



The **VSD Series** analog and serial digital video DAs and accompanying mounting frame combine top-notch quality and specifications with unmatched pricing.

The VMF-100 is a 2RU frame which will accept any combination of up to 10 analog or digital DAs. An optional redundant power supply is available.

Two versions of analog DA are available: a utility DA (VDA-101) and a precision DA (VDA-102). Both versions are terminating input and 8-outputs. The utility DA also allows selection by jumper of either AC coupling or DC coupling while the precision DA includes automatic clamp, two selections of adjustable cable equalization, white clip, and adjustable gain.

The VDD-101 (without re-clocking) and VDD-102 (with re-clocking) serial digital DAs feature eight serial digital outputs, automatic input equalization of up to 300 meters of Belden 8281 cable and LED indication of signal type (VDD-102).

## VSD Series Video Distribution Amplifiers

### FEATURES:

- **Analog and digital DAs compatible with Leitch FR-6801/6802 frames (VDA-101, VDA-102, VDD-101, VDD-102)**
- **VMF-100 frame compatible with Leitch 6800 Series DAs, generators, and converters**
- **Any combination of analog or digital DAs in one frame**
- **Optional redundant power supply**

**We take your success personally**

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**VDA-101 Utility Analog Video DA**

**Input:**

Video input level	1V p-p
Sub-carrier input level	1V to 2V p-p
Input impedance	75Ω terminating
Coupling	DC (AC optional)
Maximum DC on input	±15V (AC coupled)

**Outputs:**

Number	8
Impedance	75Ω

**Performance:**

Gain Range	-3dB to +6dB
Frequency response	<±0.1dB to 10MHz
Differential gain (10-90% APL)	<0.15%
Differential phase (10-90% APL)	<0.15°
Performance temperature	5 – 40° C
Max. operating temperature range	0 – 50° C

**VDD-101/VDD-102**  
**Serial Digital Video DA**

Standards accommodated:	SMPTE 259M-A (143mb/s NTSC) SMPTE 259M-B (177mb/s PAL) SMPTE 259M-C (270mb/s 535/625) SMPTE 259M-D (360mb/s 525/625)
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**Input:**

Number	1
Impedance	75Ω, terminating
Rate selection	Auto or manual selection (VDD-102)
Return loss	>18dB to clock frequency
Signal level	800mv ±10%
Data rates	<50mb/s to >650mb/s (VDD-101) <40mb/s to >450mb/s (VDD-102)
Equalization (automatic)	300 meters of Belden 8281

**Outputs:**

Number	8
Impedance	75Ω, per IEC169-8
Return loss	>18dB to clock frequency
Signal level	800mv ±10%
DC offset	0V ±0.5V
Rise and fall time	205-455mbps (20%-80% amplitude)
Overshoot	5% of amplitude
Output muting	Automatic on “no signal” detection
Power dissipation:	Approximately 2.5W

**VDA-102 Precision Analog Video DA**

**Input:**

Video input level	1V p-p
Input impedance	75Ω terminating
Input return loss	>40dB to 10MHz 30dB to 30MHz
Coupling	DC
Common mode rejection (CMRR)	>60dB to 10KHz

**Outputs:**

Number	8
Impedance	75Ω
Output return loss	>37dB to 10MHz
Output isolation	>30dB to 10MHz
Response variation	<0.1dB, 1 to 8 loads, to 10MHz

**Performance:**

Gain range	-3dB to +3dB
Frequency response	<±0.05dB to 10MHz 0 to -0.5dB to 20MHz -3dB bandwidth to 35 MHz
Differential gain (10-90% APL)	<0.15%
Differential phase (10-90% APL)	<0.1°
S/N ratio	65dB to 20MHz un-weighted
Hum	1mV p-p
Performance temperature	5-40° C
Max. operating temperature range	0-50° C
Power dissipation	2W
Cable Equalization:	
Equalizer A 8281 to 1000'	±0.5dB to 20 MHz 8263 (RG59) to 600'
Equalizer B 8281 to 1000'	+0.25dB to 10MHz 8263 (RG-59) to 600'

**VMF-100 Video DA Mounting Frame**

Number of modules	10 (maximum)
Dimensions	3.5" x 19" x 12" (8.2 x 48.5 x 30.6 cm)
Nominal weight (with modules)	Approx. 16 lbs. (7.6 Kg)
<b>Power Supply:</b>	
Input voltage	90-260VAC, auto selection
Frequency	50/60Hz
Power dissipation	40W
DC output	±6.5V

Your local ISIS Group Distributor: