

proISO™ series of Galvanical Coaxial Cable Isolators

proISO™ series of Galvanic Coaxial Cable Isolators for DC-grounded antennas solves immediately ground leak and interference problems in communication system. proISO™ technology is designed especially for demanding marine and military environments.



proISO™ series of Galvanic Coaxial Cable Isolators allows the use of ground plane-, lightning protected- and grounded antennas in vessels that would otherwise suffer from stray currents and ground leaks. proISO™ series protects against conducted noise and interference. In addition to universal isolator, proISO™ series includes optimized models for FM radio and TV antennas, high power MF/HF systems and marine VHF.

Due to high-performance design of proISO™ it can easily be used between antennas, filters, radios and amplifiers without losing sensitivity of the communication system.

proISO™ technology enables trouble free EMP and EMC protection of coaxial cable inlets in the vessel's hull. If the cable's screen is grounded for potential equalization, EMC shielding or EMP protection, an unwanted DC current path might occur between the vessel's metallic body and radio communication equipment. By installing a proISO™ device just after the cable inlet a complete ground loop protection is achieved. No artificial floatings are required anymore.

Prevent ground loops and increase performance

- fast deployment in retrofits
- suitable for all radios and antennas
- static discharge protection
- breaks ground loops
- minimizes interference
- makes EMP and EMI protection easy
- fully passive construction
- no wearing components
- customized versions available
- compact size with flexible cable connectors 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 1001 (GLI1001)	proISO 1002 (GLI1002)	proISO 1020 (GLI1020)	proISO 1050 (GLI1050)
Frequency range (typical)	88MHz – 500 MHz	150MHz -165MHz	88MHz – 800MHz	1MHz – 100 MHz
Frequency range (extended)*	50MHz – 5 GHz	50MHz - 1GHz	-	1MHz – 500 MHz
Impedance	50Ω	50 Ω	75Ω	50Ω
Return Loss (extended)	>20 dB	> 25 dB (>15 dB)	>20 dB	>20 dB
Insertion Loss (extended)	< 0.5 dB	< 0.2 dB (<0.5 dB)	< 0.5 dB	< 0.5 dB
Power Handling (continuous total)	50W	50W	B10W (receiver only)	250 W
Power Handling (peak)**	100W	100W	-	300W
Connectors	N-type female	UHF female (ANT) UHF male (VHF) M4 terminal for GND	BNC-type female	N-type female
Interference rejection	High	High	High against X-band radar against AIS	High
Static Discharge protection	No	Yes	No	No

(* works beyond typical operating range with slightly reduced performance)

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

Table 2 Mechanical and Environmental properties

Mechanical and Environmental properties (TA=25°C)	proISO 1001	proISO 1020	proISO 1050	proISO 1002
Dimensions	32mm (h) x 57mm (w) x 130mm (l) (with cables 320mm)			32mm x 57mm x 145mm (~500mm cable with UHF male)
Weight	about 200g			
Material	Painted aluminium			
Ingress protection	IP65 shock proof			
Operational environment	-20° - +60° C non condensing			
Standards	All proISO™ products are to the standard of IEC60945 to insure safe operation in the environment on relevant parts. Some of the criteria are operating temperature, storage temperature, humidity, vibration, electromagnetic compatibility.			

Connection example

