

OGRP – Open GNSS Receiver Protocol

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SUMMARY

OGRP - Open GNSS Receiver Protocol is a file format that has been designed to allow standardization to ensure interoperability of all conceivable components in and around GNSS receivers. The existing formats do not meet the other aspects of this requirement. Most formats are developed from individual hardware manufacturers. Formats that are not tied to hardware manufacturers cover each in itself, but only from a few aspects of a GNSS receiver.

As a prerequisite for maximum interoperability, we think about other aspects, in addition to the openness and completeness of the interface.

One aspect is the easy integration in existing hardware and software. OGRP is a plain and readable text for people without special software and OGRP based on open standards. JSON as a data language and JSON schema specification language. Thus OGRP is also good machine-readable. With JSON and JSON schema tools available for all operating systems and programming languages. We charge extra tools at your disposal, that can be specifically integrated into embedded systems.

OGRP is more than just a data definition. Behind OGRP is a device concept. In this concept, all equipment components, whether hardware or software are construed as individual modules that would like to chat with each other in a standardized way. Including an abstract module that serves as a user interface. This application contains OGRP's own messages.

Likewise, OGRP includes a system for filing and managing configurations, so you can easily make a whole unit completely OGRP data configurable. Then use the tools Abstract

maintain.

OGRP contains predefined core messages, which transmit the data available, as are produced around GNSS receiver, the possibility to specify your own messages in which you develop your own JSON schema extensions. You may ask selected partners or even all over the world if they are available to integrate your module. Or integrate it themselves. This allows you to easily realize additional sensors or exotic evaluations.

OGRP allows distributed applications. The data channels are not part of the specification, but OGRP allows data as to characterize, this can be recognized from the outside. If you can transfer the data via TCP / IP or UDP a based on Linux hardware module at one end of the world that communicates with a Windows computer halfway around the world to get up-RTK unit.

OGRP has to be the claim that HTML geodesy. Our goal is to convince as many hardware and software manufacturers to support this interface directly. For some proprietary formats are already converter and course components that work directly via OGRP incl. A Web server component with which you also can maintain their configurations except data visualization.