

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 easy-to-use GPR solution on a rugged platform with significantly faster data acquisition rates, outstanding signal-to-noise ratio and depth penetration.

Tablet

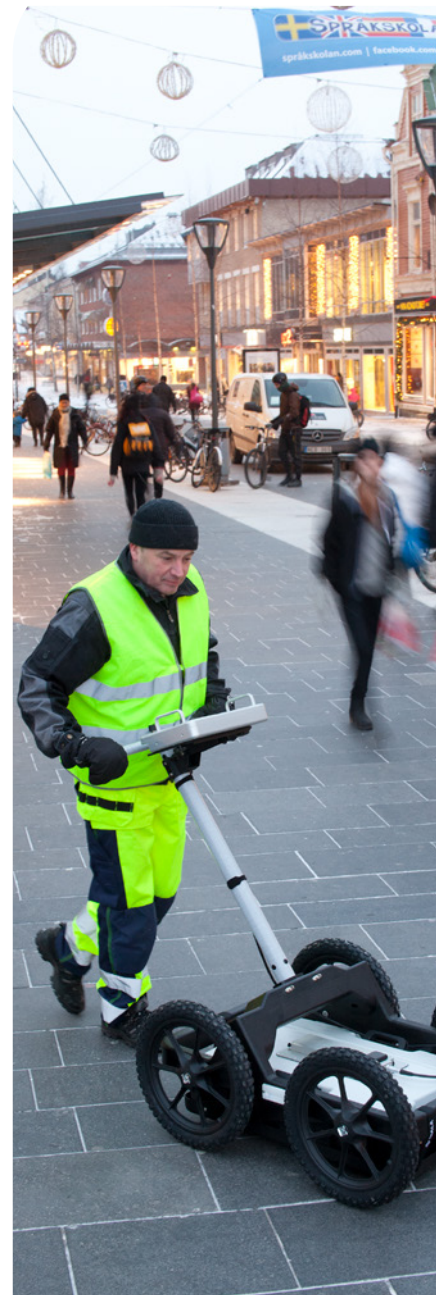
Acquisition platform	MALÅ Controller App
Processing platform	MALÅ Vision
Recommended tablet	Samsung Galaxy Tab Active Pro 4G

MALÅ GX Controller

Processor	1.6 GHz Intel Atom
Display	1024 x 768 mm
OS	Linux
Memory	8 GB compact Flash memory
Data output	32 bit
Comms	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	326 x 216 x 92 mm including handles 326 x 216 x 52 mm excluding handles
Weight	3.23 kg
Operating temp	- 20° to + 50° C or 0° to 120° F
Environmental	IP 65

GX WIFI OPTION

Wireless standard:	IEEE802.11 g
Power consumption:	0,3 A



MALÅ GX Antennas

MALÅ GX750 HDR

Technology	MALÅ Semi-Real-Time
Antenna center freq	750 MHz
SNR	97 dB
Scans/second	> 1290, time window 75 ns
Survey speed	460 [km/h] point distance 10 cm
Bandwidth	120 %, fractional, -10 dB
Time window	75 ns
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
Acq. Mode	Wheel, time or manual
Dimensions	375 x 235 x 170 mm
Weight	3.6 kg
Operating temp	- 20° to + 50° C or 0° to 120° F
ADC Clock Frequency	160 MHz
Environmental	IP 65

MALÅ GX450 HDR

Technology	MALÅ Semi-Real-Time
Antenna center freq	450 MHz
SNR	101 dB
Scans/second	> 770, time window 300 ns
Survey speed	275 [km/h] point distance 10 cm
Time window	300 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
Acq. Mode	Wheel, time or manual
Dimensions	430 x 360 x 180 mm
Weight	5.5 kg
Operating temp	- 20° to + 50° C or 0° to 120° F
ADC Clock Frequency	160 MHz
Environmental	IP 65

MALÅ GX160 HDR

Technology	MALÅ Semi-Real-Time
Antenna center freq	160 MHz
SNR	> 107 dB
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
Acq. Mode	Wheel, time or manual
Dimensions	720 x 480 x 190 mm
Weight	10.7 kg
Operating temp	- 20° to + 50° C or 0° to 120° F
ADC Clock Frequency	160 MHz
Environmental	IP 65

MALÅ GX80 HDR

Technology	MALÅ Semi-Real-Time
Antenna center freq	80 MHz
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
Acq. Mode	Wheel, time or manual
Dimensions	1010 x 780 x 220 mm
Weight	24,6 kg
Operating temp	- 20° to + 50° C or 0° to 120° F
ADC Clock Frequency	160 MHz
Environmental	IP 65