MALÅ Separable Shielded Antennas

MALÅ Separable Shielded Antennas offer the ability to separate transmitter antenna from receiver antenna. It is a feature which enables a user to study material parameters or perform special surveys, such as tomographic surveys.

These antennas also lend themselves to optimise the antenna separation and vary polarisation patterns in order to better distinguish/characterize targets. Furthermore, a user may freely configure a multi-channel/multi-frequency array-type of system.

The MALÅ Separable Shielded Antennas are operated by the MALÅ ProEx Control Unit and its coaxial module.

With a proven design, since more than 10 years, these robust antennas enables use in all applications requiring a variation of polarisation and Rx-Tx distance and further also, for any studies involving multi-path travel times such as roadbed moister content etc. Tomographic studies and velocity estimations through different Rx-Tx set-ups such as CMP, common mid point, are measurements modes where these antennas have proved themselves successful.

Primarily these antennas are used in our MALÅ MIRA Solution, but they can also be used for other fixed installations for e.g. material monitoring and as movement detectors.
Brief Description & Technical Specification

MALÅ Geoscience range of separable shielded antennas is fully compatible with the MALÅ ProEx Coaxial module. Deploying these antennas requires a little more from the operator since the power supply has to be supplied from the user. However, a standard 12V car battery, or similar, will work fine and MALÅ Geoscience can offer connectors, cables and can give general advise if needed. MALÅ Separable Antennas are mainly used in our unique MALÅ MIRA System and are hence designed to show identical structures i.e. minimal difference in signatures and traits that should benefit almost any application. The present user group is dominated by qualified specialists and researchers. Today, MALÅ Geoscience offer three different separable antenna alternatives;

1.3GHz
The 1.3GHz Separable Shielded Antenna elements are typically used for high precision high resolution measurements and velocity estimations.

Dimensions: 9 x 8 x 12 cm - Weight: 1.5 kg each
Power @12V: Rx: 0.45 [A]  Tx: 0.35 [A]
Compatibility: MALÅ ProEx Control Unit with coaxial module
MALÅ MIRA System

400MHz
The 400MHz Separable Shielded Antenna elements are typically used for precision measurements, velocity estimations and where any variation of polarisation and Rx-Tx distance is needed.

Dimensions: 16.5 x 15.5 x 23 cm – Weight: 2.1 kg each
Power @12V: Rx: 0.40 [A]  Tx: 0.90 [A]
Compatibility: MALÅ ProEx Control Unit with coaxial module
MALÅ MIRA System

200MHz
The 200MHz Separable Shielded Antenna elements are typically used for high precision measurements, velocity estimations and where any variation of polarisation and Rx-Tx distance is needed.

Dimensions: 26 x 24 x 46 cm – Weight: 4.2 kg each
Power @12V: Rx: 0.45 [A]  Tx: 0.75 [A]
Compatibility: MALÅ ProEx Control Unit with coaxial module
MALÅ MIRA System

Accessories
A number of accessories are available for the MALÅ Separable Shielded Antennas including:

- Power cables and connectors
- Software
- MALÅ ProEx System accessories
- MALÅ MIRA System accessories

See our webpage for latest information