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Van Nuys, CA 91406

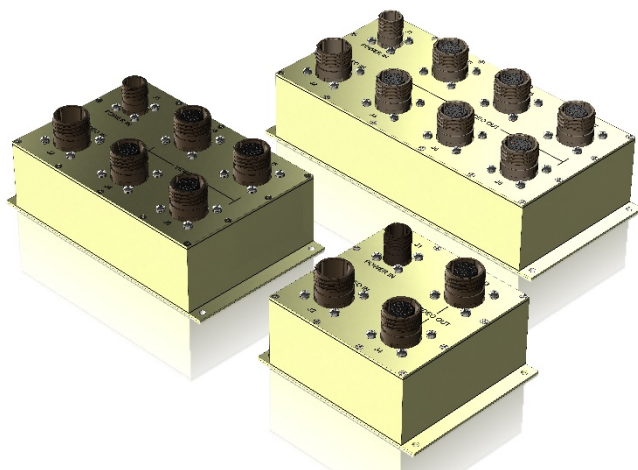
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Oceanside, CA 92056

Product Data Sheet (07/06/2018)

DVID/HDMI Video Splitter/Amplifier Series

Model Numbers:	P/N:
ADV-DVID-12 (1 in 2 out)	18800-300
ADV-DVID-14 (1 in 4 out)	18900-300
ADV-DVID-16 (1 in 6 out)	18700-300
ADV-HDMI-12 (1 in 2 out)	18800-300
ADV-HDMI-14 (1 in 4 out)	18900-300
ADV-HDMI-16 (1 in 6 out)	18700-300



General:

Eon provides existing or customized Splitter/Amplifiers that process HD-SDI, DVI-D, HDMI, DisplayPort, as well as analog (10Hz – 30MHz) video in fixed or switchable configurations. Please contact Eon's website for information and engineering staff about video products including rugged military splitter/amplifiers, cameras, monitors and recorders.

DVID/HDMI Series:

The ADV-DVID/HDMI series includes several different models, all qualified to MilSpec Power, Environmental and EMI requirements. Each model inputs one DVI-D or HDMI digital video signal and distributes to two or more outputs. Each output is equalized to unity gain with respect to the input signal level. Extended Display Identification Data (EDID) is supported.

Supported Data Formats:

8-bit through 36-bit SDR ITU-R BT.656 Modes/4:2:2 Modes; 24-bit through 36-bit SDR 4:4:4 RGB Modes; 8-bit through 12-bit DDR ITU-R BT.656 DDR 4:2:2 Mode 0; 24-bit through 36-bit DDR 4:4:4 RGB.

Supported Video Resolutions:

DVI-D, HDMI in RGB mode: Standard PC resolutions up to UXGA (1600x1200) @ 60Hz
HDMI: HDTV resolutions up to 1080p60, as defined by the HDMI 1.4a standard

Configuration:

See the attached Outline and Mounting Drawings.

Specifications:

Signal Input/Output: Differential (TMDS/CML)

Gain: Unity

Finish: (except for screws, base and connectors): Gold Chromate or CARC White Paint

Input Voltage: 16-40 VDC

Power Consumption: 3.5 - 10.0 Watts depending on configuration

Power Dissipation: 0.28 – 2.0 Watts depending on configuration

Weight: 1.0 - 2.5 lbs (nominal)

Qualification (Data available upon request):

Power: Mil-Std-704D, 1275

Environmental: Mil-Std-810G

Temperature:

Storage: -55° to +85°C

Functional: -40° to +71°C

Short Time Operating: +85°C

Altitude: Non-Pressurized Area, Cl 1 per MIL-E-5400T (0-50,000Ft)

Humidity: DO-160C, Cat A

MIL-STD-810E Method 507.3, Procedure III (Aggravated), 10ea 24 hr cycles

Salt Fog: MIL-STD-810E Method 509.3, Procedure I

Sand and Dust: MIL-STD-810E Method 510.3, Procedure I

Acceleration: Operational: +/-6.5G's, Non-operational: +/-9 G's

Endurance Sine on Random Vibration:

MIL-STD-810F Method 514.5 Category 13 and IF-3AA0-08002B.

Rapid Decompression: MIL-STD-810E Method 500.3 para II-3.3 Procedure III

Functional and Crash Safety Shock Testing:

DO-160C Section 7 Impulse, 6 G's Operational, 15 G's Crash Safety.

EMI: Mil-Std-461

Conducted Emissions, CE101

Conducted Emissions, CE102

Radiated Emissions, RE101

Radiated Emissions, RE102

Conducted Susceptibility, CS101

Conducted Susceptibility, CS114

RF Conducted Susceptibility, RFCS

Radiated Susceptibility, RS103

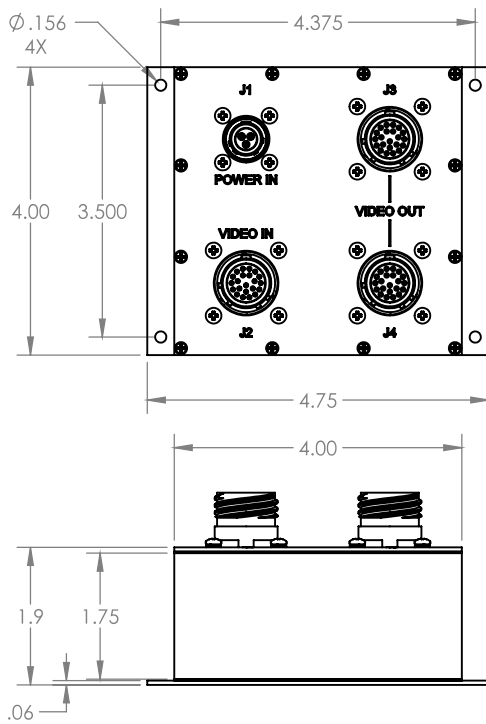
RF Radiated Susceptibility

Electrostatic Discharge, ESD

Lightning Induced Transient Susceptibility, LITS

MTBF: 82,000 – 96,000Hrs

Outline and Mounting Drawings:



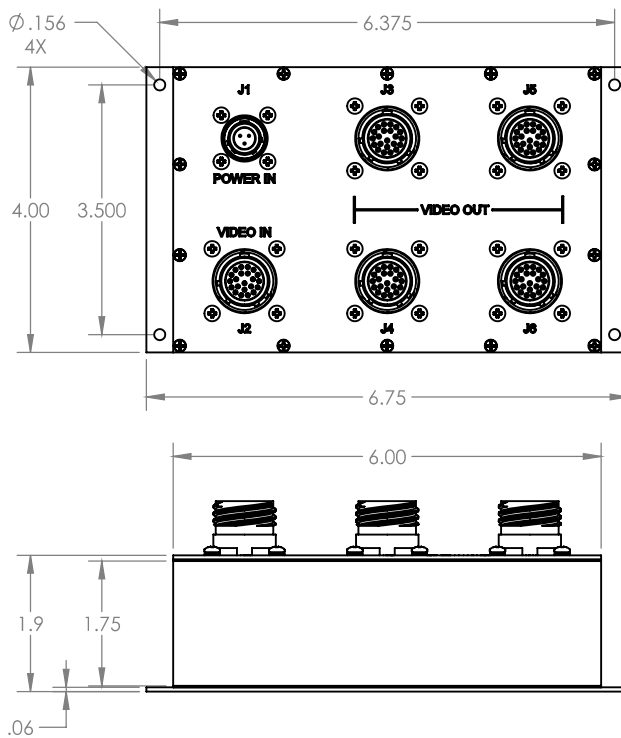
J1 - POWER IN - D38999/20WA98PN

PIN#	SIGNAL
A	+28VDC IN
B	+28 VDC RETURN
C	CHASSIS GND

J2 - HDMI/DVI-D IN - D38999/20WC35PN
J3-4 - HDMI/DVI-D OUT - D38999/20WC35SN

PIN#	SIGNAL	PIN#	SIGNAL
1	TMDS D2+ (R+)	12	RESERVED
2	TMDS D2- (R-)	13	RESERVED
3	TMDS D1+ (G+)	14	RESERVED
4	TMDS D1- (G-)	15	TMDS D2 (R) GND
5	TMDS D0+ (B+)	16	TMDS D1 (G) GND
6	TMDS D0- (B-)	17	TMDS D0 (B) GND
7	CLK+	18	CLK GND
8	CLK-	19	DDC 5V
9	DDC SCL	20	DDC GND
10	DDC SDA	21	RESERVED
11	RESERVED	22	HPD

ADV-DVID-12 Outline and Mounting Drawing



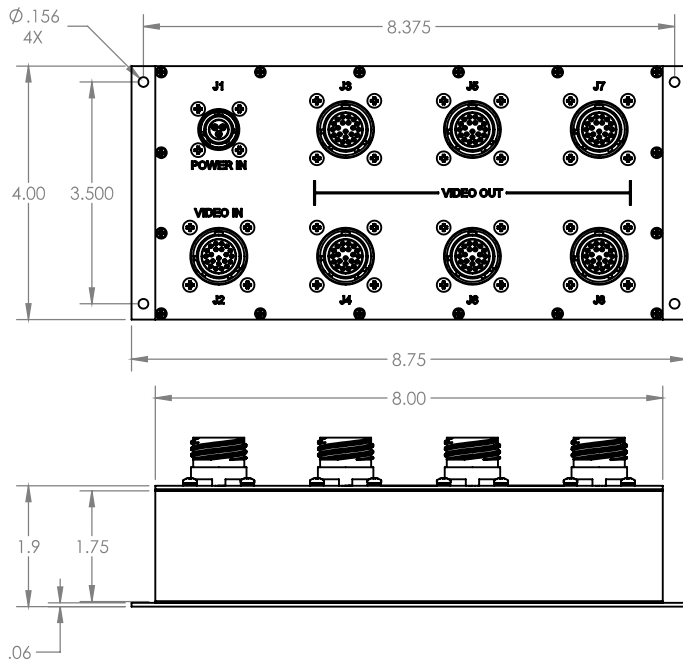
J1 - POWER IN - D38999/20WA98PN

PIN#	SIGNAL
A	+28VDC IN
B	+28 VDC RETURN
C	CHASSIS GND

J2 - HDMI/DVI-D IN - D38999/20WC35PN
J3-6 - HDMI/DVI-D OUT - D38999/20WC35SN

PIN#	SIGNAL	PIN#	SIGNAL
1	TMDS D2+ (R+)	12	RESERVED
2	TMDS D2- (R-)	13	RESERVED
3	TMDS D1+ (G+)	14	RESERVED
4	TMDS D1- (G-)	15	TMDS D2 (R) GND
5	TMDS D0+ (B+)	16	TMDS D1 (G) GND
6	TMDS D0- (B-)	17	TMDS D0 (B) GND
7	CLK+	18	CLK GND
8	CLK-	19	DDC 5V
9	DDC SCL	20	DDC GND
10	DDC SDA	21	RESERVED
11	RESERVED	22	HPD

ADV-DVID-14 Outline and Mounting Drawing



J1 - POWER IN - D38999/20WA98PN

PIN#	SIGNAL
A	+28VDC IN
B	+28 VDC RETURN
C	CHASSIS GND

J2 - HDMI/DVI-D IN - D38999/20WC35PN

J3-8 - HDMI/DVI-D OUT - D38999/20WC35SN

PIN#	SIGNAL	PIN#	SIGNAL
1	TMDS D2+ (R+)	12	RESERVED
2	TMDS D2- (R-)	13	RESERVED
3	TMDS D1+ (G+)	14	RESERVED
4	TMDS D1- (G-)	15	TMDS D2 (R) GND
5	TMDS D0+ (B+)	16	TMDS D1 (G) GND
6	TMDS D0- (B-)	17	TMDS D0 (B) GND
7	CLK+	18	CLK GND
8	CLK-	19	DDC 5V
9	DDC SCL	20	DDC GND
10	DDC SDA	21	RESERVED
11	RESERVED	22	HPD

ADV-DVID-16 Outline and Mounting Drawing

Connector Specifications:

LRU Connector Specification				Mating Connector Specification
Power In	J1	38999 series III	TE Connectivity / Deutsch D38999/20WA98PN *	TE Connectivity / Deutsch D38999/26WA98SN *
DVI-D In	J2	38999 series III	TE Connectivity / Deutsch D38999/20WC35PN *	TE Connectivity / Deutsch D38999/26WC35SN *
DVI-D Out	J3-J8	38999 series III	TE Connectivity / Deutsch D38999/20WC35SN *	TE Connectivity / Deutsch D38999/26WC35PN *
* "W" in D38999 part number denotes standard olive drab (cadmium) plating. "F" in D38999 part number denotes optional electroless nickel plating.				