APS

Advanced Power Solutions

9/27/2000

ZKS-145N50 | SFX

145W Five-Output PC Power Supply | 145 Watts

STANDARD FEATURES

- 3.3V Output
- +5VSB standby
- ATX 20-pin connector
- Remote On/Off
- Energy Star
- High efficiency
- High MTBF
- IEC1000-2, -4, -5
- Power good signal
- CE MARK

MEET SAFETY

- UL/CUL 1950
- TUV 60950 MEET
- CB (IEC 950)
- NEMKO 60950

EMI/RFI

- FCC Class B
- CISPR 22 Class B

OPTIONAL FEATURES

- Thermal fan speed control
- Fan monitor & fan control

ELECTRICAL SPECIFICATION

Input

Input range……..	95~130 / 189~260 VAC; Switch select
Frequency…….……..	47~63 Hz
Input current…….……..	4.3A @ 115VAC; 2.2A @ 230VAC
Inrush current……..	< 50A @ 115VAC at 25°C < 100A @ 230VAC at 25°C
Efficiency…….……..	> 62% full load at 115VAC

Output

Total maximum power…..……..	145 watts continuous
Transient response……..	All output shall stay within regulation for 20% load change from 10Hz to 1Khz and 50% duty cycle
Over current protection……..	< 240VA
Over voltage protection……..	+3.3V trip point < 4.3V +5V trip point < 6.8V +12V trip point < 15.6V
Short-circuit protection……..	Main outputs latch off when short-circuits to common or other outputs

Timing Sequence

Power good signal……..	100 ~500ms turn-on delay time > 1ms before power fail
Hold-up time……..	>16ms at full load at 115 or 230 Vac Input

Remote On-Off

PS-on……..	TTL compatible; active low enables main outputs

MECHANICAL / ENVIRONMENTAL

Dimension……..	125 x 100 x 63.5 (mm) LxWxH – 63.5mm only the height of metal case, to include the fan height exposed on the topside, it should be 73.50mm
Cooling…….……..	80mm sleeve bearing fan
Operating temp. / humidity…….	10 ~ 40°C / 20 ~ 85%
Storage temp. / humidity…….	-10 ~ 70°C / 10 ~ 95%
MTBF……	50,000 hours at full load 25°C (MIL-217-F)

with AC inlet and I/O power switch

Output	Voltage	Regulation	Minimum Load	Maximum Load	Peak Load[1]	Ripple P/P (PARD)[2]	Ripple & Noise[2]
V1[3]	+3.3	+/- 5%	0.3A	8A	12A	60mV	150mV
V2	+5	+/- 5%	2.5A	15A	16A	70mV	150mV
V3	+12	+/- 6%	0.7A	3.2A	5A	150mV	180mV
V4	-5	+/- 10%	0A	0.1A	0.1A	70mV	150mV
V5	-12	+/- 10%	0.05A	0.3A	0.5A	150mV	200mV
V6	+5VSB	+/- 5%	0.05A	1.5A	2A	150mV	150mV

1. Limited to 12 second maximum.
2. Peak-to-peak value; 20MHz bandwidth; Measured with 10 µF and 0.1 µF tantalum capacitors in parallel to load.
3. Total maximum combined output power on +3.3V and +5V rail is 90 watts