

# **ProEx System**

**GROUND PENETRATING RADAR** 

The most versatile GPR system on the market

MALÅ ProEx is a versatile, full range, ground penetrating radar system that is supporting an application range no other ground penetrating radar system can match. The design and the technical specifications of the MALÅ ProEx Control Unit makes it the most versatile control unit on the market. The solution is aimed at the professional GPR user and for all applications.

The MALÅ ProEx System is compatible with a broad range of MALÅ ProEx Ground Penetrating Radar Antennas and offers a flexible approach for any type of GPR survey. The system is modular and can be used for single- and multi-channel measurements. In the basic configuration the solution supports simultaneous data collection from two antenna pairs. Using the ProEx expansion units, the system can support up to 8 antennas. Furthermore, the ProEx MIRA extension is supporting 31 antenna pairs. Cross-communication between different antenna pairs is also possible.

# MALÅ ProEx Control unit

**Power supply** Li-lon 12V battery

**Operating time** 5 h nominal, depending on configuration

**Operating temperature**  $-20^{\circ}$  to  $+50^{\circ}$ C /  $0^{\circ}$  to  $120^{\circ}$ F

Environmental IP65

**Dimensions** 32.5 x 22.2 x 4.2 cm

Weight 1.9 kg

Antennas MALÅ Antennas ranging from 30 MHz - 2.3 GHz

**Pulse repetition freq.** 100, 200 kHz, not interleaved

Data bits 16

Max Nr. of samples/trace2048 (Standard), 8192 (Extended)Nr. of stacks1 - 32 768\* and auto stacking

Samplings frequency 0.2 - >400 GHz

Signal stability<70 ps</th>Communication interfaceEthernetCommunication speed100 Mbit/s

Data transfer rateAntenna dependentAcquisition modesDistance/time/manual

**Wheel inputs** 1 master, 1 for each High Frequency-unit

\*The ProEx hardware supports 32768 stacks. To avoid customer inconvenience, MALÅ XV Monitor software supports a maximum of 512 stacks and GroundVision 2 supports a maximum of 256 stacks in normal mode. In case more stacks are needed, please talk to your local Guideline Geo representative for more information.

# MALÅ XV Monitor

**Power supply** Li-Ion 12V battery or other external source (9-18 V)

**Operating time** 5 h nominal (12V battery)

Operating temperature -20° to +50°C

Environmental IP65

**Dimensions** 32.6 x 21.5 x 5.2 cm (with protruding details 8.6 cm)

Weight 2.6 kg

Antennas Compatible with full range of MALÅ Antennas from 30 MHz - 2.3 GHz <sup>1</sup>

**Communications** Ethernet 100Mb/s

Display Color backlit TFT LCD (640 x 480 pixels), trans-reflective





### MALA ProEx Modules

#### MALÅ ProEx Optical Module

The MALÅ ProEx Optical Module allows the connection of all MALÅ GPR antennas that utilize an optical interface. This includes MALÅ Shielded, RTA and Borehole antennas.

# MALÅ ProEx High Frequency (HF) Module The MALÅ ProEx High Frequency (HF) Module allows the connection of the MALÅ HF Antennas

including those with EM-option.

### MALÅ ProEx Coax Module

The MALÅ ProEx Coax Module is used for MALÅ Separable Shielded Antennas (separable Tx and Rx) and for customized solutions, including third-party products.

## **Options ProEx**

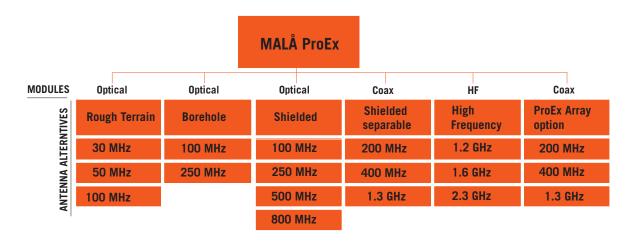
ProEx Expansion Unit ProEx MIRA Array extension Backpack or Backpack soft Monitor/PC holder MALÅ RoadCart MALÅ Rough terrain cart (RTC) HipChain encoder

Distance measuring wheel diameter (mm): 300 /150

Measuring Wheel HF antennas MALÅ HF Cart (Large & Small) Extension handle for HF antennas Towing belt for RTA antennas

Tripod with Mechanical Depth Encoder or Digital Depth Encoder for MALA Borehole antennas

# MALA ProEx antennas



# GUIDELINEGEO ABEM MALA