

# TerraSIRch

## Features

Rugged, lightweight, hand-held and very portable

High-resolution screen, easily readable in daylight

User accessible Compact Flash

Internal battery

USB, Ethernet, RS-232 ports for greater system flexibility

## Applications

Concrete and Rebar Inspection

Utility Mapping

Geological Investigation

Snow/Ice Thickness Measurement

Archaeology

Forensics / Law Enforcement

Research



## SIR-3000



The newest standard in non-destructive investigation of the earth and concrete.

The SIR-3000 is the newest GPR product from the world leader in Ground Penetrating Radar. This rugged, high-performance, single-channel radar system provides unrivaled scan rates with low noise.

This system is affordable, small and designed for easy single-user operation.

New features with future software upgrades:

- Easy 3D data collection (year end, 2002)
- Simple GPS data integration (Spring, 2003)



# SIR®-3000 System Specifications (Preliminary)

## System

**Antennas:** Compatible with all GSSI antennas

**Number of Channels:** 1 (one)

**Data Storage:**

Internal memory: 256 Mb Flash memory card

Compact Flash port: Accepts industry standard CF memory up to 1 GB (user provided).

**Processor:** 32-bit Intel StrongArm™ RISC processor @ 206 MHz

**Display:** Enhanced 8.4" TFT, 800 x 600 resolution, 64K colors

**Display Modes:** Line scan, O-scope

## Data Acquisition

**Data Format:** RADAN (dzt)

**Scan Rate Examples:**

300 scans/sec at 256 samples/scan

150 scans/sec at 512 samples/scan

**Sample size:** 8-bit or 16-bit, user-selectable

**Scan Interval:** User-selectable.

**Number of samples per scan:**

256, 512, 1024, 2048, 4096, 8192

**Operating Modes:**

Free run, survey wheel, point mode

**Time Range:**

0-8,000 nanoseconds full scale, user-selectable.

Gain: Manual or automatic, 1-5 gain points (-20 to +80 dB)

**Filters:**

Vertical: Low-Pass and High-Pass IIR and FIR

Horizontal: Stacking, Background Removal

## Operating

**Operating Temperature:**

-10°C to 40°C ambient (preliminary)

**Charging Power Requirements:**

15 V DC, 4 amps

**Battery:** 10.8 V DC, internal.

**Transmit Rate:** Up to 192 KHz

## Input/Output

**Available Ports:**

Antenna input

DC power input

Ethernet Input/Output

RS232 (GPS port)

Compact Flash memory

USB master/slave

## Mechanical

**Dimensions:**

31.5 (L) x 22 (W) x 10.5 (H) cm

12.4" x 8.7" x 4.1"

**Weight:** 4.1 kg, (9 lbs) including battery

**Environmental:** Water resistant

## System Includes:

SIR-3000 data acquisition system

Transit case

2 batteries

AC adapter

User manual

Carrying harness (optional)

Sunshade (optional)

**Antennas and antenna control cables sold separately.**

**Fully FCC Compliant**



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