

A UNIQUE REFERENCE STATION



OSR
reference

3G+C
reference

REFERENCE STATION

A unique reference station

**The station is suitable for installation at fixed sites and for use in network applications.
The navXperience Reference station is an investment for the present and for the future.**

The Station (antenna and receiver) is designed to remain modern for a long time. The 3G+C reference antenna and the OSR (open source receiver) can receive all known GNSS signals (multi-Constellation). With the ability to fit as many as three synchronized OSR receivers operating in parallel, it has the expandability to handle more satellites and new L-band GNSS signals should they be added. The antenna design is based on a German patent to yield the best signal quality and lowest phase center variation available. The OSR reference is the only receiver in the world with an open operating system (both Windows and Linux are supported). To administrate and connect the receiver to the network is easy and simple, even for a novice. The user interface is simple, but in the background, there are powerful and novel algorithms with hundreds of programmable correlation channels. A unique technology.

- Receiver and Antenna covering all signals
- Superior Multipath Reduction Algorithms
- Up to 1000 Channels with Panoramic Correlator
- Dynamic Adaptive Search Channels
- GNSS Backup Options
- Up to 14 hours Battery Backup
- Web Interface for Remote Management

OSR
reference

Designed to meet the future

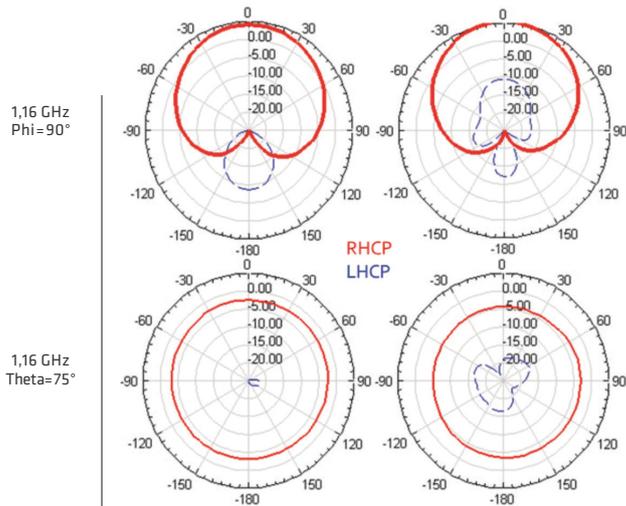
Our OSR (open source receiver) is the first programmable reference station receiver in the world and designed for your CORS network with all important features, like a web interface, Linux or Window OS, streaming data and lots of memory (64GB per receiver). The OSR reference has optimal power flexibility for external power input as well as internal battery backup. In a reference receiver configuration, the OSR-Receiver delivers up to fourteen hours operation from the internal battery. The OSR reference is compatible with every CORS software in the world.



3G+C
reference



Next generation GNSS antenna



The four charts show the reception characteristics of the 3G+C reference.

The enclosure has a lotus effect, rain water and snow cannot adhere to the surface and a uniformly high quality of reception is guaranteed. The reception characteristics of the 3G+C for low elevation satellites have been improved. The new 3G+C reference now receives more satellites with an even better signal/noise ratio than similar antennas. The proven parasitic elements ensure optimal multi-path suppression and minimize the near-field effects.

The upper row shows the vertical plane for both GPS and GLO-NASS L2 (left) and for GPS and GLONASS L2 (right). The bottom two graphs show the horizontal reception: The reception characteristics of the 3G+C reference remain horizontal on 360° nearly equal, both in L2 and in L1.

The difference in quality shows itself V.A. at the vertical sections which have unique values: Here we have at 1.16 GHz (L2) only a loss of 10dB and at 1.61 GHz, only 12.5 dB to 0° elevation angle, which is also the value of 10dB beam width between 170° and 180° explains. These unique features are indicative of the 3G+C antenna.

Neither air, dust or water can penetrate inside the antenna.



The production of the 3G+C series meets the highest quality standards with respect to processes and materials used. The housing material is designed to be extremely durable, UV resistant and color true. Even after years of use it will appear like new. The upper and lower housing are laser-welded which is unique among all GNSS antenna manufacturers. Neither air, dust, or water can penetrate its interior, even at pressure differences of 2.5 bar (36 psi).

This is also true for the standard TNC connector, because it is integral to the case and was specifically designed for this housing. Thus, the 3G+C series complies with IP69k and all tests of MILSTD 810g.



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