



America

CERTIFICATE

No. U8V 107546 0002 Rev. 00

Holder of Certificate: **American Power Design, Inc.**
3 Industrial Dr. Unit 8
Windham NH 03087
USA

Certification Mark:



Product: Audio/Video, Information and Communication technology
equipment
HV DC-DC Converter

This product was voluntarily tested to the relevant safety requirements referenced on this certificate. It can be marked with the certification mark above. The mark must not be altered in any way. This product certification system operated by TÜV SÜD America Inc. most closely resembles system 3 as defined in ISO/IEC 17067. Certification is based on the TÜV SÜD "Testing and Certification Regulations". TÜV SÜD America Inc. is an OSHA recognized NRTL and a Standards Council of Canada accredited Certification body.

Test report no.: 72155858-000

Date, 2020-08-07

(Glenn H. McLaughlin)

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Model(s): E1, E3 Series;
SP7164

Brand Name: APD

Tested according to: CAN/CSA C22.2 No 62368-1:2014
UL 62368-1:2014
EN 62368-1:2014/A11:2017

Production Facility(ies): 107546

Parameters:

Rated Input Voltage:	11.5 – 16.0 VDC
Rated Input Current:	<420mA
Rated Output Voltage:	0 to +8000 V DC
Rated Output Current:	0 to 0.375 A max
Protection Class:	III
Degree of Protection:	IPX0

Model Matrix

E	1 or 3	-P	XXX	/Y
Product Family	Total Output Power	Positive/ Negative Output	Customer Selects Output Voltage XXX = 10, 20, 30, 50, 60, 100, 125, 150, 200, 250, 300, 400, 500, 600, 800	ROHS Compliance

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E1-P100/Y

E1 Series: HV DC/DC Converters
1 WATT Total Output Power
Dimensions: 27.9 x 35.6 x 12.7 mm, 0.03 kg
Input Voltage Range 11.5 – 16 Vdc
Output Voltages from 100V to 2000 VDC

Model Number		Input Current		Output Specifications		Switching Frequency kHz
Non-RoHs	RoHS	No Load mA	Full Load mA	Voltage Vdc	Current mA	
E1-P10	E1-P10/Y	<50	<160	0V to +100	0-10	250
E1-N10	E1-N10/Y	<50	<160	0V to +100	0-10	250
E1-P20	E1-P20/Y	<50	<160	0V to +200	0-5	250
E1-N20	E1-N20/Y	<50	<160	0V to -200	0-5	250
E1-P30	E1-P30/Y	<50	<160	0V to +300	0-3.3	250
E1-N30	E1-N30/Y	<50	<160	0V to -300	0-3.3	250
E1-P50	E1-P50/Y	<50	<160	0V to +500	0-2	250
E1-N50	E1-N50/Y	<50	<160	0V to -500	0-2	250
E1-P60	E1-P60/Y	<90	<200	0V to +600	0-1.67	200
E1-N60	E1-N60/Y	<90	<200	0V to -600	0-1.67	200
E1-P100	E1-P100/Y	<90	<200	0V to +1000	0-1	190
E1-N100	E1-N100/Y	<90	<200	0V to -1000	0-1	190
E1-P125	E1-P125/Y	<100	<250	0V to +1250	0-1	180
E1-N125	E1-N125/Y	<100	<250	0V to -1250	0-1	180
E1-P150	E1-P150/Y	<100	<220	0V to +1500	0-0.67	180
E1-N150	E1-N150/Y	<100	<220	0V to -1500	0-0.67	180
E1-P200	E1-P200/Y	<100	<220	0V to +2000	0-0.5	180
E1-N200	E1-N200/Y	<100	<220	0V to -2000	0-0.5	180

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E1-P250/Y

E1 Series: HV DC/DC Converters
1 WATT Total Output Power
Dimensions 27.9 x 44.5 x 12.7 mm, 0.04 kg
Input Voltage Range 11.5 – 16 Vdc
Output Voltages from 2100 V to 4000 VDC

Model Number		Input Current		Output Specifications		Switching Frequency kHz
Non-RoHS	RoHS	No Load mA	Full Load mA	Voltage Vdc	Current mA	
E1-P250	E1-P250/Y	<100	<250	0V to +2500	0-0.4	190
E1-N250	E1-N250/Y	<100	<250	0V to -2500	0-0.4	190
E1-P300	E1-P300/Y	<100	<250	0V to +3000	0-0.33	190
E1-N300	E1-N300/Y	<100	<250	0V to -3000	0-0.33	190
E1-P400	E1-P400/Y	<100	<250	0V to +4000	0-0.25	190
E1-N400	E1-N400/Y	<100	<250	0V to -4000	0-0.25	190

E1-P800/Y

E1 Series: HV DC/DC Converters
1 WATT Total Output Power
Dimensions 27.9 x 66.0 x 12.7 mm, 0.05 kg
Input Voltage Range 11.5 – 16 Vdc
Output Voltages from 4100 V to 8000 VDC

Model Number		Input Current		Output Specifications		Switching Frequency kHz
Non-RoHS	RoHS	No Load mA	Full Load mA	Voltage Vdc	Current mA	
E1-P500	E1-P500/Y	<100	<230	0V to +5000	0-0.2	180
E1-N500	E1-N500/Y	<100	<230	0V to +5000	0-0.2	180
E1-P600	E1-P600/Y	<100	<230	0V to +6000	0-0.166	180
E1-N600	E1-N600/Y	<100	<230	0V to +6000	0-0.166	180
E1-P800	E1-P800/Y	<150	<230	0V to +8000	0-0.125	180
E1-N800	E1-N800/Y	<150	<230	0V to +8000	0-0.125	180

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E3-P100/Y

E1 Series: HV DC/DC Converters
3 WATT Total Output Power
Dimensions 27.9 x 35.6 x 12.7 mm, 0.03 kg
Input Voltage Range 11.5 – 16 Vdc
Output Voltages from 100V to 2000 VDC

Model Number		Input Current		Output Specifications		Switching Frequency kHz
Non-RoHS	RoHS	No Load mA	Full Load mA	Voltage Vdc	Current mA	
E3-P10	E3-P10/Y	<60	<360	0V to +100	0-30	250
E3-N10	E3-N10/Y	<60	<360	0V to +100	0-30	250
E3-P20	E3-P20/Y	<60	<360	0V to +200	0-15	250
E3-N20	E3-N20/Y	<60	<360	0V to +200	0-15	250
E3-P30	E3-P30/Y	<60	<360	0V to +300	0-9.9	250
E3-N30	E3-N30/Y	<60	<360	0V to +300	0-9.9	250
E3-P50	E3-P50/Y	<60	<360	0V to +500	0-6	250
E3-N50	E3-N50/Y	<60	<360	0V to +500	0-6	250
E3-P60	E3-P60/Y	<105	<380	0V to +600	0-5	200
E3-N60	E3-N60/Y	<105	<380	0V to +600	0-5	200
E3-P100	E3-P100/Y	<105	<380	0V to +1000	0-3	190
E3-N100	E3-N100/Y	<105	<380	0V to +1000	0-3	190
E3-P125	E3-P125/Y	<110	<390	0V to +1250	0-2.4	180
E3-N125	E3-N125/Y	<110	<390	0V to +1250	0-2.4	180
E3-P150	E3-P150/Y	<110	<400	0V to +1500	0-2	180
E3-N150	E3-N150/Y	<110	<400	0V to +1500	0-2	180
E3-P200	E3-P200/Y	<110	<400	0V to +2000	0-1.5	180
E3-N200	E3-N200/Y	<110	<400	0V to +2000	0-1.5	180

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E3-P250/Y

E3 Series: HV DC/DC Converters
3 WATT Total Output Power
Dimensions 27.9 x 44.5 x 12.7 mm, 0.04 kg
Input Voltage Range 11.5 – 16 Vdc
Output Voltages from 2100V to 4000 V DC

Model Number		Input Current		Output Specifications		Switching Frequency kHz
Non-RoHs	RoHS	No Load mA	Full Load mA	Voltage Vdc	Current mA	
E3-P250	E3-P250/Y	<140	<410	0V to +2500	0-1.2	190
E3-N250	E3-N250/Y	<140	<410	0V to +2500	0-1.2	190
E3-P300	E3-P300/Y	<140	<410	0V to +3000	0-1	190
E3-N300	E3-N300/Y	<140	<410	0V to +3000	0-1	190
E3-P400	E3-P400/Y	<140	<410	0V to +4000	0-0.75	190
E3-N400	E3-N400/Y	<140	<410	0V to +4000	0-0.75	190

E3-P800/Y

E3 Series: HV DC/DC Converters
3 WATT Total Output Power
Dimensions 27.9 x 66 x 12.7 mm, 0.05 kg
Input Voltage Range 11.5 – 16 Vdc
Output Voltages from 4100V to 8000 V DC

Model Number		Input Current		Output Specifications		Switching Frequency kHz
Non-RoHs	RoHS	No Load mA	Full Load mA	Voltage Vdc	Current mA	
E3-P500	E3-P500/Y	<150	<420	0V to +5000	0-0.6	180
E3-N500	E3-N500/Y	<150	<420	0V to +5000	0-0.6	180
E3-P600	E3-P600/Y	<150	<420	0V to +6000	0-0.5	180
E3-N600	E3-N600/Y	<150	<420	0V to +6000	0-0.5	180
E3-P800	E3-P800/Y	<150	<420	0V to +8000	0-0.375	180
E3-N800	E3-N800/Y	<150	<420	0V to +8000	0-0.375	180

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SP7164

SP7164: HV DC/DC Converters						
3 WATT Total Output Power						
Dimensions 31.8 x 76.2 x 15.2 mm, 0.06 kg						
Input Voltage Range 11.5 – 16 Vdc						
Output Voltages from 0V to 8000 V DC						
Model Number		Input Current		Output Specifications		Switching Frequency
Non-RoHS	RoHS	No Load mA	Full Load mA	Voltage Vdc	Current mA	kHZ
SP7164	SP7164/Y	<150	<250	0V to -8000	0-0.125	180