

# LEN LAMGI01 ISOLATOR Galvanic ground path isolator, 2x BNC, inline housing, AES MADI ASI



Model number  
LAMGI01



## LEN SPLITTERS/FILTERS/RELAYS - AES, MADI, ASI

### AES/MADI/ASI Splitters

The LEN AES/MADI/ASI Splitter is a miniature, passive design, requiring no power, LEN digital signal splitters are a direct equivalent to the use of a Distribution Amplifier to create additional AES, MADI or ASI signals, for most applications. LEN AES/MADI/ASI Splitters are often also utilised for such applications as additional feeds say in remote locations, and in situations where size and weight are critical factors. Offering a broadcast-quality signal, they are useful in both permanent and temporary installations. They may be used freestanding and have fixing screws for mounting through panels. An accessory panel is also available to mount eight splitters in 1U of rack space.

**LAMS01** is for use with the AES, MADI and ASI standards. It is built in an ABS enclosure fitted with three female BNC connectors. Two M3 mounting screws are provided on the same face as the connectors, so that the splitter can be mounted flat to a panel, with the connectors protruding through it.

Two or more splitters can be used in series to provide up to eight individual feeds over shorter distances. Actual distance is dependant on original signal strength and cable quality.

#### **LAMS01**

Input and output impedance:	75 ohms
Return loss, 5 to 270 MHz	15dB, (1)
Amplitude roll-off, 360 MHz :	- 0.2dB (2)
Insertion loss:	3.4dB
Isolation, 270 MHz :	35dB (3)
Drive capability, typical:	90 metres (4)

Notes. 1: Worst case, both outputs terminated. 2: Maximum attenuation. 3: Between output ports. 4: Depends on cable type; 20% reduction compared to a free cable run.

Dimensions: 45 x 30 x 15 (length x width x height) mm, excluding connectors. Weight: 30g.

#### Technical Note

To achieve the specified performance the input should be fed with a source impedance of 75 ohms and both outputs must be terminated with 75 ohms. Therefore, if an output cable is not present, a 75 ohm termination should be fitted. This should be specified to operate over the full bandwidth in use.

**Optional accessories:** **LMPS02** rack frame is a 1U 19-inch panel, finished in black, punched to take eight splitters mounted from the rear by means of the mounting screws, the BNC connectors facing out of the rack. If it is desired to have the connectors facing into the rack, the splitters may be reversed, revealing the splitter modules which will protrude 15mm from the surface of the panel.

### AES / MADI / ASI Galvanic Isolators

These AES/MADI/ASI ground isolators use a broadband high-pass filter to provide complete galvanic isolation of DC currents between two pieces of equipment, whilst permitting the full bandwidth of the digital signal to pass, thus avoiding problems of signal distortion and operator shocks caused by a voltage difference. This method out-performs broadband transformers for these digital signals. Additionally, some broadband transformers invert the signal, which is incompatible for use with ASI. Both the signal and ground paths between equipment are isolated, there is no distortion of the signal.

There are three types with different housings; one type has an encapsulated enclosure which may be rack-mounted with an accessory panel, one is an in-line 'barrel', without a mounting flange and the third is an in-line 'barrel', with mounting flange

Common specifications are as follows. Input and output impedance: 75 ohms. Return loss: Better than 20dB.

Model	Bandwidth (1)	Breakdown Voltage (1)
LAMF01	0.5 MHz to 360 MHz, - 0.25dB	100V
<b>LAMGI01</b>	<b>0.5 MHz to 360 MHz, - 0.25dB</b>	<b>100V</b>
LAMGI02	0.5 MHz to 360 MHz, - 0.25dB	100V

Note 1: These are minimum values.

### Encapsulated Enclosure - LAMF01

LAMF01 is for use with the AES, MADI and ASI standards. It is built in an ABS enclosure fitted with two female BNC connectors. Two M3 mounting screws are provided on the same face as the connectors, so that the filters can be mounted flat to a panel, with the connectors protruding through it.

Dimensions: 45 x 30 x 15 (l x w x h) mm. Weight: 26g.

**Optional accessories:** LMPF01 rack frame is a 1U 19-inch panel, finished in black, punched to take eight filters mounted from the rear by means of the mounting screws, the BNC connectors facing out of the rack. If it is desired to have the connectors facing into the rack, the filters may be reversed, revealing the filter modules which will protrude 15mm from the surface of the panel.

### In-line 'Barrel' Types – LAMGI01

LAMGI01 is for use with the AES, MADI and ASI standards. It is built into a cylindrical plastic (for isolation) enclosure, fitted with a BNC connector at each end. It is ideal for carrying in a toolbox, to cure interference issues.

Dimensions: 30 x 20 (l x diameter) mm. Weight: 36g.

### In-line 'Barrel' Types, with mounting flange for through panel mounting – LAMGI02

LAMGI02 is for use with the AES, MADI and ASI standards. It is built into a cylindrical plastic (for isolation) enclosure, fitted with a BNC connector at each end. An industry-standard size mounting flange is fitted at one end.

Dimensions: 30 x 20 (l x diameter) mm, mounting flange 31 x 26 mm. Weight: 37g.

**Optional accessories:** The LMPG01 rack frame is a 1U 19-inch full width panel, finished in black, punched to take sixteen isolators mounted from the rear by means of the mounting flanges, so that the BNC connectors are on either side of the rack. The LMPG02 rack frame is a 1U 19-inch half width panel, punched to take eight isolators, mounted in the same way as the full width panel.

## AES/MADI/ASI Relays

LAMR01 AES/MADI/ASI Relay is a miniature single-circuit, change-over relay, providing full broadcast quality switching, for data rates up to 360 Mb/s. It is suitable for applications such as power-failure switching and source selection. It can be used to choose between two inputs or to have a single input and choose between two outputs, controlled by a 5V DC applied to the coil. It is built in an ABS enclosure fitted with three female BNC connectors, with mounting screws, which are also used to connect to the coil, on the same face of the relay as the connectors.

### LAMR01







Input and output impedance:	75 ohms
Return loss:	15dB, 0.1-360 MHz (1)
Amplitude roll-off, 0.1 - 360 MHz:	-0.3 dB (2)
Insertion loss:	0.4 dB (3)
Weight:	35g

Note 1: Worst case. 2: Maximum attenuation. 3: Maximum loss, DC - 360MHz. All measurements are quoted with the relay energised. Coil voltage: 5V DC, 80mA.

Dimensions: 45 x 30 x 15 (l x w x h) mm, excluding connectors.

**Optional accessories:** LMPR01 rack frame is a 1U 19-inch panel, finished in black, punched to take eight relays mounted from the rear

by means of the mounting screws, the BNC connectors facing out of the rack. If it is desired to have the connectors facing into the rack, the relays may be reversed, revealing the relay modules which will protrude 15mm from the surface of the panel.

Description	ex. VAT
 LEN LAMS01 SPLITTER Passive, 1x2, 3x BNC, AES MADI ASI	
 LEN LAMF01 ISOLATOR Galvanic ground path isolator, 2x BNC, AES MADI ASI	
 <b>LEN LAMGI01 ISOLATOR Galvanic ground path isolator, 2x BNC, inline housing, AES MADI ASI</b>	
 LEN LAMGI02 ISOLATOR Galvanic ground path isolator, 2x BNC, flange mount, AES MADI ASI	
 LEN LAMR01 RELAY 2x1, changeover, 3x BNC, AES MADI ASI	
 LEN LMPS02 RACK PANEL For 8x video splitters, 1U	