

# Seeker SPR

## Surface Penetrating Radar



 **USRADAR**

# COMPLETELY SELF-CONTAINED · PINPOINT ACCURACY · NON-DESTRUCTIVE

500 MHz Trackercart mounted



500 MHz Trackercart mounted with RGO rough terrain attachment



250 MHz Trackercart mounted



## SPOT

SPOT is a highly portable backpack system for high-resolution imaging of targets such as rebar, wire mesh, and conduits. It is completely self-contained including battery, charger, electronics, and mains power adapter. Available in 1000 MHz or 2000 MHz versions. On board screen makes for easy detection and mark-out of targets. On board memory and USB ports enable the operator to transfer data for further image processing or report building.



## 100 MHz

The 100 MHz antenna offers the deepest realistic penetration that this technology can offer. Capable of depths up to 100 feet (300 meters). The system incorporates a separate transmitter and receiver connected by pivoting assembly for greatest terrain ability.

1 GHz Trackercart mounted for scanning floors, slabs, and horizontal surfaces



1 GHz pole mounted for hard to reach and tight locations



2 GHz handheld



A wide range of custom solutions are available for applications in Engineering, Archaeology, Forensic and Law Enforcement, Environmental, Security, Search and Rescue



# Technical Specifications

## Radar Controller Computer

Processor:	x86
Radar Interface Card:	Proprietary
Memory:	SDRAM
Hard Disk(Program and Storage):	Ruggedized Solid State
Display"	10.4"Transflective Daylight Readable Color TFT LCD
Dimensions:	335mm x 235mm x 95mm
Weight:	5.0kg/11lb.
Power Supply:	10.5-18VDC @ 45W

## Control

Windows based full screen menu system using touchscreen interface. Optional use of full keyboard and mouse.

## I/O Provision

PS/2 MiniDIN Connector for Keyboard  
PS/2 MiniDIN Connector for Mouse  
Serial Port  
Radar Interface Port  
DC Power Port  
2 USB 2.0 Ports

## Software

Microsoft Windows  
Subsurface Imaging System/US Radar Control Software Including:  
System Configuration  
A Scan Display (Oscilloscope Mode)  
B Scan Display (Cross Sectional View)  
C Scan Display (Area Scan)  
Real Time Signal Processing  
Data Storage and Playback

## System Scan Modes

Logging scan rate of 250 scans per second typical with gain and remove average algorithms enabled.  
Trigger Modes: Free run, timed interval, shaft encoder  
Nominal Sampling Rate 1,000,000 samples per second  
Time Varying Gain Maximum 40dB

## Radar Head Electronics

Total System Dynamic Range:	>130 dB
Receiver Dynamic Range:	>90 dB
Time Range Minimum:	6.3 ns
Time Range Maximum:	820 ns
Pulse Repetition Time:	1us
Effective Bandwidth (typ):	3GHz
Dimensions:	290mm x 210mm x 85mm
Weight:	2kg / 4.4 lb

## System Environmental Specifications

Temperature:	-11 deg. to 50 deg. C
Humidity:	non condensing 0% to 90%
Seals:	IP 55

## Antennas

P-0250	250 MHz
Pulse duration (typ)	2.0 ns
Dimensions	560mm x 560mm x 270mm
Weight	6.0kg / 13.2 lb
P-0500	500 MHz
Pulse duration (typ)	0.9 ns
Dimensions	400mm x 400mm x 250mm
Weight	4kg / 8.8 lb
P-1000	1000 MHz (1 GHz)
Pulse duration (typ)	0.4 ns
Dimensions	200mm x 200mm x 95mm
Weight	2kg / 4.4 lb
Optional wall encoder	
May be used as handheld or cart mount	
P-2000	2000 MHz (2 GHz)
Pulse duration (typ)	0.2 ns
Dimensions	120mm x 120mm x 100mm
Weight	0.65kg / 1.43 lb
P-100	100 MHz (1 GHz)
2 separate pieces: transmitter, receiver	
Pulse duration (typ)	4 ns
Dimensions	800mm x 550mm x 162mm (ea.)
Weight	7.3kg / 16 lbs (ea.)

## Optional Equipment

Additional Battery Packs and Chargers  
33.3 ft. (10m), 83.3 ft. (25m) and 133.3 ft. (40m) data/control cables  
Remote Control Unit  
Rough Ground Trackercart Attachment  
Wall Shaft Encoder  
Thermal Printer

1 Year Parts and Labor Warranty with loaners at no charge during repair  
Unlimited telephone or email support at no charge  
*Up and Running First... Ask Questions Later* Loaner Component Program



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