Surface Penetrating Radar



COMPLETELY SELF-CONTAINED • PINPOINT ACCURACY • NON-DESTRUCTIVE

500 MHz Trackercart mounted



500 MHz Trackercart mounted with RGO rough terrain attachment



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.



· User-Friendly Touch Screen Operation · Easy to Navigate Settings

· Super Bright Daylight **Readable Screen** · Easiest to Read Data

· Balanced Trackercart · Most Maneuverable With Less Operator Fatigue

Most Durable, Greatest Run Time, Longest Lifetime Battery Packs

Field Rugged Dedicated **Controller Unit**

> Numerous User-Defined Processing Capabilities Built Right In. The Most Field-Ready System Available.

USB Port: Easy Connection to Various Peripherals

Robust Military Spec **Connectors and Cables**

> Optimized High Performance Antennas. Greatest Depths with Greatest Resolution

250 MHz Trackercart mounted





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



100 MHz

The 100 MHz antenna offers the deepest realistic penetration that this technology can offer. Capable of depths up to 100 feet (30 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 horzontal surfaces



1 GHz pole mounted for hard to reach and tight locations





Technical Specifications

Radar Controller Computer

Processor: Radar Interface Card: Memory: Hard Disk(Program and Storage): Display:

Dimensions: Weight: Power Supply:

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 Systems/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: Receiver Dynamic Range: Time Range Minimum: Time Range Maximum:

Pulse Repetition Time: Effective Bandwidth (typ): Dimensions: Weight:

1us 3GHz 290mm x 210mm x 85mm 2 kg / 4.4 lb.

>130 dB >90 dB

6.3 ns

820 ns

System Environmental Specifications

-11 deg. to 50 deg. C

IP 55

250 MHz

500 MHz

4 kg / 8.8 lb.

2kg / 4.4 lb.

1000 MHz (1 GHz)

2000MHz (2GHz)

0.65 kg/ 1.43 lb

0.9 ns

0.4 ns

0.2 ns

6.0 kg/ 13.2 lb.

2.0 ns

non condensing 0% to 90%

560mm x 560mm x 270mm

400mm x 400mm x 250mm

200mm x 200mm x 95mm

120mm x 120mm x 100mm

Temperature: Humidity: Seals:

Antennas P-0250 Pulse duration (typ) Dimensions Weight

P-0500 Pulse Duration (typ) Dimensions Weight:

P-100014Pulse Duration (typ)0.Dimensions24Weight21Optional wall encoder21May be used as handheld or cart mount

P-2000 Pulse Duration (typ.) Dimensions Weight

P-100100MHz (1GHz)2 separate pieces: transmitter, receiverPulse Duration (typ.)4 nsDimensions800mm x 550mm x 162mm (ea.)Weight7.3 kg/ 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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x86 Proprietary SDRAM Ruggerdized Solid State 10.4"Transflective Daylight Readable Color TFT LCD 335 mm x 235mm x 95mm 5.0kg/ 11 lb. 10.5-18VDC @ 45 W