RIS One & RIS Plus
The versatile ground penetrating radar solution for subsurface profiling

A configurable system combining an unsurpassed multi-channel radar controller with a large range of compact and lightweight single and dual frequency antennas

IDS GeoRadar: The Leader in Multi-frequency and Multi-channel Ground Penetrating Radar
www.idsgeoradar.com
RIS One & RIS Plus

The RIS One & RIS Plus system represents a versatile approach to the professional requirements of subsurface profiling. The system meets a wide range of needs with a large variety of antennas which can be set up in either a single or multi-channel configuration with a number of single or dual frequency antennas in a chain connection. Applications that RIS One & RIS Plus can be used for, include:

- Underground tunnel inspection and condition assessment
- Bedrock and lithological profiling
- Fracture characterization
- Ground water profiling
- Foundation and pile measurements
- Borehole investigations
- Snow and ice thickness measurements.
- River bed profiling

**RIS ONE & RIS PLUS BENEFITS**

- Compact and lightweight antennas
- Excellent data quality
- Highest flexibility in multi-channel chain connection
- High stacking thereby improving penetration depth
- Wireless link to keep track of the survey path and the location of buried objects

**RIS ONE & RIS PLUS FEATURES**

- **The largest range of antennas in the ground penetrating radar arena:** IDS GeoRadar have a comprehensive set of antennas from 25 MHz to 3 GHz, including multi-frequency, borehole and horn antennas ensuring that the right equipment is available for the right application.

- **More than 8 hours of autonomous use:** IDS GeoRadar’s radar control unit has the lowest power consumption in the ground penetrating radar market.

- **Flexible:** The multi-channel DAD control unit can drive any IDS GeoRadar antenna and up to 8 antennas in a chain connection simultaneously enabling the use of custom configurations.
RIS One & RIS Plus Configuration

RIS One & RIS Plus is a configurable system driven by a single or multi-channel DAD FastWave control unit providing a high stacking factor which enables an increased acquisition speed and improved penetration depth. A large range of antennas is available from 25 MHz to 3 GHz including multi-frequency and borehole antennas. Up to 8 antennas or 4 dual frequency antennas can be powered by a single control unit and a cluster of 4 control units can be used to power up to 32 antennas. A variety of survey kits is available, from backpacks to trolleys, for operations in all kinds of environmental conditions.

**Single Frequency Antennas**
- TR80*
- TR100*
- TR600 FW*
- TR200*
- TR400*
- TR600*
- TR600 V*
- TR900*
- TRHF
- TRSHF*
- TR BIP 2GHz

**Array Antennas**
- DML200
- DML600
- DUAL F 200-600
- DUAL F 400-900

**Horn Antennas**
- HR1000*
- HR2000

**Recommended Laptop**
- Panasonic CF-19 Tough-Book

**Software Specifications**
- GRED HD basic
- GRED HD 3D
- Tomographic map view (C-Scan) including radar scan fusion
- 3D data visualization
- Advanced targeting using radarscan and tomographic view
- Radarscan viewer, filter and advanced filtering macros, multiple radarscan viewer
- Layer picking for automatic analysis of sub-layers
- GPS and map track viewer including X, Y and Z axis and digital map importation
- Video handling (option)

**System Specifications**
- **Recommended Laptop:** Panasonic CF-19 Tough-Book
- **Max. Acquisition Speed:** Depends on the number of antennas and scan rate
- **Power Consumption:** Depends on the configuration, from 10 W to 40 W
- **Positioning:** Survey wheel and/or GPS or total station
- **Number of Control Units:** From 1 to 4
- **Collection Speed:** Depends on the number of antennas
- **Scan Interval:** Depends on the number of antennas
- **Power Supply:** SLA Battery 12 VDC 12 AH

**Antenna Specifications**
- **Environmental:** IP65
- **Antenna Footprint:** Depends on the antenna
- **Number of Hardware Channels:** 8 or 32 with a cluster of 4 DAD MCH
- **Antenna Center Frequencies:** From 25 MHz to 3 GHz
- **Certification:** Depends on the antenna

* This antenna is not FCC or IC approved for use in the USA or Canada.