

BOREHOLE/CROSSHOLE SYSTEM FOR DEEP GPR SURVEYS



Borehole radar is based on the same principles as ground penetrating radar systems for surface use. Borehole system can be used in several different modes: reflection, cross-hole, surface-to-borehole and directional mode. The surveys can be done with two available antenna frequencies; 100 and 250MHz.

Applications:

- Geological investigations
- Engineering investigations
- Environmental investigations
- Hydropower dams investigations
- Fracture detection
- Cavity detection
- Certified area investigation
- Salt layers investigations



TECHNICAL SPECIFICATIONS

SPECIFICATION FOR ALL ANTENNAS

- . Pulse repetition frequency 100khz
- . A/D-converter 16 bit
- . Temperature range -10 - +50 c.
- . Optical connectors lemo/st
- . Maximum depth 150m in standard mode, 2500m in deep mode

100 MHz ANTENNA	
TRANSMITTER	
Diameter	40mm
Length	1,89 m, incl. batteries
Weight	3,3 kg
Length of antenna element	0,426m (each side)
Power consumption	0,3a 7,4v
Battery	7,4v 6,4ah Li-jon
Nominal centre frequency	100 MHz
Operating time	21 hours
RECEIVER	
Diameter	40mm
Length	1,76 m, internal batteries
Weight	3,6 kg
Length of antenna element	0,426m (each side)
Power consumption	0,75a 7,4v
Battery	7,4v 6,4ah Li-jon
Preamplifier	18 db
Total amplification	~29 db
Theoretical dynamic area	96db (16 bit)
Nominal centre frequency	100 MHz
Operating time	7,6 hours

