Opera Duo

First class underground surveys

Dual frequency antenna lets you see shallower as well as deeper targets. Advanced GPS integration allows you to perform professional surveys. New design and parts make it practically indestructible. ALL THESE FEATURES IN THE MOST INTUITIVE GROUND PENETRATING RADAR EVER.

IDS Ingegneria Dei Sistemi S.p.A.

GeoRadar Division, Via Enrica Calabresi 24, 56121 Pisa (PI) Italy Tel. +39 050 31241 Fax +39 050 3124201 georadarsales@idscorporation.com

IDS Brasil Engenharia de Sistemas Ltda.

Av. Paulista, 2300L, Andar Pilotis, CEP 01310-300 São Paulo - SP / Brasil Tel. +55 11 3060 9364 Fax +55 11 3060 9364 idsbr@idscorporation.com

IDS Brasil Engenharia de Sistemas Ltda. Belo Horizonte

Av. Prof. Mario Werneck, 26 Conjto 503 Belo Horizonte - MG, Brazil, CEP 30455-610 Tel. +55 31 3286 1195 Fax +55 31 3286 1195 idsbr@idscorporation.com

IDS North America Ltd.

155 Terence Matthews Cres. Ottawa, Ontario K2M 2A8 Canada Tel. +1 613 591-0500 Fax +1 613 591-0981 idsna@idscorporation.com

IDSNA, Inc.

14828 W 6th Ave., Suite 12-B, Golden, CO 80401, USA Phone: + 1 303 232 3047 Fax: + 1 720 519 1087 idsna@idscorporation.com

IDS Australasia Pty Ltd.

Unit 5, 3-5 Hinkler Court, Brendale, Queensland, Australia, 4500 Tel. +61 7 3205 5524 Fax 61 7 3205 5536 idsau@idscorporation.com

IDS Australasia Pty Ltd, Perth

Unit 8, 3 La Fayette Boulevard, Bibra Lake, Western Australia, Australia 6163 Tel: +61 8 9418 8719 Fax: +61 7 320 55536 idsau@idscorporation.com

14_REV_1.19



IDS Ingegneria Dei Sistemi S.p.A.

Via Enrica Calabresi 24, 56121 Pisa (PI) Italy Tel. +39 050 31241 Fax +39 050 3124201 ids@idscorporation.com www.idscorporation.com



IDS: The leader in multi-frequency and multi-channel **Ground Penetrating Radar**



Opera Duo GEORADAR DIVISION

Opera Duo Features



Superior maneuverability

A large, comfortable handle to make pushing and pulling easier, large wheels for better control and a balanced weight distribution to offer the minimum resistance.



Robust

Engineered and built to withstand the harshest field conditions, the Opera Duo is suitable for heavy use in every type of terrain.



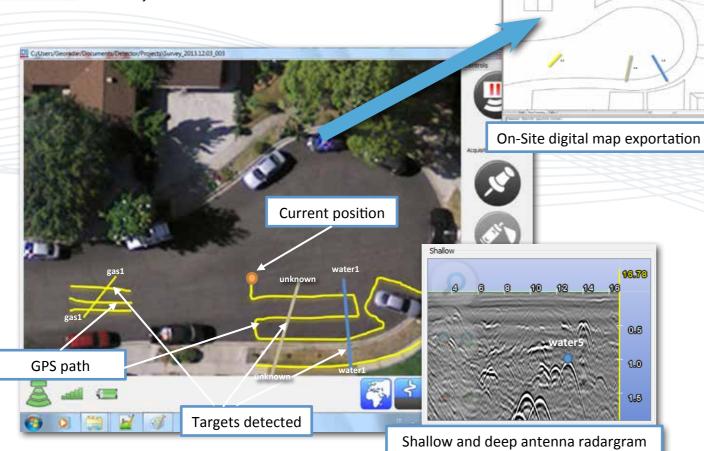
Easy to use

Opera Duo uses an intuitive interface. Just click the start button to receive the best performance in every soil condition. There is no longer a need to perform calibration or adjust any other manual settings.



Results delivered on site

IDS's proprietary solution tracks the position of the radar and marks targets automatically. All of the acquired data can be exported to CAD and a report can be produced directly on site.





Spray marker kit



Easy to transport, foldable trolley

Pivoting head provides better contact on uneven terrain and reduces signal loss Remote controlled spray paint in order to mark your findings Dual-frequency antenna to locate deep and shallow targets simultaneously Dedicated pole mounted GPS kit

SYSTEM SPECIFICATIONS

OVERALL WEIGHT (PC AND BATTERY NOT INCLUDED):	24 kg two wheels (53 lbs) 27 kg four wheels (59 lbs)
RECOMMENDED LAPTOP:	Panasonic CF-H2
MAX. ACQUISTION SPEED:	more than 10 kph (6 mph)
POWER CONSUMPTION:	13.3 W
POSITIONING:	2 integrated encoders and/or GPS - Total station
SCAN RATE PER CHANNEL (@512 SAMPLES/SCAN):	381 scans/sec
SCAN INTERVAL:	42 scans/m

POWER SURPLY: SLA Battery 12VDC 12 AH

POWER SUPPLI.		
ANTENNA SPECIFICATIONS		
ENVIRONMENTAL:	IP65	
ANTENNA FOOTPRINT:	40 x 50 cm	
NUMBER OF HARDWARE CHANNELS:	2	
ANTENNA CENTRAL FREQUENCIES:	250 MHz and 700 MHz	
ANTENNA ORIENTATION:	Perpendicular, broadside	
SAMPLING FREQUENCY:	400 kHz	



Large handle for enhanced maneuverability

SOFTWARE SPECIFICATIONS

 Automatic calibration for an easy and quick start-up

No exposed cables, providing peace of mind assurance of no

ruptures in the field

- Metric and imperial units
- Visualization and storage of data from both antennas
- Capability to mark targets and pipes in the software and in the ground
- Available in more than 20 languages
- Connection for an NMEA positioning device
- Export to CAD

OPERA DUO

SOFTWARE

ACQUISITION

- Export job reports
- Advanced grid acquisition procedure

