

INTRODUCTORY BRIEF

PRLX

GNSS SPOOFER

Compact long-range GNSS deception system for mobile, fixed-site, and integrated EW operations.

PRLX is a field-ready spoofing platform built around a compact software-defined radio architecture. It combines high RF output power, precision spoofing, remote network control, local HMI operation, and automated scenarios in a rugged outdoor-rated unit.



L1 / L2 / L5

REMOTE + LOCAL CONTROL

SOFTWARE-DEFINED ARCHITECTURE

50 km

DEMONSTRATED RANGE

128+

SIM. CHANNELS

4.9 kg

DEVICE WEIGHT

IP67

OUTDOOR OPERATION

CAPABILITY HIGHLIGHTS

LONG-RANGE EFFECT

50 km demonstrated range with up to 2 x 30 W RF output.

Range can be extended with external amplification.

HIGH SIGNAL COUNT

128+ simultaneous spoofing channels across major GNSS systems and bands.

OUTDOOR-READY

IP67 enclosure, rugged construction, vibration-tested design, and fully silent passive cooling.

RAPID DEPLOYMENT

4.9 kg device weight, compact form factor, mounting options for mast, vehicle, shelter, or fixed site.

Operational in 3 minutes.

PRECISION SPOOFING

Target matched spoofed trajectory, propagation time compensation, high update rate.

SERVICEABLE ARCHITECTURE

Commercial SoC based, clean supply chain, and zero dependence on exotic components.

TECHNICAL SUMMARY

Configuration baseline

PRLX is a compact SDR-based GNSS spoofing platform for field deployment, fixed-site protection, and integration into sensor-driven EW workflows.

The system combines network based control, local HMI operation, mission-plan handling, and automated scenarios with precise timing and travel-time compensation.

The architecture is designed around a clean, serviceable supply chain with a commercially successful ARM base and reduced dependence on exotic single-source components.

We employ a GPU based DSP approach, which ensures long term supportability and no vendor lock-in.



PHYSICAL AND ENVIRONMENTAL

DIMENSIONS	171 × 95 × 400 mm (with antennas)
WEIGHT	4.9 kg device weight 15 kg with field kit
PROTECTION	IP67 outdoor operation rugged, vibration tested
CONSTRUCTION	aluminium unibody housing custom colors available

RF AND SIGNAL CAPABILITY

GNSS SYSTEMS	GPS, GLONASS, Galileo, Beidou
SIGNALS	128+ simultaneous channels all active L1 signals *
OUTPUT POWER	up to 2 × 30 W sum. 30 W over PoE
EXTENSION	optional external amplifier ** 2 × 100 W / 400 W available

INTERFACES AND INSTALLATION

CONNECTORS	Amphenol Socapex ethernet mating: RJF6G Amphenol 62GB AUX mating: 62GB-56T18-11P
MOUNTING	pole mount available 3/8", 5/8", 1/4" tripod plates M3 bolt pattern available
POWER	48–57 V DC isolated, max 150 W 12 V DC max. 150 W PoE++ 802.3bt, 90 W smart battery interface
VEHICLE	12 V / 24 V system adaptor

CONTROL AND ARCHITECTURE

REMOTE	IP management, local/networked controller
LOCAL	cable attached simplified HMI tablet/PC based field UI
MISSION	predefined configuration store and auto-execution
ARCHITECTURE	commercial chipset based fully software defined platform

* available signal set is subject to licensing terms, L2 (GPS, GLONASS) L5 (GPS, BeiDou, Galileo) civilian signals are implemented

** PA extensions: user installable external modules, requiring additional power and active cooling