

Geoscanners AB®



# LLD702

The LLD702 is a long line driver for GSSI SIR® ground penetrating radar systems with low drive capacity. Radar systems such as the SIR3000 can drive cables with lengths up to 30 meters only, but with the aid of the LLD702 cables of in excess of 100 meters can be safely operated.

### **ELECTRICAL SPECIFICATIONS:**

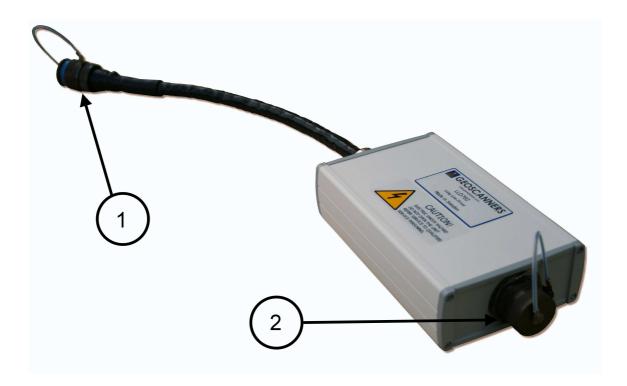
Power Consumption (Low Voltage)	120 mW
Power Consumption at 100 kHz PRF (HV)	0.9 W
Output TX Trigger Peak Voltage	80 V
Output RX Trigger Peak Voltage	80 V
TX Trigger rise time	1.25 ns
RX Trigger rise time	1.25 ns
AF gain	6 dB

# MECHANICAL SPECIFICATIONS:

Dimensions (LxWxH) mm/inch	175x106x45 (mm)/ 6.9x4.1x1.7 (inch)
Weight Kg/Lbs	0.6 kg/ 1.32 Lbs
Ingress Protection Rating	IP51

# **ENVIRONMENTAL SPECIFICATIONS:**

Maximum Temperature °C / °F	+40 °C / +104 °F
Minimum Temperature °C / °F	-10 °C / +14 °F
Maximum Humidity (non-condensing)	96% RH
RoHS Compliant	YES



## **OPERATING INSTRUCTIONS:**

- 1. Connect the control cable (1) from the LLD702 to the radar control unit.
- 2. Connect the antenna control cable to the LLD701 output (2).
- 3. Attach the antenna control cable to the antenna intended for operation.
- 4. Turn on the radar unit and proceed with the survey.

# CABLE TYPE AND OPERATING CABLE LENGTH

The long line driver LLD702 was designed to be operated with control cables using coax cables of the type RG58 for the triggering pulses. For that type of cables the attenuation is approximately 17 dB/100m and the capacitance around 10nF/100m. With those specifications it is possible to run cables up to 150 meters with the existing hardware from Geoscanners AB, Radarteam Sweden AB and GSSI without modifications. If another type of cable is used, for instance RG174 or RG316U, with higher attenuation and capacitance then the maximum operating length will be reduced accordingly.

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