

MALÅ GroundExplorer

GROUND PENETRATING RADAR

GPR with exceptional range and resolution

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.

MALÅ GX CONTROLLER

Processor	1.6 GHz Intel Atom
Display	1024 x 768 mm
OS	Linux
Memory	8 GB compact Flash memory
Data output resolution	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 pat pending
Antenna center freq	750 MHz
SNR	97 dB
Significant/useful number of bits	16 bit
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
Environmental	IP 65

MALÅ GX450 HDR

Technology	MALÅ Semi-Real-Time pat pending
Antenna center freq	450 MHz
SNR	101 dB
Significant/useful number of bits	> 16 bit
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
Environmental	IP 65

MALÅ GX160 HDR

Technology	MALÅ Semi-Real-Time pat pending
Antenna center freq	160 MHz
SNR	> 107 dB
Significant/useful number of bits	> 17 bit
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
Environmental	IP 65

MALÅ GX80 HDR

Technology	MALÅ Semi-Real-Time pat pending
Antenna center freq	80 MHz
SNR	> 114.4 dB
Significant/useful number of bits	> 19 bit
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
Environmental	IP 65