



Impedance converter for Long wire Antenna. Outdoor mounting

Rev 06/2021

Impedance converter for long wire antenna

Removes the need of antenna tuning devices
Outdoor mounting

If a Long Wire antenna is used an impedance matching device is essential to match the high impedance figure of the antenna, typical 450Ω, with the 50Ω standard impedance of radio equipments.

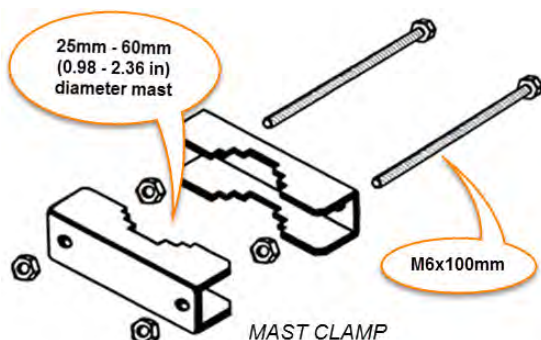
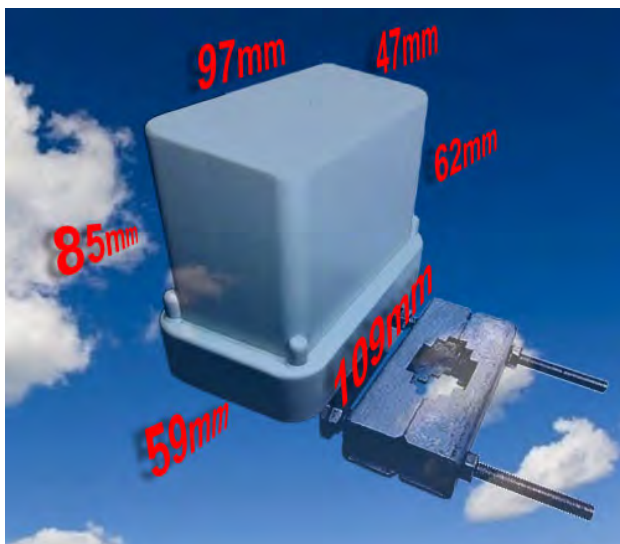
Matching the antenna-radio system impedances can boost signal strength up to 20 dB, in worst impedance mismatch cases, allowing signals to cut through interference and noise more effectively.

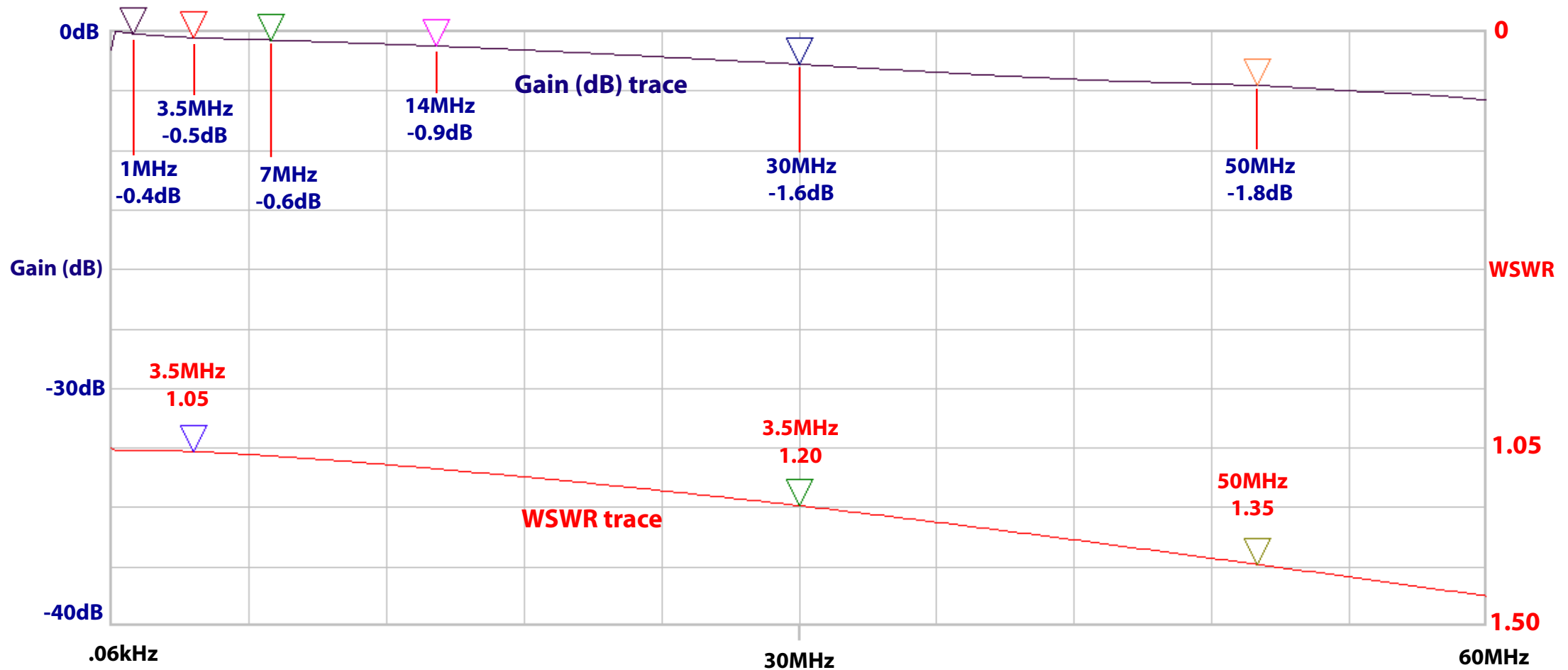
In addition it eliminates the need of antenna tuning devices.

A high isolation broadband transformer wound on a large toroid core is included in order to avoid distortion products due excessive RF levels.

A gas discharge tube is included as protection against electrostatic discharges.

- Frequency range: 10kHz to 60MHz.
- Impedance conversion ratio: 9:1
- Long wire antenna input impedance port: 450Ω (unbalanced)
- Output impedance port: 50Ω (unbalanced)
- Power rating: 200 watts CW (400 watts PEP)
- Includes gas discharge tube protection on antenna Input port.
- Weatherproof assembly.
- Connectors: "N" or SO-239 options available on 50Ω output port. ("N" type recommended).
- Binding post for long wire antenna input port.
- Enclosure: Cover: ABS material rated to UL 94V-0. Protection IP65.
- Chassis: 2mm thick treated aluminium. Stainless still screws.
- Size:

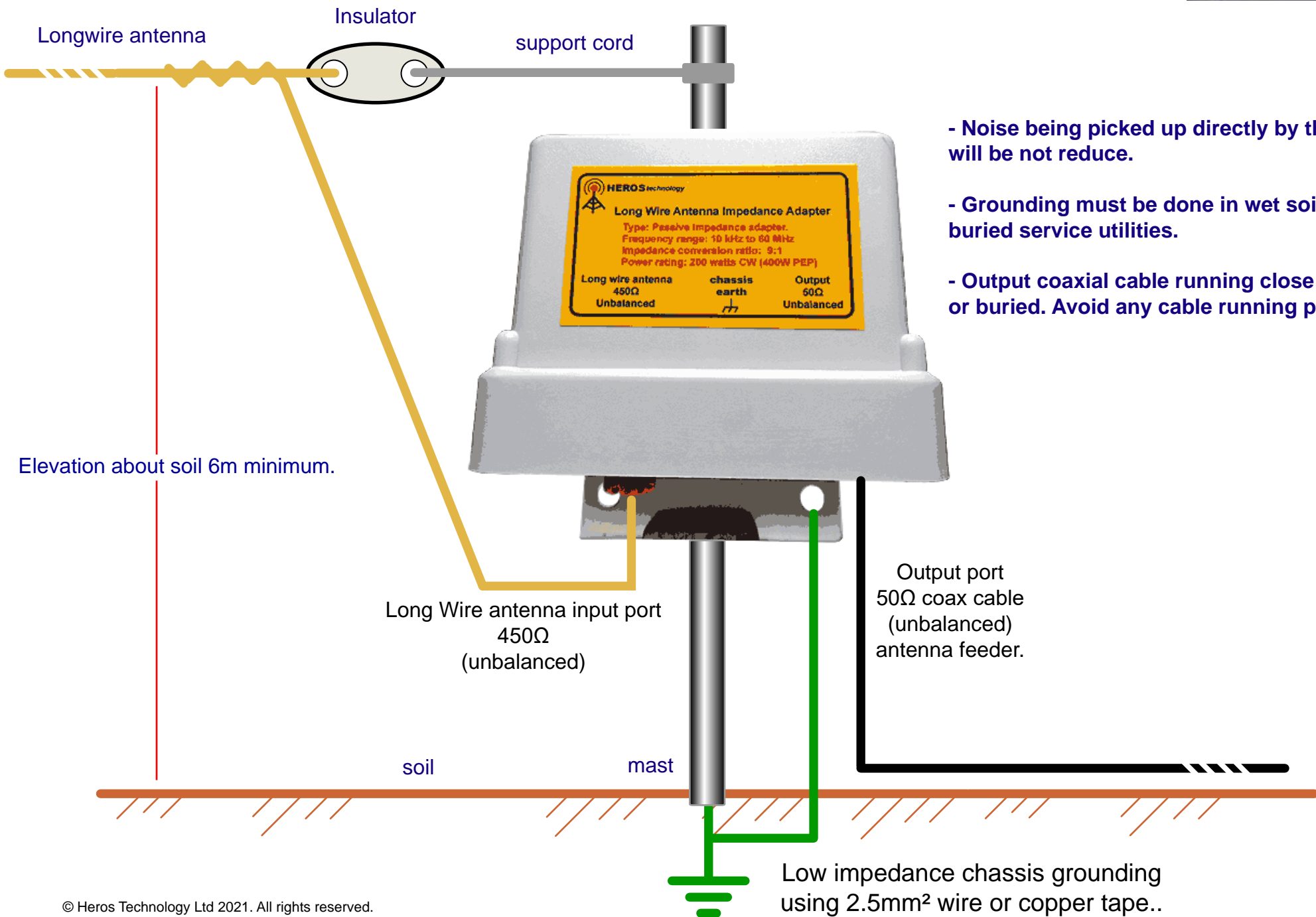




Impedance converter graphic plot showing on laboratory Vector Network Analyser measurements as a reference.

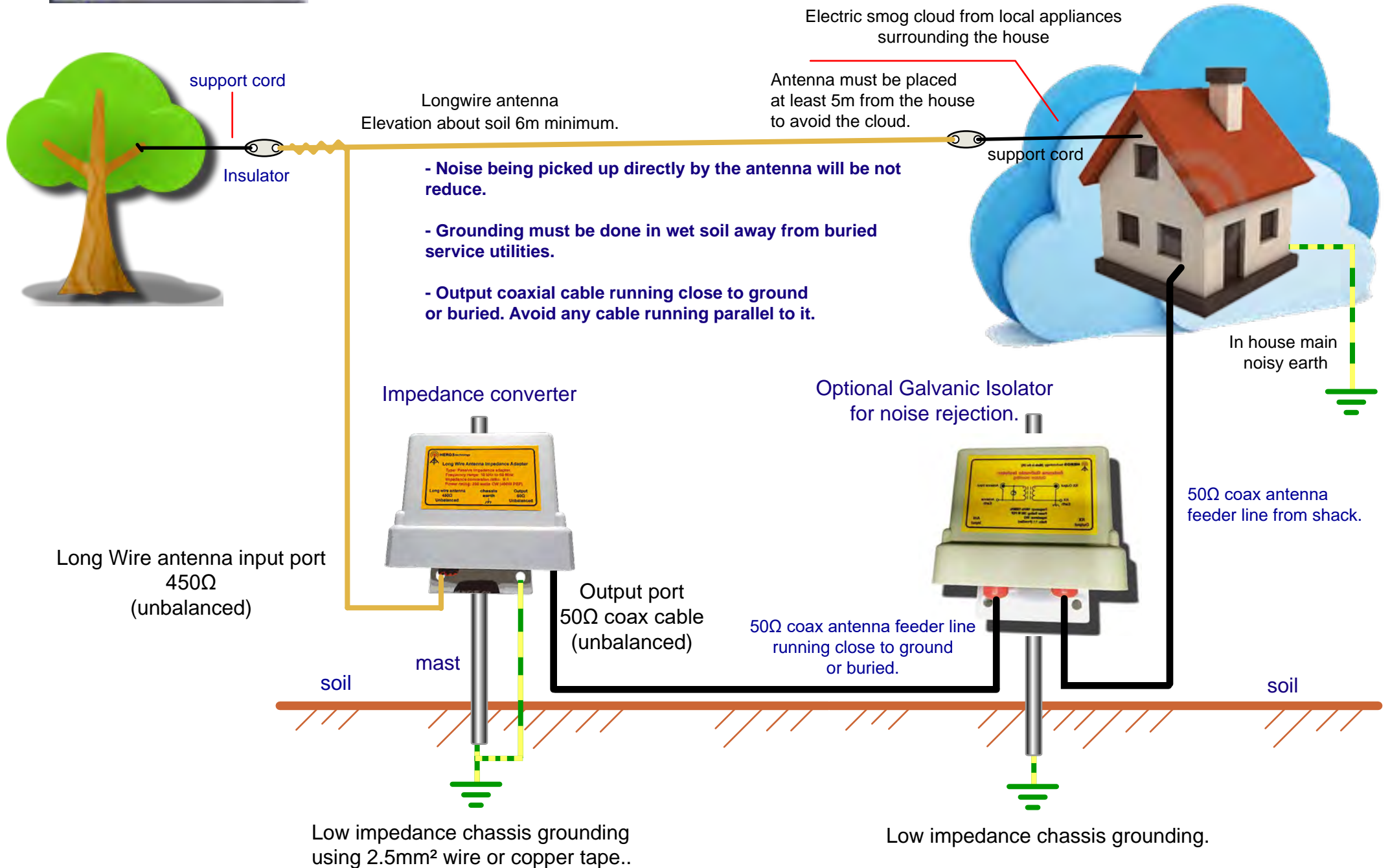
Figures may vary depending on the Long Wire antenna installation variables such as elevation about ground, terrain, soil conductivity, environment, etc.

Impedance converter for long wire antenna. Outdoor mounting. Installation.



- Noise being picked up directly by the antenna will be not reduce.
- Grounding must be done in wet soil away from buried service utilities.
- Output coaxial cable running close to ground or buried. Avoid any cable running parallel to it.

Impedance converter for long wire antenna. Noise rejection system.





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