

APS

Advanced Power Solutions

5/31/01

AUTO-RANGING INPUT AC TO DC EXTERNAL DESKTOP ADAPTOR MULTIPLE OUTPUT 100-120 WATTS SWITCHING POWER SUPPLIES APS100ES SERIES



FEATURES:

- AUTO-RANGING ACCOMMODATE AC SOURCES IN THE WORLD
- IMPACT RESISTANT THERMO-PLASTIC LOW-PROFILE ENCLOSURE
- MEET UNIVERSAL SAFETY STANDARDS
- CONDUCTED EMI MEET EN55022 / FCC CLASS B, RADIATED EMI MEET CLASS A
- CE MARKING COMPLIANCE

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: Auto-ranging 115Vac for range 90-132Vac and 230Vac for range 180-264Vac
Transient threshold 150Vac typical
Input Connector: IEC320 3P AC Inlet/Outlet receptacle, with AC On/Off switch
Input Frequency: 47-63Hz
Inrush Current: 20A peak. @ 115Vac, 40A @ 230Vac
Input Current: 2.5A @ 115Vac, 1.1A @ 230Vac
Dielectric Withstand: Meets IEC950
EMI: Conducted EMI meet EN55022 / FCC Class B
Radiated EMI meets Class A,
Hold-up Time: 22mS @115Vac./ 27mS @ 230Vac
Power Fail Signal: Option in all series
Logic Inhibit: Optional in single & dual output series
Remote Sensing: Optional for single & dual output series

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart
Output Current: See Ratings Chart
Output Wattage: Typ.100-120 Watts
Output Connector & Cable: Optional
Cord length typ. 3 ft.(1 meter)
Line Regulation: VO1, VO3 & VO4 $\pm 0.1\%$ typ.
Aux.VO2 $\pm 0.5\%$ typ.
Load Regulation: At strain relief end
Main O/P VO1 $\pm 1.0\%$ typ.
Aux. O/P VO2 $\pm 2.0\%$ typ. with Mag. Amp. or $\pm 5.0\%$ typ. with Stacked on
Aux. O/P VO3 & VO4 $\pm 1.5\%$ typ. with PR
Noise & Ripple: Typ. 1.0% peak to peak
OVP: Main O/P only set @ 124% $\pm 8\%$ VO1
Overload Protection: 125-150% of max. power
Over-range or short circuit, power foldback & self-recovering

GENERAL SPECIFICATION

Efficiency: Typ. 75%
Switching Frequency: Fixed Frequency at 100KHz
Circuit Topology: Fixed Frequency Forward circuit
Transient Response: Output voltage returns in less than 3mS following a 25% load change
Safety Standard: UL1950/EN60950 Class I
Construction: Desktop enclosure plastic box
Power Density: 0.88Watts / Inch³

Operating Temperature: 0 to 40°C
Storage Temperature: -20°C to +85°C
Temperature Coefficient: 0.04% per °C
Cooling: Built-in 6.5CFM 40mm fan cooling
Long Term Stability: After 20 minutes warm-up, 0.1% for 8 hours
Industrial or Commercial Grade Option:
" Industrial" higher MTBF, " Commercial" lower cost

Note: (1) At least 20% of typical main output current is required to maintain stated regulation.
(2) Cord length typical 3 ft. (or 1 meter).



OUTPUT VOLTAGE/CURRENT RATINGS CHART

SINGLE OUTPUT

MODEL NO.	MAIN O/P VO1 • #		
	TYP.	VOLT.	PEAK
APS100ES-11	8.3A	12.0V	10.0A
APS100ES-12	6.7A	15.0V	8.0A
APS100ES-13	4.2A	24.0V	5.0A
APS100ES-14	2.1A	48.0V	2.5A

DUAL OUTPUT

MODEL NO.	MAIN VO1 O/P • •			AUX. O/P VO2 • •		
	TYP.	VOLT.	MAX.	TYP.	VOLT.	MAX.
APS100ES-21	10.0A	5.0V	15.0A	4.0A	5.0V	3.5A
APS100ES-22	10.0A	5.0V	15.0A	3.0A	12.0V	3.0A
APS100ES-23	6.0A	5.0V	12.0A	3.0A	24.0V	3.0A
APS100ES-24	4.5A	12.0V	5.0A	4.5A	12.0V	5.0A
APS100ES-25	3.5A	15.0V	5.0A	3.4A	15.0V	4.0A

TRIPLE OUTPUT

MODEL NO.	MAIN O/P VO1 •			AUX. O/P VO2 †			AUX. O/P ±VO3 •		
	TYP.	VOLT.	MAX.	TYP.	VOLT.	MAX.	TYP.	VOLT.	MAX.
APS100ES-30	12.0A	+5.0V	13.0A	3.0A	+12.0V	3.5A	0.8A	12.0V	1.0A
APS100ES-31	12.0A	+5.0V	13.0A	3.0A	+12.0V	3.5A	0.8A	5.0V	1.0A
APS100ES-32	12.0A	+5.0V	13.0A	1.5A	+24.0V	2.0A	0.8A	12.0V	1.0A
APS100ES-33	12.0A	+5.0V	13.0A	3.0A	+15.0V	3.3A	0.3A	15.0V	1.0A

QUAD OUTPUT

MODEL NO.	MAIN O/P VO1 •			AUX. O/P VO2†			AUX. O/P ±VO3 •			AUX. O/P ±VO4 •		
	TYP.	VOLT.	MAX.	TYP.	VOLT.	MAX.	TYP.	VOLT.	MAX.	TYP.	VOLT.	MAX.
APS100ES-40	12.0A	+5.0V	13.0A	2.5A	+12.0V	3.0A	0.8A	12.0V	1.0A	0.5A	12.0V	1.0A
APS100ES-41	12.0A	+5.0V	13.0A	2.5A	+12.0V	3.0A	0.8A	5.0V	1.0A	0.6A	5.0V	1.0A
APS100ES-42	12.0A	+5.0V	13.0A	1.0A	+24.0V	1.5A	0.8A	12.0V	1.0A	0.5A	12.0V	1.0A
APS100ES-43	12.0A	+5.0V	13.0A	2.2A	+15.0V	2.7A	0.6A	12.0V	1.0A	0.4A	15.0V	1.0A

Symbols: "•" OVP built-in. "@" Adjustable. "•" Floating(or isolated) output. "•" Installed with Post Regulator (PR). "†" Stacked on main output.
 "#" Remote sensing. "••" Installed with magnetic amplifier. "±" Positive or Negative selectable (factory set).

MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 1.242KG.(43.80z.)

