

## **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 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 5G

## **MALÅ GX Controller**

Processor 1.6 GHz Intel Atom Display 1024 x 768 mm

**OS** Linux

Memory 32 MB 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) Internal 12 V/20.8 Ah Li-Ion battery,

Power supply 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

 $\begin{array}{lll} \mbox{Power consumption} & 1.3-2.0 \mbox{ A} \\ \mbox{Operating time} & 8-10 \mbox{ h} \end{array}$ 

**Dimensions** 326 x 216 x 92 mm including handles 326 x 216 x 52 mm excluding handles

3.23 kg

Operating temp  $-20^{\circ}$  to  $+50^{\circ}$  C or  $0^{\circ}$  to  $120^{\circ}$  F

Environmental IP 65

**GX WIFI OPTION** 

Charger

Weight

Wireless standard: IEEE802.11 g

Power consumption: 0,3 A



### MALÅ GX Antennas

MALÅ GX750 HDR

MALÅ HDR Real-Time sampling

**Technology** Antenna center freq 750 MHz **SNR** 97 dB Time window 75 ns

**Bandwidth** 120 %, fractional, -10 dB **Positioning** RTK GNSS (option), GPS Time Synchronization (PPS), DGNSS, mobile device positioning, encoder,

Total station support

Operating time 6 h

Power supply Interchangeable 12 V

Li-Ion batt. or ext. 12 V DC source

Power consumption

Acq. Mode Encoder wheel, time, manual or

MALA Motion Trig\*

**Dimensions** 375 x 235 x 170 mm Weight 3.6 kg (~7.94 lb)

Operating temp - 20° to + 50° C or 0° to 120° F

Environmental

MALÅ GX450 HDR

**Technology** MALÅ HDR Real-Time sampling

Antenna center freq 450 MHz **SNR** 101 dB Time window 300 ns

**Bandwidth** 120 %, fractional, -10 dB **Positioning** RTK GNSS (option), GPS Time Synchronization (PPS), DGNSS,

mobile device positioning, encoder,

Total station support

Operating time 6 h

Power supply Interchangeable 12 V

Li-Ion batt. or ext. 12 V DC source

Power consumption

Acq. Mode Encoder wheel, time, manual or

MALÅ Motion Trig\*

**Dimensions** 430 x 360 x 180 mm Weight 5.7 kg (~12.57 lb)

Operating temp  $-20^{\circ}$  to  $+50^{\circ}$  C or  $0^{\circ}$  to  $120^{\circ}$  F

Environmental

#### MALÅ GX160 HDR

**Technology** MALÅ HDR Real-Time sampling

Antenna center freq 160 MHz **SNR** 107 dB Time window 1700 ns

**Bandwidth** 120 %, fractional, -10 dB **Positioning** RTK GNSS (option), GPS Time Synchronization (PPS), DGNSS, mobile device positioning, encoder,

Total station support

Operating time

Interchangeable 12 V Li-Ion batt. Power supply

or ext. 12 V DC source

Power consumption 1 A

Acq. Mode Encoder wheel, time, manual or

MALA Motion Trig\*

**Dimensions** 720 x 480 x 190 mm Weight 10.7 kg (~23.6 lb)

Operating temp - 20° to + 50° C or 0° to 120° F

**Environmental** IP 65 **Technology** MALÅ HDR Real-Time sampling

Antenna center freq 80 MHz **SNR** 114 dB Time window 3100 ns

**Bandwidth** 120 %, fractional, -10 dB **Positioning** RTK GNSS (option), GPS Time

Synchronization (PPS), DGNSS, mobile device positioning, encoder,

Total station support

Operating time

Power supply Interchangeable 12 V Li-Ion batt.

or ext. 12 V DC source

Power consumption 1 A

Encoder wheel, time, manual or Acq. Mode

MALA Motion Trig\*

**Dimensions** 1010 x 780 x 220 mm Weight 24.2 kg (~53.35 lb)

Operating temp -  $20^{\circ}$  to +  $50^{\circ}$  C or  $0^{\circ}$  to  $120^{\circ}$  F

**Environmental** IP 65

## **GUIDELINEGEO**

<sup>\*</sup>Trigger the signal using the internal GPS.

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MALÅ GX80 HDR

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