

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

Cable Products, Drop Passives

# Taikan

ESTD. 1973

## 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

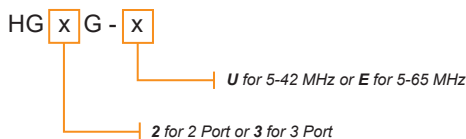
- Class A - CENELEC EN50083-2 (Screening Effectiveness)
- EN/IEC 60728-11:2010 (Safety Requirements)
- 5-1002 MHz Bandwidth
- 2 or 3 Port Design with High Pass Filter
- Protection for Network Equipment Against Power Surges
- Superior Isolation and Return Loss for Return Path
- 2 kV DC Double Isolation Protection
- IEEE C62.41-1991 Category A3 Ring Wave, 6kV, 200A on all ports
- 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



## Drop Passives - HGxG-x

Cable Products, Drop Passives

### HG2G-x

### HG3G-x

#### Insertion Loss TV

Frequency	HG2G-x			HG3G-x			dB
	Input Port	TV HP Port	Data Output Port	Input Port	TV HP Port	Data Output Port	
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	
110-500 MHz	x	3.8	3.8	x	7.0	3.8	
500-860 MHz	x	4.2	4.2	x	7.8	4.2	
860-1002 MHz	x	4.5	4.5	x	8.0	4.5	

#### Input/Output Return Loss

Frequency	HG2G-x		HG3G-x		dB
	Min	Typ	Min	Typ	
5-15 MHz	16	18	x	x	dB
15-65 MHz	16	18	x	x	
85-500 MHz	16	18	16	18	
500-860 MHz	16	18	16	18	
860-1002 MHz	16	18	16	18	

#### Isolation Out to Out

Frequency	HG2G-x		HG3G-x		dB
	Min	Typ	Min	Typ	
5-15 MHz	45	50	x	x	dB
15-65 MHz	45	50	x	x	
85-500 MHz	22	22	22	25	
500-860 MHz	20	22	22	25	
860-1002 MHz	20	22	22	25	

#### Screening Effectiveness\*

Frequency	HG2G-x	HG3G-x	dB
	Typ	Typ	
5-10 MHz	85	85	dB
10-12 MHz	85	85	
12-300 MHz	85	85	
300-470 MHz	80	80	
470-1002 MHz	75	75	

#### Intermodulation p+q\*\*

	HG2G-x	HG3G-x	dB
	Max	Max	
After 25V Surge	-110	-110	dB
After 1KV Surge	-110	-110	

#### Galvanic Isolation

	Max
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)

# 1.2 GHz HIGH PASS GALVANIC ISOLATORS [HGxV-x]

Cable Products, Drop Passives

## 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

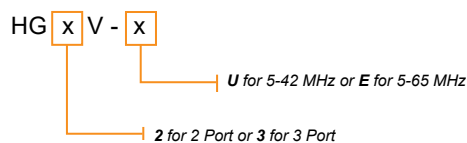
- Class A - CENELEC EN50083-2 (Screening Effectiveness)
- EN/IEC 60728-11:2010 (Safety Requirements)
- 5-1218 MHz Bandwidth
- 2 or 3 Port Design with High Pass Filter
- Protection for Network Equipment Against Power Surges
- Superior Isolation and Return Loss for Return Path
- 2 kV DC Double Isolation Protection
- IEEE C62.41-1991 Category A3 Ring Wave, 6kV, 200A on all ports
- 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
HG2V-x	30 pcs	300 pcs	21kg / 46 lbs
HG3V-x	30 pcs	300 pcs	22kg / 48 lbs



		HG2V-x †			HG3V-x †									
<b>Insertion Loss TV</b>		Input Port	TV HP Port	Data Output Port	Input Port	TV HP Port	Data Output Port							
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						
	1003-1218 MHz	x	5.2	5.2	x	8.8	5.2	dB						
<b>Input/Output Return Loss</b>		Min	Typ	Min	Typ	Min	Typ	Min	Typ					
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
	1003-1218 MHz	16	18	16	18	16	18	16	18	16	18	16	18	dB
<b>Isolation Out to Out</b>		Min		Typ		Min		Typ		Min		Typ		
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		25		22		25		22		25		dB
	501-860 MHz	22		25		22		25		22		25		dB
	861-1002 MHz	22		25		22		25		22		25		dB
	1003-1218 MHz	20		25		20		25		20		25		dB
<b>Screening Effectiveness*</b>		Typ			Typ									
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						
	1003-1218 MHz	75			75			dB						
<b>Intermodulation p+q**</b>		Typ			Typ									
After 25V Surge		-110			-110			dB						
After 1KV Surge		-110			-110			dB						
<b>Galvanic Isolation</b>					Max									
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)
- \* 30-1218 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)

† Class A Certification Pending

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# 2 GHZ TUBULAR GALVANIC ISOLATOR [G1X-T]

Cable Products, Drop Passives

**Taikan**  
ESTD. 1973

## 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 (i.e. voltage surges or lightning).

It is an effective and practical solution to prevent various types of hazardous surges from damaging Customer Premise Equipment (CPE).

## Features

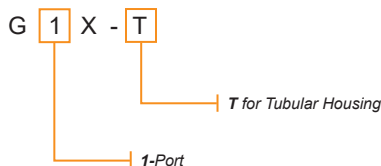
- Class A - CENELEC EN50083-2 (Screening Effectiveness)
- EN/IEC 60728-11:2010 (Safety Requirements)
- 5-2000 MHz Bandwidth
- 1-Port Tubular Design
- Protection for Subscriber's Premise Network Equipment Against Power Surges and Variabilities in Local Currents
- Superior Isolation and Return Loss for Return Path
- 2 kV DC Double Isolation Protection
- IEEE C62.41-1991 Category A3 Ring Wave, 6kV, 200A on all ports
- Standard Contact Pins
- Compact Design, Zinc Alloy Cast Nickel Plated
- CE & RoHS Compliant



## General Specifications

Voltage Isolation:	2 kV DC
F Connector:	SCTE Compliant IPS-SP 400
Operation Temperature:	-40 to 60 °C (-40 to 140 °F)
RFI Shielding:	-125 dB

## Ordering Information



Model Number	Inner Box	Standard Carton	Carton Weight
G1X-T	30 pcs	300 pcs	20 kg / 44 lbs



**Insertion Loss****G1X-T**

	<b>Typ</b>	<b>Max</b>	
5-12 MHz	0.4	0.6	dB
12-30 MHz	0.2	0.4	dB
30-300 MHz	0.2	0.4	dB
300-470 MHz	0.3	0.5	dB
470-1006 MHz	0.6	0.8	dB
1006-1700 MHz	0.8	1.1	dB
1700-2000 MHz	1.0	1.4	dB

Frequency

**Input/Output Return Loss****Min**

5-12 MHz	16	dB
12-30 MHz	20	dB
30-300 MHz	20	dB
300-470 MHz	18	dB
470-1006 MHz	18	dB
1006-1700 MHz	14	dB
1700-2000 MHz	12	dB

Frequency

**Screening Effectiveness\*****Min**

5-300 MHz	85	dB
300-470 MHz	80	dB
470-950 MHz	75	dB
950-1218 MHz	70	dB
1218-2000 MHz	70	dB

Frequency

**Intermodulation p+q\*\*****Max**

After 25 V Surge	-125	dB
After 1 kV Surge	-125	dB

**Galvanic Isolation****Max**

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), Output to Input, @ 120dBuV, before surge
- \*\* Two carriers (60 & 65 MHz), Output to Input, @ 120 dBuV, after 10 pulses (25 V/1.2 uS rise time/500 uS fall time) at all ports
- \*\* Two carriers (60 & 65 MHz), Output to Input, @ 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  $\geq$  1 minute, I =  $\leq$  0.7 mA
- \*\*\*\* EN-60728-11/10 Safety Requirements: 230 VAC, I =  $\leq$  2.0 mA (0 to 25 °C)



# 1 GHz GALVANIC ISOLATORS [GxG-x]

Cable Products, Drop Passives

## 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 (i.e. voltage surges or lightning).

It is an effective and practical solution to prevent various types of hazardous surges from damaging Customer Premise Equipment (CPE).

## Features

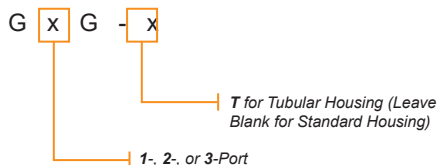
- Class A - CENELEC EN50083-2 (Screening Effectiveness)
- EN/IEC 60728-11:2010 (Safety Requirements)
- 5-1002 MHz Bandwidth
- 1-, 2-, and 3-Port Splitter Design (1-Port Tubular Design Available)
- Protection for Subscriber's Premise Network Equipment Against Power Surges and Variabilities in Local Currents
- Superior Isolation and Return Loss for Return Path
- 2 kV DC Double Isolation Protection
- IEEE C62.41-1991 Category A3 Ring Wave, 6kV, 200A on All Ports
- 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 to 60 °C (-40 to 140 °F) -
RFI Shielding:	120 dB
Impedance:	75 Ohms

## Ordering Information



Model Number	Inner Box	Standard Carton	Carton Weight
G1G	30 pcs	300 pcs	20 kg / 44 lbs
G 2 G	30 pcs	300 pcs	21 kg / 46 lbs
G 3 G	30 pcs	300 pcs	22 kg / 48 lbs
G1G-T	30 pcs	300 pcs	20 kg / 44 lbs



## Drop Passives - GxG

Cable Products, Drop Passives

	G1G One Port		G2G Two Port		G3G Three Port				G1G-T† One Port		
	Typ	Max	Typ	Max	Typ	Max	Typ	Max	Typ	Max	
Frequency 5-10 MHz 10-40 MHz 40-470 MHz 470-862 MHz 862-1002 MHz	0.1	0.6	3.3	3.7	3.2	3.7	6.8	6.9	0.1	0.6	dB
	0.1	0.4	3.3	3.9	3.3	3.9	6.6	6.9	0.1	0.4	dB
	0.2	0.4	3.3	3.9	3.3	3.9	6.8	7.0	0.2	0.4	dB
<b>Input/Output Return Loss</b>	0.4	0.7	4.3	4.4	4.2	4.4	7.8	8.0		0.7	dB

Frequency	Min	Typ	Min	Typ	Min	Typ	Min	Typ	Min	Typ	
	5-10 MHz	18	18	18	18	18	18	18	18	18	18
10-470 MHz	18	20	18	20	18	20	18	20	18	20	dB
470-862 MHz	18	20	18	20	18	20	18	20	18	20	dB
862-1002 MHz	18	20	18	20	18	20	18	20	18	20	dB
										<b>Typ</b>	
										x x x x	

Frequency	Typ	Min	Typ	Min	Typ	Min	Typ	Min	Typ		
	5-10 MHz	x	20	25	20	25	20	25	20	25	dB
10-470 MHz	x	20	25	20	25	20	25	20	25	dB	
470-862 MHz	x	22	25	22	25	22	25	22	25	dB	
862-1002 MHz	x	20	22	20	22	20	22	20	22	dB	
										80 75	

Frequency	Typ	Typ	Typ	Typ	Typ	Typ	Typ	Typ	Typ		
	5-10 MHz	85	85	85	85	85	85	85	85	85	dB
10-300 MHz	85	85	85	85	85	85	85	85	85	dB	
300-470 MHz	80	80	80	80	80	80	80	80	80	dB	
470-1002 MHz	75	75	75	75	75	75	75	75	75	dB	
										-120	dB
										-120	dB

	Max	Max	Max	Max	Max	Max	Max	Max	Max	
	After 25 V Surge	-120	-110	-110	-110	-110	-110	-110	-110	-110
After 1 kV Surge	-120	-110	-110	-110	-110	-110	-110	-110	-110	dB

<b>Galvanic Isolation</b>		Max
2120 VDC***	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), Output to Input, @ 120dBuV, before surge
- \*\* Two carriers (60 & 65 MHz), Output to Input, @ 120 dBuV, after 10 pulses (25 V/1.2 uS rise time/500 uS fall time) at all ports  
Two carriers (60 & 65 MHz), Output to Input, @ 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 ≥ 1 minute, I = ≤ 0.7 mA
- \*\*\*\* EN-60728-11/10 Safety Requirements: 230 VAC, I = ≤ 2.0 mA (0 to 25 °C)

† Class A Certification Pending

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Taikan



# 1.2 GHz GALVANIC ISOLATORS [GxV]

Cable Products, Drop Passives

**Taikan**  
ESTD. 1973

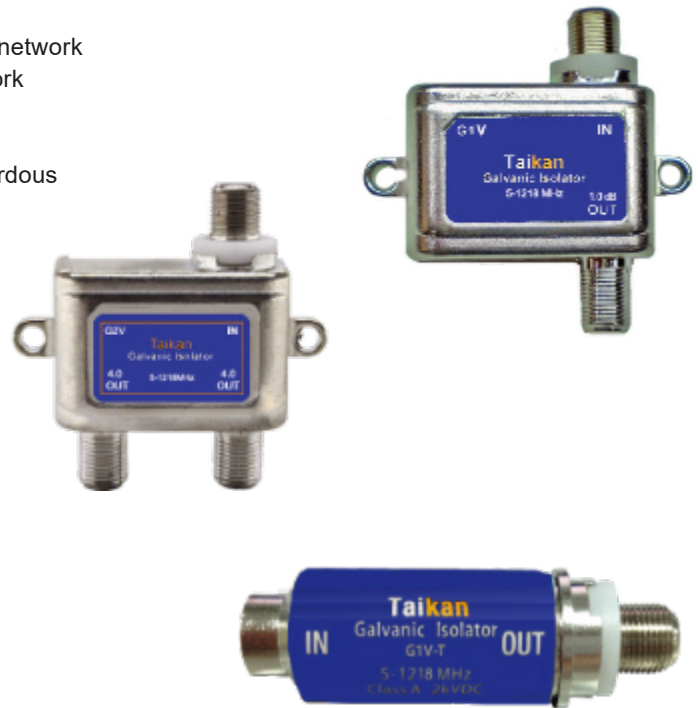
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It is an effective and practical solution to prevent various types of hazardous surges from damaging Customer Premise Equipment (CPE).

## Features

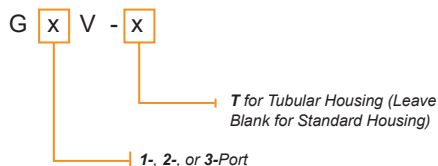
- Class A - CENELEC EN50083-2 (Screening Effectiveness)
- EN/IEC 60728-11:2010 (Safety Requirements)
- 5-1218 MHz Bandwidth
- 1-, 2-, and 3-Port Splitter Design
- Protection for Subscriber's Premise Network Equipment Against Power Surges and Variabilities in Local Currents
- Superior Isolation and Return Loss for Return Path
- 2 kV DC Double Isolation Protection
- IEEE C62.41-1991 Category A3 Ring Wave, 6kV, 200A on all ports
- 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 to 60 °C (-40 to 140 °F)
RFI Shielding:	-120 dB

## Ordering Information



Model Number	Inner Box	Standard Carton	Carton Weight
G1V	30 pcs	300 pcs	20 kg / 44 lbs
G2V	30 pcs	300 pcs	21 kg / 46 lbs
G3V	30 pcs	300 pcs	22 kg / 48 lbs
G1V-T	30 pcs	300 pcs	20 kg / 44 lbs



## Drop Passives - GxV

Cable Products, Drop Passives

	G1V One Port		G2V Two Port		G3V Three Port				G1V-T One Port			
	Typ	Max	Typ	Max	Typ	Max	Typ	Max	Typ	Max		
Frequency	5-10 MHz	0.1	0.6	3.3	3.7	3.2	3.7	6.8	6.9	0.1	0.6	dB
	10-40 MHz	0.1	0.4	3.3	3.9	3.3	3.9	6.6	6.9	0.1	0.4	dB
	40-470 MHz	0.2	0.4	3.3	3.9	3.3	3.9	6.8	7.0	0.2	0.4	dB
	470-862 MHz	0.4	0.7	4.0	4.3	3.9	4.3	7.0	7.5	0.4	0.7	dB
	862-1002 MHz	0.4	0.7	4.3	4.4	4.2	4.4	7.8	8.0	0.4	0.7	dB
	1002-1218 MHz	0.5	0.7	4.5	5.2	4.5	5.2	8.0	8.3	0.5	0.7	dB

	G1V		G2V		G3V		G1V-T			
	Min	Typ	Min	Typ	Min	Typ	Min	Typ		
Frequency	5-10 MHz	18	20	18	20	18	20	18	20	dB
	10-470 MHz	18	20	18	20	18	20	18	20	dB
	470-862 MHz	18	20	18	20	18	20	18	20	dB
	862-1002 MHz	18	20	18	20	18	20	18	20	dB
	1002-1218 MHz	16	18	16	18	16	18	16	18	dB

	G1V		G2V		G3V		G1V-T		
	Typ	Min	Typ	Min	Typ	Min	Typ		
Frequency	5-10 MHz	x	20	25	20	25	x	dB	
	10-470 MHz	x	20	25	20	25	x	dB	
	470-862 MHz	x	22	25	22	25	x	dB	
	862-1002 MHz	x	22	22	20	22	x	dB	
	1002-1218 MHz	x	20	22	20	22	x	dB	

	G1V		G2V		G3V		G1V-T		
	Typ	Min	Typ	Min	Typ	Min	Typ		
Frequency	5-10 MHz	85	85	85	85	85	85	dB	
	10-300 MHz	85	85	85	85	85	85	dB	
	300-470 MHz	80	80	80	80	80	80	dB	
	470-1002 MHz	75	75	75	75	75	75	dB	
	1002-1218 MHz	75	75	75	75	75	75	dB	

	G1V		G2V		G3V		G1V-T		
	Max	Min	Max	Min	Max	Min	Max		
After 25 V Surge	-120	-110	-110	-120	-120	-110	-120	dB	
After 1 kV Surge	-120	-110	-110	-120	-120	-110	-120	dB	

## Galvanic Isolation

	Max
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)
- \* 30-1218 MHz (Absorption Clamp Method According EN-60728-2 Sec 4.4)
- Two carriers (60 & 65 MHz), Output to Input, @ 120dBuV, before surge
- \*\* Two carriers (60 & 65 MHz), Output to Input, @ 120 dBuV, after 10 pulses (25 V/1.2 uS rise time/500 uS fall time) at all ports
- Two carriers (60 & 65 MHz), Output to Input, @ 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 to 25 °C)

# 1.8 GHz GALVANIC ISOLATORS [GxW]

Cable Products, Drop Passives

**Taikan**  
ESTD. 1973

## 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 (i.e. voltage surges or lightning).

It is an effective and practical solution to prevent various types of hazardous surges from damaging Customer Premise Equipment (CPE).

## Features

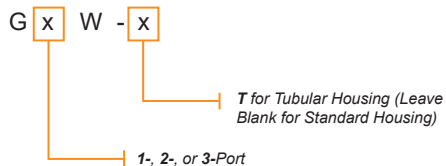
- Screening acc. to EN 50083-2 Class A \*
- Safety Requirements acc. to IEC / EN60 728-11:2010 \*\*\*
- 5-1800 MHz bandwidth
- 1-Port and 2-Port splitter design
- Protection of subscriber's Premise Network Equipment against electrical hazards caused by power surges, lightnings and variabilities in local currents
- Superior isolation and return loss
- 2 kV DC Double Isolation Protection
- IEEE C62.41-1991 Category A3 Ring Wave, 6kV, 200A on all ports
- Compact design with zinc alloy die-cast housing & tin-plated soldered back cover
- 1 GND block with screw for 6mm<sup>2</sup> GND wire



## General Specifications

Voltage Isolation:	2 kV DC
F Connector:	SCTE Compliant IPS-SP 400
Operation Temperature:	-40 to 60 °C

## Ordering Information



Model Number	Inner Box	Standard Carton	Carton Weight
G1W	30 pcs	300 pcs	20 kg / 44 lbs
G2W	30 pcs	300 pcs	21 kg / 46 lbs
G3W	30 pcs	300 pcs	22 kg / 48 lbs
G1W-T	30 pcs	300 pcs	20 kg / 44 lbs



**Galvanic Isolation**

acc. to EN 60728-11:2017 point 10 : at 2120 VDC ≥ 1minute, Leakage current ≤ 0.7 mA; at 230 VAC 50/60 Hz, Leakage current ≤ 2.0 mA RMS (test environmental temperature 0 ~ 25 °C)

2120 VDC	Inner Conductor (Input Port) to Inner Conductor (Output Port)	≤0.7 mA
2120 VDC	Outer Conductor (Input Port) to Outer Conductor (Output Port)	≤0.7 mA
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

**DGIS-1**

**DGIS-2**

**DGIS-2-HPF**

Insertion Loss (dB)	OUT1		OUT1		OUT 2		OUT TV		OUT DATA	
	Typ	Max	Typ	Max	Typ	Max	Typ	Max	Typ	Max
5-10 MHz	0.1	0.6	3.3	3.7	3.3	3.7	>40		3.3	3.7
10-40 MHz	0.1	0.4	3.3	3.9	3.3	3.9	>40		3.3	3.9
40-204 MHz	0.2	0.4	3.3	3.9	3.3	3.9	>40		3.3	3.9
204-258 MHz	0.2	0.4	3.3	3.9	3.3	3.9			3.3	3.9
258-470 MHz	0.2	0.4	3.3	3.9	3.3	3.9	3.8	4.3	3.3	3.9
470-862 MHz	0.4	0.7	4.0	4.3	4.0	4.3	4.2	4.5	4.0	4.3
862-1006 MHz	0.4	0.7	4.3	4.4	4.3	4.4	4.5	4.6	4.3	4.4
1006-1218 MHz	0.5	0.8	4.5	5.2	4.5	5.2	4.7	5.4	4.5	5.2
1218-1800 MHz	0.8	1.2	5.0	5.5	5.0	5.5	5.2	5.8	5.0	5.5

**Return Loss**

IN, OUT (dB)

Frequency	Min	Typ	Min	Typ	Min	Typ	Min	Typ	Min	Typ
	5-10 MHz	18	20	18	20	18	20	18	20	18
10-470 MHz	18	20	18	20	18	20	18	20	18	20
470-862 MHz	18	20	18	20	18	20	18	20	18	20
862-1006MHz	18	20	18	20	18	20	18	20	18	20
1006-1218 MHz	16	18	16	18	16	18	16	18	16	18
1218-1800 MHz	12	14	12	14	12	14	12	14	12	14

**Isolation**

OUT - OUT (dB)

Frequency	Min	Typ	Min	Typ
	5-10 MHz	-	20	25
10-40 MHz	-	20	25	≥40
40-204 MHz	-	20	25	≥40
204-258 MHz	-	20	25	40 ~ 25
258-470 MHz	-	20	25	20
470-862 MHz	-	22	25	22
862-1006 MHz	-	22	22	22
1006-1218 MHz	-	20	22	20
1218-1800 MHz	-	18	20	18

**Intermodulation distortion\***

all Ports

After 25 V Surge	0 dBμV / -120 dBc	≤10 dBμV / -110 dBc
After 1 kV Surge	0 dBμV / -120 dBc	≤10 dBμV / -110 dBc

**Notes:**

- \* Two carriers (60 & 65 MHz), Output to Input, @ 120dBuV, before surge
- Two carriers (60 & 65 MHz), Output to Input, @ 120 dBuV, after 10 pulses (25 V/1.2 uS rise time/500 uS fall time) at all ports ;
- Two carriers (60 & 65 MHz), Output to Input, @ 120 dBuV, after 1 pulse (1 KV/1.2 uS rise time/500 uS fall time) at all ports

Frequency	DGIS-1		DGIS-2				DGIS-2-HPF			
	OUT1		OUT1		OUT 2		OUT TV		OUT DATA	
	Typ	Max	Typ	Max	Typ	Max	Typ	Max	Typ	Max
5-10 MHz	0.1	0.6	3.3	3.7	3.3	3.7	>40		3.3	3.7
10-40 MHz	0.1	0.4	3.3	3.9	3.3	3.9	>40		3.3	3.9
40-204 MHz	0.2	0.4	3.3	3.9	3.3	3.9	>40		3.3	3.9
204-258 MHz	0.2	0.4	3.3	3.9	3.3	3.9			3.3	3.9
258-470 MHz	0.2	0.4	3.3	3.9	3.3	3.9	3.8	4.3	3.3	3.9
470-862 MHz	0.4	0.7	4.0	4.3	4.0	4.3	4.2	4.5	4.0	4.3
862-1006 MHz	0.4	0.7	4.3	4.4	4.3	4.4	4.5	4.6	4.3	4.4
1006-1218 MHz	0.5	0.8	4.5	5.2	4.5	5.2	4.7	5.4	4.5	5.2
1218-1800 MHz	0.8	1.2	5.0	5.5	5.0	5.5	5.2	5.8	5.0	5.5

**Return Loss**

IN, OUT (dB)

Frequency	Min	Typ	Min	Typ	Min	Typ	Min	Typ	Min	Typ
	5-10 MHz	18	20	18	20	18	20	18	20	18
10-470 MHz	18	20	18	20	18	20	18	20	18	20
470-862 MHz	18	20	18	20	18	20	18	20	18	20
862-1006MHz	18	20	18	20	18	20	18	20	18	20
1006-1218 MHz	16	18	16	18	16	18	16	18	16	18
1218-1800 MHz	12	14	12	14	12	14	12	14	12	14

**Isolation**

OUT - OUT (dB)

Frequency	Min	Typ	Min	Typ
	5-10 MHz	-		20
10-40 MHz	-		20	25
40-204 MHz	-		20	25
204-258 MHz	-		20	25
258-470 MHz	-		20	25
470-862 MHz	-		22	25
862-1006 MHz	-		22	22
1006-1218 MHz	-		20	22
1218-1800 MHz	-		18	20

**Intermodulation distortion\***

all Ports

After 25 V Surge	0 dBμV / -120 dBc	≤10 dBμV / -110 dBc
After 1 kV Surge	0 dBμV / -120 dBc	≤10 dBμV / -110 dBc

**Notes:**

- \* Two carriers (60 & 65 MHz), Output to Input, @ 120dBuV, before surge
- Two carriers (60 & 65 MHz), Output to Input, @ 120 dBuV, after 10 pulses (25 V/1.2 uS rise time/500 uS fall time) at all ports ;
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