



## Embedded Computing, Timing and Telemetry Products



### PFSL-G3 Portable Field Strength Logging and Surveillance System

#### Features

- Easy portability
- Rechargeable battery
- Automated operation
- GPS included
- Wide frequency range
- Signal level or field strength logging
- Signal demodulation and recording
- Low cost

Until recently, the task of mobile field strength logging, monitoring and surveillance typically required several pieces of conventional equipment interconnected into bulky and expensive systems.

WiNRADiO PFSL-G3 system provides an elegant, fully integrated solution, specifically designed for mobile "drive-by" signal coverage measurements, field strength mapping, mobile surveillance and other similar investigative operations.

The PFSL-G3 system employs an integrated GPS receiver to display and store geographical co-ordinates of the measured signal. The logged data include time, date, latitude, longitude and altitude.

The signal level can be measured in  $\mu\text{V}$ ,  $\text{dBm}$  or S-units, and field strength can be displayed in  $\mu\text{V/m}$  or  $\text{dB}\mu\text{V/m}$ . Instantaneous, peak or average values can be shown, calculated over user-definable intervals.

The contents of the logs have a flexible format, defined by the user, making the data easy to import into popular GIS packages for further processing. A provision also exists to specify the antenna factor of calibrated antennas for various frequencies, to achieve accurate measurements of field strength.

This system is enclosed in a ruggedized easily transported enclosure, which contains the control computer, the receiver and rechargeable battery. It can be powered from three sources: Internal rechargeable batteries, a vehicle's 12V DC

power outlet or mains power. Leads to connect to mains and the vehicle power outlet are included. The enclosure features dual fans for cooling and built-in fuses protect system components. The GPS, receiver antenna and power connectors are easily accessible.

Sophisticated signal processing, demodulation and recording facilities are included in the comprehensive software package supplied with the system.

The PFSL-G3 system is designed for use by emergency service providers, communications providers, public safety, homeland security, law enforcement and defense authorities.

#### Receivers

WiNRADiO G313e or G315e receivers are at the heart of the PFSL-G3 systems, making it possible to achieve the necessary high level of integration. The receivers are designed to operate in the harsh electromagnetic environment existing inside a computer-based system.

#### PFSL-G3 Receiver Control Software

The PFSL-G3 receiver software contains numerous advanced features such as spectrum analysis (both RF and audio), scanning, many tuning options, memories and a rich on-line help facility:



#### PFSL-G3 Logger Control Software

The logger contains antenna factor calibration facilities, GPS display and control panel, signal strength meter with

signal or field strength displayed in user-selectable units, and log control.



## Technical Specifications

The following specifications refer to the standard PFSL-G3 models. These specifications are to be taken as a guide only as the exact types of the receivers and the computer configuration can all be customized to suit customer specific requirements.

	PFSL-G315/8600	0.009 - 8599 MHz, based on <a href="#">WR-G315e</a> receiver with the <a href="#">WR-AMFE-8600</a> frequency extension
	PFSL-G3XX	Application-specific customized solutions
Dimensions		Shipping size: 560mm x 440mm x 360mm Net size: 460mm x 330mm x 165mm
Weight		Shipping weight: 18kg Net weight: 11kg

Specifications are subject to change without notice due to continuous product development and improvement.

Computer	IBM Thinkpad lap-top PC (Please <a href="#">contact us</a> for specific options available.)	
Ordering code	PFSL-G313	0.009 - 30 MHz, based on <a href="#">WR-G313e</a> receiver
	PFSL-G313/180	0.009 - 180 MHz, based on <a href="#">WR-G313e</a> receiver with <a href="#">180 MHz extension</a>
	PFSL-G315	0.009 - 1800 MHz, based on <a href="#">WR-G315e</a> receiver
	PFSL-G315/3500	0.009 - 3500 MHz, based on <a href="#">WR-G315e</a> receiver with the <a href="#">WR-AMFE-3500</a> frequency extension



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