sited parking machines and a central office.

Things continue to advance for the SNYPER family with the latest launch of the SNYPER-LTE Graphyte, which is a high performance signal strength analyser which provides additional datalogging functions on top of all the usual SNYPER features, to allow several days of network monitoring to be carried out. This will prove invaluable to those who want to measure all "visible" base-stations within an area, over a period of hours or days before making decisions on best signal / most suited operator for a specific area. The downloadable data will give the likes of Metric a far more detailed understanding of how best to use the cellular network infra-structure using the network dominance report.

For Metric the downloadable reports can also be used to explain issues to their customers and how they are being resolved, adding to the already solid reputation for Metric's products and services.

Another significant feature of the SNYPER-LTE Graphyte is that it does not require a SIM in order to obtain its survey results, which is a key step forward from previous models.

For more information on Metric and the SNYPER-LTE Graphyte(EU), please visit:

www.metricgroup.co.uk

www.siretta.com/snyper-lte-graphyte