



Passive Audio/Video Signal Splitters



Overview:

- Splits a single signal into two outputs
- Low loss
- Support for **12G/6G/3G/HD/SD-SDI** and **ASI** digital video formats
- Supports **AES3i** and **MADI** digital audio formats
- Passive device
- Very high performance and fault-tolerant design
- Ultra compact units in standalone or 1RU rack mount versions

Application:

- Low cost 1 to 2 distribution amplifier. Multiple units to achieve 1 to 4, 1 to 8 etc.
- Signal split for dual-redundant signal processing architectures
- Simple monitoring split from main signal feed

DSMB Technology

www.dsmbtech.com
sales@dsmbtech.com

Tel (US): +1 305 396 2811
Tel (UK): +44 207 183 0697



Passive Audio/Video Signal Splitters

Description:

These signal splitters conveniently split a single source into two signals for distribution with minimal loss. Since it is a passive device there is no requirement for power. These high performance devices are fault tolerant, such that a cable fault, short-circuit, or improper termination on one output does not affect the other.

They provide a convenient method for allowing a single source to be connected to multiple equipment inputs, where a loop-through is not available, or a monitor feed is required. They can also be used where redundant paths are required and since these units do not require any power to operate they provide excellent reliability.

The splitters are available in a compact single channel unit, or multiple channels in a 1RU rack unit. The rack unit is available in 6 and 12-channel variants with rear or front only connectors and in 10 and 20-channel versions with front to rear, or rear to front routing.

The splitter range supports all of the SMPTE digital video and AES digital audio transmission rates and so are compatible with 12G-SDI, 6G-SDI, 3G-SDI, HD-SDI, SD-SDI and ASI along with signals conforming to AES3i and MADI.

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Passive Audio/Video Signal Splitters

Specifications:

Model	AS275	HS275	3S275	WS275	6S275	US275
Mode	1:2					
Impedance (typ)	75Ω					
Frequency (min)	2MHz	10MHz	50MHz	2MHz	DC	1.5GHz
(max)	500MHz	1.5GHz	3GHz	3GHz	6.8GHz	12.5GHz
Compatibility	AES3i MADI	ASI SD-SDI HD-SDI	ASI SD-SDI HD-SDI 3G-SDI	AES3i MADI ASI SD-SDI HD-SDI 3G-SDI	AES3i MADI ASI SD-SDI HD-SDI 3G-SDI 6G-SDI	HD-SDI 3G-SDI 6G-SDI 12G-SDI
Power (typ)	1.0W	0.5W	0.5W	0.5W	0.5W	1.85W
Return Loss (typ)	26.4dB	21.2dB	11.1dB	17.6dB	16.7dB	16.4dB
Insertion Loss (typ)	0.35dB	0.6dB	0.9dB	1.1dB	0.8dB	1.8dB
Total Loss (typ)	3.35dB	3.6dB	3.9dB	4.3dB	10.3dB	4.8dB
Amplitude Imbalance (typ)	0.2dB	0.6dB	0.8dB	0.4dB	0.3dB	0.7dB
Phase Imbalance (typ)	2 deg	3 deg	6.5 deg	4 deg	3 deg	6 deg
Output Isolation (min)	35dB	28dB	21dB	22dB	19dB	16dB
Channel Isolation (standalone)	Not Applicable					
(rack mount)	85dB	83.2dB	77.5dB	78.1dB	73.2dB	16dB
Size (standalone)	37mm x 34mm x 22mm (1.46" x 1.34" x 0.87"), excluding connectors					
(rack mount)	19" x 1RU x 37mm (1.46") max, excluding connectors					
Weight (standalone)	43g : 1.5oz					
(rack mount)	165g + (42g * num chans) : 6oz + (1.5oz * num chans)					
Environmental	-25 to +55 deg C [32 to 131 deg F], 5%-95% non-condensing EN55103-1, EN55103, EN6095, FCC part 15					

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Ordering Information:

Type	Configuration	Part Number				
		Prefix	Suffix Channels			
			1	6	10	12 20
AS275	Standalone	AS275B	-01S			
	Rack Mounting - Front Panel IO	AS275B		-06F		-12F
	Rack Mounting - Rear Panel IO	AS275B		-06R		-12R
	Rack Mounting - Front Inputs, Rear Outputs	AS275B			-10F	-20F
	Rack Mounting - Rear Inputs, Front Outputs	AS275B			-10R	-20R
HS275	Standalone	HS275B	-01S			
	Rack Mounting - Front Panel IO	HS275B		-06F		-12F
	Rack Mounting - Rear Panel IO	HS275B		-06R		-12R
	Rack Mounting - Front Inputs, Rear Outputs	HS275B			-10F	-20F
	Rack Mounting - Rear Inputs, Front Outputs	HS275B			-10R	-20R
3S275	Standalone	3S275B	-01S			
	Rack Mounting - Front Panel IO	3S275B		-06F		-12F
	Rack Mounting - Rear Panel IO	3S275B		-06R		-12R
	Rack Mounting - Front Inputs, Rear Outputs	3S275B			-10F	-20F
	Rack Mounting - Rear Inputs, Front Outputs	3S275B			-10R	-20R
WS275	Standalone	WS275B	-01S			
	Rack Mounting - Front Panel IO	WS275B		-06F		-12F
	Rack Mounting - Rear Panel IO	WS275B		-06R		-12R
	Rack Mounting - Front Inputs, Rear Outputs	WS275B			-10F	-20F
	Rack Mounting - Rear Inputs, Front Outputs	WS275B			-10R	-20R
6S275	Standalone	6S275B	-01S			
	Rack Mounting - Front Panel IO	6S275B		-06F		-12F
	Rack Mounting - Rear Panel IO	6S275B		-06R		-12R
	Rack Mounting - Front Inputs, Rear Outputs	6S275B			-10F	-20F
	Rack Mounting - Rear Inputs, Front Outputs	6S275B			-10R	-20R
US275	Rack Mounting - Standalone	US275B	-01S			
	Rack Mounting - Front Panel IO	US275B		-06F		-12F
	Rack Mounting - Rear Panel IO	US275B		-06R		-12R
	Rack Mounting - Front Inputs, Rear Outputs	US275B			-10F	-20F
	Rack Mounting - Rear Inputs, Front Outputs	US275B			-10R	-20R

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