

# 1 GHz HIGH PASS GALVANIC ISOLATORS [HGxG-x]

Cable Products, Drop Passives

# TaiTin

## Description

Taikan's galvanic isolator series are used to separate the subscriber's network equipment from the CATV network system as well as protect the network equipment from electrical hazards (ie. voltage surges or lightning). It is an effective and practical solution to prevent various types of hazardous surges for Customer Premise Equipment (CPE).

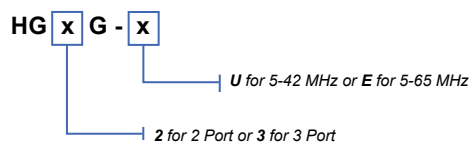
## Features

- Class A - CENELEC EN50083-2 (Screening Effectiveness)
- EN/IEC 60728-11:2010 (Safety Requirements)
- 5-1002 MHz Bandwidth
- 2 or 3 Port Design with High Pass Filter
- Protection for Network Equipment Against Power Surges
- Superior Isolation and Return Loss for Return Path
- 2 kV DC Double Isolation Protection
- Standard Contact Pins
- Compact Design with Zinc Alloy Die Cast Housing & Tin Plated Soldered Back
- Two Ground Screws (Available)
- CE & RoHS Compliant

## General Specifications

Voltage Isolation:	2 kV DC
F Connector:	SCTE Compliant IPS-SP 400
Operation Temperature:	-40 °C to 60 °C (-40 °F to 140 °F)
RFI Shielding:	-120 dB

## Ordering Information



Model Number	Inner Box	Standard Carton	Carton Weight
HG2G-x	30 pcs	300 pcs	21kg / 46 lbs
HG3G-x	30 pcs	300 pcs	22kg / 48 lbs



		<b>HG2G-x</b>						<b>HG3G-x</b>						
<b>Insertion Loss TV</b>		<b>Input Port</b>		<b>TV HP Port</b>		<b>Data Output Port</b>		<b>Input Port</b>		<b>TV HP Port</b>		<b>Data Output Port</b>		
Frequency	5-65 MHz	x		40.0		3.5		x		40.0		3.5		dB
	85-110 MHz	x		5.0		3.8		x		8.2		3.8		dB
	111-500 MHz	x		3.8		3.8		x		7.0		3.8		dB
	501-860 MHz	x		4.2		4.2		x		7.8		4.2		dB
	861-1002 MHz	x		4.5		4.5		x		8.0		4.5		dB
<b>Input/Output Return Loss</b>		<b>Min</b>		<b>Typ</b>		<b>Min</b>		<b>Typ</b>		<b>Min</b>		<b>Typ</b>		
Frequency	5-15 MHz	16	18	x	x	18	20	16	18	x	x	18	20	dB
	16-65 MHz	16	18	x	x	18	20	16	18	x	x	18	20	dB
	85-500 MHz	16	18	16	18	18	20	16	18	16	18	18	20	dB
	501-860 MHz	16	18	16	18	16	18	16	18	16	18	16	18	dB
	861-1002 MHz	16	18	16	18	16	18	16	18	16	18	16	18	dB
<b>Isolation Out to Out</b>				<b>Min</b>		<b>Typ</b>				<b>Min</b>		<b>Typ</b>		
Frequency	5-15 MHz			45	50					45	50	x	x	dB
	16-65 MHz			45	50					45	50	x	x	dB
	85-500 MHz			22	22					22	25	22	25	dB
	501-860 MHz			20	22					22	25	22	25	dB
	861-1002 MHz			20	22					22	25	22	25	dB
<b>Screening Effectiveness*</b>				<b>Typ</b>						<b>Typ</b>				
Frequency	5-10 MHz			85						85				dB
	10-12 MHz			85						85				dB
	12-300 MHz			85						85				dB
	301-470 MHz			80						80				dB
	471-1002 MHz			75						75				dB
<b>Intermodulation p+q**</b>				<b>Max</b>						<b>Max</b>				
After 25V Surge				-110						-110				dB
After 1KV Surge				-110						-110				dB

**Galvanic Isolation**

		<b>Max</b>
2120 VDC***	Inner Conductor (Input Port) to Inner Conductor (Output Port)	0.7 mA RMS
2120 VDC***	Outer Conductor (Input Port) to Outer Conductor (Output Port)	0.7 mA RMS
230 VAC****	Inner Conductor (Input Port) to Inner Conductor (Output Port)	2.0 mA RMS
230 VAC****	Outer Conductor (Input Port) to Outer Conductor (Output Port)	2.0 mA RMS

**Notes:**

- \* 5-30 MHz (Transfer Impedance Method according EN-60728-2)
- \* 30-1002 MHz (Absorption Clamp Method according EN-60728-2 Sec 4.4)
- Two carriers (60 & 65 MHz), Out to In, @ 120 dBuV, before surge
- \*\* Two carriers (60 & 65 MHz), Out to In, @ 120 dBuV, after 10 pulses (25 V/1.2 uS rise time/500 uS fall time) at all ports
- Two carriers (60 & 65 MHz), Out to In, @ 120 dBuV, after 1 pulse (1 KV/1.2 uS rise time/500 uS fall time) at all ports
- \*\*\* EN-60728-11/10 Safety Requirements: 2120 VDC ≥ 1minute, I = ≤ 0.7 mA
- \*\*\*\* EN-60728-11/10 Safety Requirements: 230 VAC, I = ≤ 2.0 mA (0 °C to 25 °C)