Users / Installation Guide: High power **Coaxial Line Isolator** for radioamateur HF transmitting / receiving antennas.

Properties:

- Broadband UNUN transmission line transformer (Common-Mode Choke) with impedance ratio of 1/1.
- Nominal impedance: 50 Ohms.
- Frequency range: 1,5MHz tot 55 MHz depending on version. (See label on the product)
- Large ferrite volume, preventing saturation under high power conditions.
- Use of teflon coaxial cable with high temperature resistance and high power / voltage withstand.
- Circuit installed in waterproof housing and impregnated / potted with synthetic resin.
- Maximum power: 3 kW.(ICAS) (@ VSWR of 2/1 max)
- Intrinsic VSWR: <1.2/1 over the specified frequency range.

Versions:

- Standard version, optimized for the mid HF bands, using "Mix 43" ferrite toroid core.
- Version optimized for the low HF bands, using "Mix 31" ferrite toroid core.
- Custom versions on request.

Use:

Suitable for deployment at any position in the coaxial feedline.
Use of the line isolator beyond the specified frequency-power or specified VSWR range can destroy it and cause safety risks.
The line isolator must be considered as a sub assembly, intended to be a part of an antenna installation.
The line isolator is exclusively intended for outdoor use, in a fire safe and explosion safe environment.
Under undefined VSWR conditions, (e.g. like exists after an antenna tuner) limit power applied to 1000W max.).

Connections:

SO239 connectors for coaxial cable connections. (N-connector or 7/16 DIN on request)
M6 stainless steel terminal for RF ground connection. (Functional earth).
This terminal allows for connection to a good RF ground, forming an "L" configuration filter for common-mode currents, and providing additional (secondary) lightning protection.
Note: Although the line isolator is built fully waterproofed (IP68) the antenna connectors need to be protected from moisture penetration. Use self amalgating tape or heat shrink tube with internal glue.

Important safety instructions:

- Read these instructions prior to installation of the product and heed warnings Retain this document..
- Apply during installation and use all possible safety countermeasures, like described in amateur radio courses and literature.
- Install the line isolator out of reach of persons and animals.
- Always install the line isolator so that it cannot fall on persons or property.
- Do not attempt to open the enclosure .It is sealed from the inside. Attempts to open the enclosure will damage it and void any warranty.
- Inspect the line isolator on a regular basis and immediately replace if damaged.
- Install additional external lightning protection and earthing, as a means of secondary protection, and disconnect the antenna cables during thunderstorms.
- Never work on the antennas or antenna cables during thunderstorms.

WEEE

You will find the following "crossed out wheeled bin" symbol on the product, indicating that it can harm the environment and it should be disposed of by the end user, separate from other types of waste.
In case of questions, please contact your local authorities regarding recycling.

You will find the following "High Voltage Hazard" symbol on the product, indicating that the terminals (just like the antenna itself) carry dangerous high voltages during transmission, and that caution is required, in order to avoid electrocution or RF burns.

The specifications and information regarding this product are subject to changes without prior notice.
All statements, information, recommendations and warnings in this user guide are deemed to be accurate, but are given without any warranty.
Users must take the full responsibility for the application of the product.