3Y - 2U Redundant

YH5701-1EA13R (700W)

DESCRIPTION

YH5701-1EA13R 2U redundant power system designed for use in various server applications. The output power reached 700 watts with parallel operation by active load sharing and provides a hot-swap configuration. Support PMBus 1.2 for server management to achieve high efficiency and reliability.

APPLICATION

Server, Storage, Networking and Security System

FEATURES

* Max. output 700W combined with 3 main outputs +12V, 5V and 3.3V
* High efficiency, meet 80PLUS Platinum standards.
* Built-in active PFC function, > 0.95 at full load / 115Vac input.
* Operation Temperature range: 0°C~50°C @ full load
* With OCP/OVP/OPP/UVP/OTP/SCP/FFP protection function.
* Active current sharing within ± 10%
* Self-cooled with PMW Fan of power modules
* Hot-Swap function for the power modules

INPUT SPECIFICATIONS

Input Range:	90-264 Vac
Input Frequency:	47-63 Hz
Input Current:	max. 10A @90-132V / 5A @180-264V
Power Factor:	0.95 @115Vac/60Hz 09.95 @230Vac/50Hz
Leakage Current:	max. 3.5mA @ 240Vac/50Hz

OUTPUT SPECIFICATIONS

Output Voltage/Current:	see rating chart.
Max. Output Power:	see rating chart.
Ripple & Noise:	+3.3V, +5V, 5VSB: 50mV p-p +12V, -12V: 120mV p-p
Over Voltage Protection:	+3.3V: 3.9V ~ 4.5V / +5V: 5.7V ~ 6.5V +12V: 13.3V ~ 14.5V
Over Current Protection:	+3.3V: 22A ~ 36A / +5V: 22A ~ 45A +12V: 62A ~ 85.5A
Transient Response:	max. 4% diviation, recovery to within 1% in 1mSec for 25% load change
Short Circuit Protection:	No damage, resistance ≦ 0.01Ω
Over Temperature Protection:	Primary & secondary protection with auto recovery
Over / Undershoot:	max. 5% at turn on/off
Control & Indicator Functions:	PSAlert Output Signal Pin at PMBus TTL,TTL1 and TTL2 Output Signal LED Indicators - No AC Input - Power Supply Failure - PWOK Fail - Fan Fail or Lock

YH5701-1EA13R

Dimension: 101.0(W) x 82.0(H) x 260.0(L) mm

SAFETY STANDARD APPROVALS

UL 60950
File No. E142723

GB4943.1-2011

TUV EN 60950-1

IEC 60950-1

GENERAL SPECIFICATIONS

Efficiency (Module):	94% @230VAC (Typical Load)
Efficiency (Set):	≧ 80% at Max load of 115VAC
Power Density:	5.17 W/in³
Signals:	Power good, TTL compatible
Inrush Current:	40A peak over the entire input voltage range
Hold-up Time:	min. 16ms@110Vac
Output Rise Time:	max. 50ms measured at 10% to 90%
PWOK Delay Time:	500ms >PWOK>100ms
MTBF:	> 200,000 hours calculated at 100%, according to BELL CORE TR-322 at 25°C excluding the Fan MTBF. At least 100,000 hours including the fan MTBF.
EMC Performance:	EN55022, class B Conducted EN55022, class B Radiated EN61000-3-2, class D EN61000-3-3 EN61000-4-4, level 3 Perf Criteria B EN61000-4-5, level 3 Pref Criteria B EN61000-4-6, 10Vrms, Pref Criteria A

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature:	0°C to +50°C
Storage Temperature:	-40°C to +70°C
Relative Operating Humidity:	85% RH, Non-condensing
Operating Altitude:	Sea level to 2000m
Vibration Operating:	0.01G²/Hz at 10Hz 0.02G²/Hz at 20Hz

OUTPUT RATING CHART

Model Name	Max. Output Watt.	Output Current															
		+3.3V		+5V		+12V1		+12V2		+12V3		-12V		-5V		+5VSB	
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
YH5701-1EA13R	700W	1,5 A	20,0 A	1,0 A	20,0 A	1,0 A	57,0 A	-	-	-	-	0,0 A	0,5 A	-	-	0,1 A	4,0 A

Remark : Max. continuous total DC output power should not exceed 700W
Max. combined +5V and +3.3V output is limited to total 140W

MECHANICAL SPECIFICATIONS AND HARNESS

Dimension: 101.0(W) x 82.0(H) x 260.0(L) mm

Connector

1* ATX 24pin (700mm)
2* EPS12V 8pin CPU (600mm)
10* 4Pin Molex Power (2*450/150,3*300/150mm)
2* 4Pin FFD Power
2* Sata Power (650/150mm)
1* Buzzer Reset (650mm)
3* TTL Cables (TTL, TTL1, TTL2)
1* PMBus (SB 350mm)