



# 2450GR

## GROUND PENETRATING RADAR

An invaluable tool in utility mapping efforts, the **Subsite® 2450GR Ground Penetrating Radar System** will help you locate any type of utility conduit or piping—metallic or non-metallic, including PVC—beneath soil, rock, pavement, and other surfaces. The 2450GR's advanced locating capability makes it ideal for a wide range of other applications, including void and sinkhole detection, concrete detection, and locating underground storage tanks.



### KEY FEATURES

- ❖ Locates both metallic and non-metallic pipes and cables to allow one-pass locates at depths of up to 19.7 feet (6 m), depending on soil conditions and antenna selection.
- ❖ Earth-engaged antenna provides better contact on uneven terrain and reduces signal loss.
- ❖ With 5.6 mph (9 km/h) survey speed and digitally controlled radar, the 2450GR provides fast, clear images.
- ❖ The 2450GR folds up into a size that is easy to transport.
- ❖ Rugged, four-wheel cart design allows the operator to scan on any type of terrain.
- ❖ Dual-frequency antenna simultaneously sweeps in two frequencies; this allows you to see both deep and shallow objects simultaneously.



## 2450GR GROUND PENETRATING RADAR

The versatile 2450GR is ideal for a wide range of applications beyond accurate utility conduit and piping locating, making it a valuable addition to your crew.

### 2450GR GROUND PENETRATING RADAR SPECIFICATIONS

	U.S.	METRIC
<b>SYSTEM</b>		
Survey path width	19.68 in	500 mm
Recording channels	2	
Transmit pulse frequency	200 kHz	
Typical antenna frequency	250 and 700 MHz	
Typical collection speed (scans/second)	100	
Typical collection speed at 2-in (5-cm) sampling interval	5.6 mph	9 km/h
Display mode	Gray scale/color palette	
Zoom	Up to 4x	
Data storage	Laptop hard drive	
Profile length, max	Virtually unlimited	
Stored data format	Raw data (for further data analysis)	
Setting of GPR propagation velocity (to get accurate evaluation of depth of detected targets)	Ground truth or hyperbola fitting methods	
Reading of pipe position/depth	Software cursor	
System output	Printable radar map with descriptor of detected utilities	
Diagnostic	Radar and power supply status, excessive speed, data loss	
Languages	English, French, German, Spanish, Italian, Portuguese, Chinese	
Data collection type	Parallel profile lines, perpendicular to the expected orientation of utilities	

#### RADAR POWER REQUIREMENTS

Battery operating time	<10 hours	
Power supply	12V sealed lead acid, 12 Ah	
<b>Mechanical</b>		
Operating temperature	14-104°F	-10-40°C
Humidity	100% (sealed)	
Weight, w/out battery or PC	60.6 lb	27.5 kg
Weight, w/out PC	68.6 lb	31.1 kg
Weight, total	73.9 lb	33.5 kg
Width	21 in	533 mm
Length, handle fully extended	49.92 in	1.27 m
Length, folded	39.96 in	1.02 m
Height, handle fully extended	39.48 in	1 m
Height, folded	20.4 in	521 mm

	U.S.	METRIC
<b>DUAL FREQUENCY</b>		
Antenna technology	Ultra-wide band, ground coupled, shielded dipole	
Typical range	.32-8.2 ft	0.1-2.5 m
Range, max	.32-19.7 ft	0.1-6 m
<b>RECOMMENDED PC SPECIFICATIONS</b>		
Processor	1 GHz or faster	
RAM	512 MB or more	
Display resolution	800 x 600 or higher	
Hard drive	Shock proof or solid state	
Hard disk space	100 MB available	
Ethernet connection	100 Mbps	
USB connection	USB 2.0	
Operating system	Windows® 2000 Professional SP4, Windows® XP Professional or Windows® 7	

No software protecting data exchange (firewall protection, etc.)

Specifications are general and subject to change without notice. If exact measurements are required, equipment should be weighed and measured. Due to selected options, delivered equipment may not necessarily match that shown.