

# MALÅ GroundExplorer

## GROUND PENETRATING RADAR

GPR with exceptional range and resolution

## Technical Specifications

MALÅ HDR (High Dynamic Range) technology is the result of a unique development that represents a giant leap forward for GPR products and solutions.

MALÅ PRODUCTS BUILT with HDR technology deliver unprecedented data quality and performance. With their exceptional bandwidth and high dynamic range, MALÅ GroundExplorer and other HDR enabled products will deliver far better results than conventional GPR solutions.

### MALÅ GX CONTROLLER

Processor	1.6 GHz Intel Atom
Display	1024 x 768
Operating System	Linux
Memory	8 GB compact Flash memory
Data output resolution	32 bits
Communication ports	Ethernet, WiFi (optional), USB 3.0, RS232 (serial)
GPS	Integrated support for built-in GPS, or external GPS via USB / serial port (NMEA 0183 protocol)
Power supply	Internal 12 V / 20.8 ah Li-Ion battery, or any external 10-15 V DC source
Charger	Internal, unit can also be charged from any external 12 - 15 V DC source
Power consumption	1.3 – 2.0 A
Operating time	8 – 10 h
Dimensions	430 x 360 x 180 mm including handles
Weight	3.2 kg
Operating temperature	-20° to +50° C / 0° to 120° F
Environmental	IP 65

#### GX WIFI OPTION

Wireless standard:	IEEE 802.11g
Power consumption:	0.3 A



# MALÅ GX ANTENNAS

## MALÅ GX750 HDR

<b>Technology</b>	MALÅ Semi-Real-Time, pat. pend.
<b>Antenna center freq.</b>	750 MHz
<b>SNR</b>	97 dB
<b>Significant/useful number of bits</b>	16 bits
<b>Scans/second</b>	> 1290, time window 75 ns
<b>Survey speed</b>	460 [km/h] point distance 10 cm
<b>Bandwidth</b>	120%, fractional, -10 dB
<b>Time window</b>	75 ns
<b>Positioning</b>	Built-in DGPS, external GPS (NMEA 0183 protocol), wheel encoder
<b>Operating time</b>	5 h
<b>Power supply</b>	Interchangeable 12 V Li-Ion batt. or ext. 12 V DC source
<b>Power consumption</b>	1.3 A
<b>Acq. Mode</b>	Wheel, time or manual
<b>Dimensions</b>	375 x 235 x 170 mm
<b>Weight</b>	3.6 kg
<b>Operating temp.</b>	-20° to +50° C / 0° to 120° F
<b>Environmental</b>	IP65

## MALÅ GX450 HDR

<b>Technology</b>	MALÅ Semi-Real-Time, pat. pend.
<b>Antenna center freq.</b>	450 MHz
<b>SNR</b>	101 dB
<b>Significant/useful number of bits</b>	> 16 bits
<b>Scans/second</b>	> 770, time window 300 ns
<b>Survey speed</b>	275 [km/h] point distance 10 cm
<b>Time window</b>	300 ns
<b>Bandwidth</b>	>120%, fractional, -10 dB
<b>Positioning</b>	Inbuilt DGPS, external GPS (NMEA 0183 protocol), wheel encoder
<b>Operating time</b>	5 h
<b>Power supply</b>	Interchangeable 12 V Li-Ion batt. or ext. 12 V DC source
<b>Power consumption</b>	1.3 A
<b>Acq. Mode</b>	Wheel, time or manual
<b>Dimensions</b>	430 x 360 x 180 mm
<b>Weight</b>	5.5 kg
<b>Operating temp.</b>	-20° to +50° C / 0° to 120° F
<b>Environmental</b>	IP65

## MALÅ GX160 HDR

<b>Technology</b>	MALÅ Semi-Real-Time, pat. pend.
<b>Antenna center freq.</b>	160 MHz
<b>SNR</b>	> 107 dB
<b>Significant/useful number of bits</b>	> 17 bits
<b>Scans/second</b>	> 880, time window 625 ns
<b>Survey speed</b>	320 [km/h] point distance 10 cm
<b>Time window</b>	625 ns
<b>Bandwidth</b>	>120%, fractional, -10 dB
<b>Positioning</b>	Inbuilt DGPS, external GPS (NMEA 0183 protocol), wheel encoder
<b>Operating time</b>	5 h
<b>Power supply</b>	Interchangeable 12 V Li-Ion batt. or ext. 12 V DC source
<b>Power consumption</b>	1.3 A
<b>Acq. Mode</b>	Wheel, time or manual
<b>Dimensions</b>	720 x 480 x 190 mm
<b>Weight</b>	10.7 kg
<b>Operating temp.</b>	-20° to +50° C / 0° to 120° F
<b>Environmental</b>	IP65

## MALÅ GX80 HDR

<b>Technology</b>	MALÅ Semi-Real-Time, pat. pend.
<b>Antenna center freq.</b>	80 MHz
<b>SNR</b>	> 114.4 dB
<b>Significant/useful number of bits</b>	> 19 bits
<b>Scans/second</b>	> 1200, time window 812 ns
<b>Survey speed</b>	430 [km/h] point distance 10 cm
<b>Time window</b>	812 ns
<b>Bandwidth</b>	>120%, fractional, -10 dB
<b>Positioning</b>	Built-in DGPS, external GPS (NMEA 0183 protocol), wheel encoder
<b>Operating time</b>	5 h
<b>Power supply</b>	Interchangeable 12 V Li-Ion batt. or ext. 12 V DC source
<b>Power consumption</b>	1.3 A
<b>Acq. Mode</b>	Wheel, time or manual
<b>Dimensions</b>	1010 x 780 x 220 mm
<b>Weight</b>	24,6 kg
<b>Operating temp.</b>	-20° to +50° C / 0° to 120° F
<b>Environmental</b>	IP65

## ABEM | MALÅ *Part of the Guideline Geo success story*

*Guideline Geo – has been in the geophysics business since 1923 and is the global leader in near-surface geotechnology. Advanced technology ensures practical solutions to everyday, societal and global problems. We deliver total solutions in the technological fields of ground penetrating radar, geoelectrical and electromagnetic measurement, and seismics. The Guideline Geo AB share (GGEO) is listed on NGM Equity. Our offices and regional partners serve clients in 113 countries.*