

MALÅ MIRA 16

GROUND PENETRATING RADAR

MIRA - MALÅ Imaging Radar Array for true 3D acquisition

MALÅ MIRA 16 is a 16-channel GPR array created for efficient and high-resolution large area mapping. The 16-channel MIRA solution is the ideal compromise between swath-width and maneuverability, and has proven to be the primary choice among GPR array users world-wide. Due to its size and weight, the MIRA 16 solution is primarily a vehicle based solution and not recommended for manual surveys.

MALÅ MIRA systems enable fast, accurate 3D data acquisition. The systems are built for cost-efficient, high resolution, large-area mapping. All MALÅ MIRA solutions are customizable, based on the same core technology.

Typical application areas include: utility detection, archeological investigations, concrete inspections, forensic, cavity and sinkhole detection.

Features

- ▷ Real-time support of high-end positioning systems
- ▷ Dedicated software suited for MALÅ MIRA 3D array data
- ▷ Ground coupled antennas for maximum near surface resolution
- ▷ Vehicle-mounted

Technical Specifications

	MALÅ MIRA 16 channel 400MHz	MALÅ MIRA 16 channel 200MHz
Control Unit	MALÅ ProEx with array option	MALÅ ProEx with array option
Dimension Box	155x66x44 cm (WxLxH)	250x130x56 cm (WxLxH)
Weight	90 kg	300 kg
Power	From survey vehicle	From survey vehicle
Pulse Repetition Frequency	200 kHz	200kHz
Suitable Target depth	Up to 4 meters	Up to 8 meters
Number of data channels	16 channels	16 channels
Number of samples	Up to 1024	Up to 1024
Standard Antenna Frequency	400 MHz (options available)	200 MHz (options available)
Communication	Point to point Ethernet, 100 Mbit/s	Point to point Ethernet, 100 Mbit/s
Positioning input	Supports all major RTK, GPS and Total Stations	Supports all major RTK, GPS and Total Stations

Other available options

	MALÅ MIRA 16 channel 1.3 GHz
Control Unit	MALÅ ProEx with array option
Dimension Box	104 x 70 x 47 cm (LxWxH)
Weight	70 kg
Power	LI-FE PO 4 Battery 12v 40Ah
Pulse Repetition Frequency	200 kHz
Suitable Target depth	Up to 1 meter
Number of data channels	16 channels
Number of samples	Up to 1024
Standard Antenna Frequency	1.3 GHz (Options available)
Communication	Point to point Ethernet, 100 Mbit/s
Positioning input	Supports all major RTK, GPS and Total Stations



Note: The image shows MIRA 8

1.3 GHz antennas

Dimension	114x90x98 [mm], (LxWxH)
Weight	0.7 kg/antenna, max
Power	0,9A@12V/antenna, max, 1.2A/pair
Centre frequency	1.3GHz, within 10%, measured on reflection off a target in dry sand
Bandwidth	100%
Power connectors	Tsaye, mick jack line/mic plug chassis, 4 pol
ADC	16-bit
Compliance	EN 302 066-1
Environmental	IP65

400 MHz antennas

Dimension	230x165x160 [mm], (LxWxH)
Weight	2,1 kg/antenna, max
Power	0,9A@12V/antenna, max, 1.2A/pair
Centre frequency	400 MHz, within 10%, measured reflection from off a target in dry sand
Bandwidth	100%
Power connectors	Tsaye, mick jack line/mic plug chassis, 4 pol
ADC	16-bit
Compliance	EN 302 066-1
Environmental	IP65

200 MHz antennas

Dimension	455x255x25 [mm], (LxWxH)
Weight	4.2 kg/antenna, max
Power	0,9A@12V/antenna, max, 1.2A/pair
Centre frequency	200 MHz, within 10%, measured on reflection off a target in dry sand
Bandwidth	100%
Power connectors	Tsaye, mick jack line/mic plug chassis, 4 pol
ADC	16-bit
Compliance	EN 302 066-1
Environmental	IP65



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