

## **Ground Explorer (GX)**

**GROUND PENETRATING RADAR** 

GPR with exceptional range and resolution

# **Technical Specification**

MALÅ GroundExplorer (GX) is an integrated GPR solution with four MALÅ GX antenna options: GX80, GX160, GX450 and GX750. MALÅ GX provides an easyto-use GPR solution on a rugged platform with significantly faster data acquisition rates, outstanding signal-to-noise ratio and depth penetration.

### Tablet

Acquisition platform Processing platform

MALÅ Controller App MAL<sup>Å</sup> Vision Recommended tablet Samsung Galaxy Tab Active Pro 4G

## **MALÅ GX Controller**

Processor Display OS Memory Data output Comms GPS

Power supply

Charger

**Power consumption Operating time** Dimensions

Weight **Operating temp** Environmental

#### **GX WIFI OPTION**

Wireless standard: Power consumption: 1.6 GHz Intel Atom 1024 x 768 mm Linux 32 MB compact Flash memory 32 bit Ethernet, WiFi (optional), USB 3.0, RS232 (serial) Integrated support for built-in GPS, or external GPS via USB/serial port (NMEA 0183 protocol) Internal 12 V/20.8 Ah Li-Ion battery, or any external 10-15 V DC source Internal. Unit can also be charged from any external 12 - 15 V DC source 1.3 – 2.0 A 8 – 10 h 326 x 216 x 92 mm including handles 326 x 216 x 52 mm excluding handles 3.23 kg - 20° to + 50° C or 0° to 120° F IP 65

IEEE802.11 g 0.3 A



### MALÅ GX Antennas

Environmental

MALÅ GX750 HDR	MALÅ Semi-Real-Time
Technology	750 MHz
Antenna center freq	97 dB
SNR	> 1290, time window 75 ns
Scans/second	460 [km/h] point distance 10 cm
Survey speed	120 %, fractional, -10 dB
Bandwidth	75 ns
Time window	Built-in DGPS, external GPS
Positioning	(NMEA 0183 protocol),
Operating time Power supply Power consumption Acq. Mode Dimensions Weight Operating temp ADC Clock Frequency Environmental	wheel encoder 5 h Interchangeable 12 V Li-Ion batt. or ext. 12 V DC source 1.3 A Wheel, time or manual 375 x 235 x 170 mm 3.6 kg - 20° to + 50° C or 0° to 120° F 160 MHz IP 65

#### MALÅ GX450 HDR

Technology Antenna center freq SNR Scans/second Survey speed Time window **Bandwidth** Positioning **Operating time** Power supply Power consumption Acq. Mode Dimensions Weight **Operating temp** ADC Clock Frequency Environmental

MALÅ Semi-Real-Time 450 MHz 101 dB > 770, time window 300 ns 275 [km/h] point distance 10 cm 300 ns >120 %, fractional, -10 dB Inbuilt DGPS, external GPS (NMEA 0183 protocol), wheel encoder 5 h Interchangeable 12 V Li-Ion batt. or ext. 12 V DC source 13A Wheel, time or manual 430 x 360 x 180 mm 5.5 kg - 20° to + 50° C or 0° to 120° F 160 MHz IP 65

#### MALÅ GX160 HDR Technology MALÅ Semi-Real-Time 160 MHz Antenna center freq > 107 dB SNR Scans/second > 880, time window 625 ns Survey speed 320 [km/h] point distance 10 cm Time window 625 ns Bandwidth > 120 %, fractional, -10 dB Positioning Inbuilt DGPS, external GPS (NMEA 0183 protocol), wheel encoder **Operating time** 5 h Power supply Interchangeable 12 V Li-Ion batt. or ext. 12 V DC source Power consumption 1.3 A Wheel, time or manual Acq. Mode Dimensions 720 x 480 x 190 mm Weight 10.7 kg - 20° to + 50° C or 0° to 120° F **Operating temp ADC Clock Frequency** 160 MHz

IP 65

#### MALÅ GX80 HDR

Technology MALÅ Semi-Real-Time 80 MHz Antenna center freq SNR > 114.4 dB Scans/second > 1200, time window 812 ns Survey speed 430 [km/h] point distance 10 cm Time window 812 ns **Bandwidth** > 120 %, fractional, -10 dB Positioning Built-in DGPS, external GPS (NMEA 0183 protocol), wheel encoder **Operating time** 5 h Power supply Interchangeable 12 V Li-Ion batt. or ext. 12 V DC source Power consumption 1.3 A Wheel, time or manual Acq. Mode Dimensions 1010 x 780 x 220 mm Weight 24,6 kg - 20° to + 50° C or 0° to 120° F **Operating temp ADC Clock Frequency** 160 MHz Environmental IP 65

### GUIDELINEGEO ABEM MALÂ

GUIDELINE GEO has been in the geophysics business since 1923 and is the global leader in near-surface geotechnology. Our advanced technology ensures practical solutions to everyday, societal, and global problems. We deliver total solutions in the technological fields of ground penetrating radar, seismic, geoelectrical and electromagnetic measurement. The Guideline Geo AB share (GGEO) is listed on Nasdaq First North Growth Market. We are a Swedish company with international offices and regional partners serving clients in over 100 countries.