

GALVANIC ISOLATORS



Galvanic isolators are used to galvanically isolate coaxial access network from subscribers premises. They prevent that grounding caused problems would occur on sensitive devices like LCD and Plasma screens, VoIP and cable modems, when connected directly to system outlet. GIS line has also push on plastic mount base and cover as option, which enables fast and mounting and replacement of system outlet.

Features

- CENELEC safety requirements EN50083-1
- CLASS A screening effectiveness EN50083-2
- Full Galvanic Isolation
- Withstands 2000Vdc for at least one minute not exceeding 0.7mA leakage current
- Withstands 230Vac RMS 50/60Hz not exceeding 2.0mA RMS
- Excellent return loss
- Low insertion loss
- CE approval
- Easy mounting and grounding
- Frequency range 5...1000 MHz
- Wide variety of models

Technical specifications

Common technical parameters

Parameter	Specification	Note
Screening effectiveness	85 dB	5...470 MHz
	75 dB	470...1000 MHz
Directivity	10 dB	5...40 MHz
	18 dB ¹⁾	40...865 MHz
	9 dB	865...1000 MHz

Outlet technical parameters

Insertion loss (dB)	GIS-01
IN-OUT 5...1000 MHz	0.5 ± 0.5
Insertion loss (dB)	GIS-02
IN-OUT1/2 5...1000 MHz	4.2 ± 1.0
Insertion loss (dB)	GIS-03
IN-DATA 5...1000 MHz	4.0 ± 1.0
IN-TV 5...108 MHz	>20
125...1000 MHz	4.5 ± 1.0
IN-Radio 87.5...108 MHz	4.5 ± 1.0
Insertion loss (dB)	GIS-04
IN-DATA 5...1000 MHz	4.0 ± 1.0
IN-TV 5...60 MHz	>50
80...1000 MHz	4.5 ± 1.0
Insertion loss (dB)	GIS-05
IN-DATA 5...1000 MHz	4.0 ± 1.0
IN-TV 5...30 MHz	>50
47...1000 MHz	4.5 ± 1.0

Return loss (dB)	GIS-01	GIS-02	GIS-03	GIS-04	GIS-05
Input					
5...65 MHz	15	18	15	15	15 ²⁾
65...470 MHz	16	20	17	17	17 ³⁾
470...1000 MHz	15	17	17	17	17
Output 1/2					
5...65 MHz	18	19	-	-	-
65...470 MHz	17	18	-	-	-
470...1000 MHz	15	17	-	-	-
Output DATA					
5...65 MHz	-	-	20	18	18 ²⁾
65...470 MHz	-	-	18	16	16 ³⁾
470...1000 MHz	-	-	18	16	16
TV					
80...118 MHz	-	-	-	14	14 ⁴⁾
118...1000 MHz	-	-	14	14	
Radio					
88...108 MHz	-	-	10	-	-

Isolation (dB)	GIS-02	GIS-03	GIS-04	GIS-05
Output 1 – Output 2				
5...65 MHz	40	-	-	-
65...470 MHz	30	-	-	-
470...1000 MHz	28	-	-	-
Data – TV/Radio				
5...65 MHz	-	65	55	55 ²⁾
65...1000 MHz	-	25	25	25 ⁴⁾
TV – Radio				
88...108 MHz	-	20	-	-

General

Connectors	F female
Impedance	75 Ω
Enclosure classification	Indoor use only
Operating temperature range	-10...+55 °C
Storage temperature range	-30...+70 °C
EMC compatibility	EN 50083-2

Notes

- 1) @ 40 MHz -1.5 dB / octave, but not less than -10 dB
- 2) 5...30 MHz
- 3) 30...470 MHz
- 4) 47...1000 MHz