

GP-Probe DIN L1

Product information and specifications
Document version 1.1



GP-Probe DIN L1

Designed for telecom to monitor GNSS interference and synchronization quality

Cost-effective GNSS probe with built-in RF blocker, onboard GNSS interference detection and LUA scripting. Compatible with GP-Cloud

GP-Probe DIN L1 covers three primary applications: GNSS interference detection and classification, PPS accuracy monitoring, GNSS signal quality analysis, and logging. The device is easily installed between a GNSS antenna and a receiver or time server. When an event is detected, the GNSS and PPS outputs are immediately disabled, preventing any counterfeit signals from reaching your systems.

With Onboard Signal Processing option, GP-Probe DIN L1 can detect GNSS interference and anomaly without connecting to GP-Cloud

- PPS Accuracy Measurement
- RF spectrum analyzer
- LUA scripting for custom scenario
- Embedded GNSS blocker



Key Features

- Supported by GP-Cloud to provide centralized monitoring of your entire GNSS-dependent infrastructure. The combination of two features – GNSS interference detection and PPS accuracy tracking – makes the device perfect for ensuring robust and reliable synchronization systems for mission-critical infrastructure.
- Onboard Signal Processing Option – the device can detect anomalies of GNSS signal and interference without connection to GP-Cloud.
- Integrated GNSS RF switch with an embedded jammer. You can connect the device between a GNSS antenna and a protected time server. If GNSS signal anomalies or interference are detected, the GNSS output port is disabled. To protect against powerful spoofing attacks, there is a built-in jammer that assures blocking of fake signals of any power.



- Built-in PPS Phase Measurement Unit. You can connect a PPS output of your time server to a GP-Probe DIN L1 and receive real-time notification of PPS phase accuracy degradation.
- Embedded LUA script engine and debugger for custom user scenarios. You can develop your own LUA script to respond to interference or GNSS signals anomaly. A terrific option for quick integration of the device into your existing infrastructure.
- 65 MHz basic RF spectrum monitoring feature.
- Validated PPS signal output.
- The embedded real-time operating system FreeRTOS guarantees high availability and cybersecurity.
- Secure firmware auto-update engine.
- Embedded self-diagnostic and dispatching all error messages to the cloud.
- Web interface for configuration.

Onboard Spoofing Detection

The probe is compatible with GP-Cloud to detect advanced attacks and build a comprehensive monitoring system



Embedded Lua Scripting

You can develop complex LUA scenarios in response to GNSS spoofing/jamming/GNSS signal quality and PPS accuracy degradation

