proISO™ Grounding Protectors

proISO™ series of Grounding Protectors for dGPS and Navtex antennas and MF/HF applications are professional high-quality isolators. proISO™ grounding protectors create galvanical isolation between active antenna element and vessel's ground. proISO™ technology is designed especially for demanding marine and military environments.

proISO 2001 is used to replace grounding wire of dGPS/Navtex reception antenna. It creates DC- isolation between active antenna and vessel's ground while still ensuring RF ground connection for interference free reception of received signals.

proISO2003 and 2004 are grounding protectors for MF/HF communication systems. The model 2003 can be used to isolate MF/HF radio transmitter and model 2004 is specially designed for MF/HF antenna tuner grounding. They work on all kind of MF/HF communication systems including power fed Antenna Tuner (ATU) units.

proISO™ series of grounding protectors does not only prevent the formation of harmful ground leaks but it also works as lightning protector and dissipates harmful static charges from antenna elements.

proISO™ technology enables trouble free galvanic isolation of communication system. Due to its high performance and innovative design, safety is never compromised and the quality of communication is secured.

Prevent ground loops, increase performance Less trouble!

- fast deployment in retrofits
- replaces antennas' ground wire
- static discharge protection
- breaks ground loops
- enables lightning and surge protection
- makes EMP and EMI protection easy
- fully passive construction
- compact size with flexible cables eases installation

Electromagnetic modelling services fine-tunes performance

By using advanced proEMS[™] electromagnetical simulation, modeling, analysis and measurement services a complete 3D-electromagnetic environment of the ship's external structures is built and the optimal location for each antenna with the least interference can be found and verified. The proEMS[™] services are useful for any size of boat or ship and are tailored for each customer separately.







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Table 1 Electrical Specifications

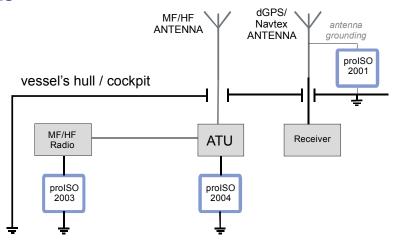
| Electrical Specifications (TA=25°C) | proISO 2001 (GLI2001) | proISO 2003 (GLI2003) | proISO 2004 (GLI2004) |
|--|--|-------------------------|------------------------|
| Frequency range (typical) | 285KHz –325KHz (dGPS) | 1MHz – 30MHz | 2MHz – 30 MHz |
| Frequency range (extended)* | C100KHz-600KHz Navtex (490/518kHz) | 1MHz - 80MHz | - |
| Power Handling (continuous total) | 50W | 150W | 250 W |
| Power Handling (peak)** | N/A | 200W | 300W |
| Connectors | 1.5mm² copper wire | 6mm² tinned copper wire | 40mm wide copper plate |
| Resistance to ground | 1Mohm | 1Mohm | 1Mohm |
| Lightning protection | Yes, threshold voltage 230V, Conductivity 10KA | | |
| Static Discharge protection | Yes | | |

^{(*} works beyond typical operating range with sligthly reduced performance)

Table 2 Mechanical and Environmental properties

| Mechanical and Environmental properties (TA=25°C) | proISO 2001 | proISO 2003 | proISO 2004 |
|---|---|--|--|
| Dimensions | diameter: 30mm length: 150mm cable length: 200mm | diameter: 30mm length: 150mm cable length: 200mm | hwidth: 40mm length: 240mm thickness: 20mm (max) |
| Weight | about 60g | 90g | 85g |
| Material | thermoplastic sealed aluminium body | | thermoplastic sealed copper body |
| Ingress protection | IP68 shock proof | | |
| Operational environment | -40° - +80° C | | |
| Standards | All proISO™ products are to the standard of IEC60945 to insure safe operation in the environment on relevant parts. Some of the criteria is operating temperature, storage temperature, humidity, vibration, electromagnetical compatibility. | | |

Connection example



^{(**} Maximum tolerable peak value for antenna with better SWR < 2.5)