

CTL8100 24X7 GPS Jamming Sensor



PRELIMINARY DATASHEET

Introduction

With the increase in low cost commercially available GPS jammers, instances of GPS jamming / GNSS interference events threatening national critical infrastructure such as South Korea and Newark International Airport are being reported more frequently.

Product Overview

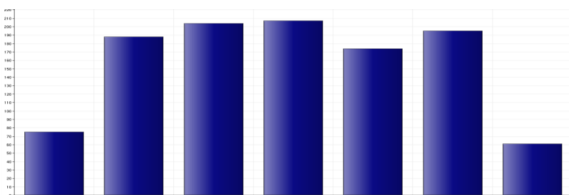
The Chronos PoC CTL8100 Sensor Probe will quantify the nature and extent of the GPS jamming threat in the vicinity of your critical infrastructure.

Based on the existing GAARDIAN/SENTINEL research platform, the sensor will detect and quantify sources of GPS interference.

Weatherproof sensors can be deployed using mobile backhaul or your own LAN infrastructure for data communications. A simple web user interface enables secure access and the ability to quickly drill down to view jamming events in real time.

Additionally emails can be triggered by events, as they happen, alerting users to log on to view the most recent events.

Sequences of events can be analysed using the secure web interface by month, day, time-of-day and day-of-week to enable actionable intelligence in order to mitigate the threat.



For example, events shown here are by day of week starting with Sunday on the left, for the period February to December 2013. The dominance of

Monday to Friday events over weekend events suggests business use of jammers.

Chronos' expert installation teams can deploy a sensor in just a few days anywhere in the world. Depending on site logistics and access permissions, the time from site survey to working installation could be less than a week.

It may not be easy to develop a business case to deploy a full scale network around your critical infrastructure environment until the nature and threat from GPS jammers has been quantified. The Chronos PoC SENTINEL Probe will enable a light touch deployment for a short period of time allowing a GPS jamming report to be created to enable management to assess the threat. The system can then grow into a full infrastructure protection system when budget allows.



24/7 GPS Jamming Network Sensor Probe

Key Features

- GPS interference detection
- 24/7 GPS monitoring
- 24/7 eLoran monitoring option
- GPS C/No analysis
- GPS power in L1 band analysis
- Interference detection algorithms
- Reports events to SENTINEL server

For further information contact sales@chronos.co.uk





GENERAL PROBE FEATURES

Probe Management Interfaces:

- 10/100 BaseT on RJ45
- RS232 on DB9 connector

Probe Management:

- CLI

Probe Power Supply:

- -40 to -72 VDC
- 15W max (base probe)
- 40W max (with options)

Probe Environmental:

- Op temperature: 0°C to +50°C
- Storage temp: -10°C to +60°C

Probe Physical Specifications:

- Weight: (base probe) 1.75 kg
- Weight (with options) 2.2 kg
- 443mm W x 200mm D x 44mm H

Probe Installation Options:

- 19" and ETSI rack mountable, 1U

Cables/Adaptors:

- Mains to 48V DC power adaptor
- Cable and connector kit (optional)
- GPS antenna kit (optional)

Probe Compliance:

- UL
- CE Mark
- RoHS (6 of 6)
- FCC
- EN55022
- EN61326
- EN301489

SYSTEM OUTPUTS

Server Interface

- 10/100 BaseT on RJ45
- Provides communication to SENTINEL server
- Provides GPS interference alarms
- Provides GPS interference data
- Provides eLoran data (optional)
- Configuration via SENTINEL server



Probe deployed during outdoor GPS Jamming trials in IP65 weather-proof enclosure