PRODUCT SPECIFICATIONS

CRS-C8050-14

500W SWITCHING POWER SUPPLY

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1.0 INPUT **4**
- 1.1 VOLTAGE 4
- 1.2 FREQUENCY 4
- 1.3 CURRENT 4
- 1.4 INRUSH CURRENT 4
- 1.5 POWER EFFICIENCY 4
- 1.6 LEAKAGE CURRENT 4
- 1.7 POWER FACTOR 4

2.0 OUTPUT **5**
- 2.1 REMOTE ON/OFF 5
- 2.2 HOLD-UP TIME 5
- 2.3 POWER GOOD DELAY 5
- 2.4 POWER FAIL DELAY 5
- 2.5 TURN-ON DELAY TIME 5
- 2.6 TRANSIENT OVERSHOOT 6
- 2.7 RISE TIME 6

3.0 PROTECTION **6**
- 3.1 OVER CURRENT PROTECTION 6
- 3.2 NO LOAD OPERATION 6
- 3.3 OVER VOLTAGE PROTECTION 6
- 3.4 SHORT PROTECTION 6
- 3.5 OVER POWER PROTECTION 6

4.0 ENVIRONMENT **7**
- 4.1 OPERATING TEMPERATURE 7
- 4.2 STORAGE TEMPERATURE 7
- 4.3 OPERATING HUMIDITY 7
- 4.4 STORAGE HUMIDITY 7
- 4.5 OPERATING ALTITUDE 7
- 4.6 STORAGE ALTITUDE 7

5.0 HI-POT **7**
- 5.1 PRIMARY TO SECONDARY 7
- 5.2 PRIMARY TO EARTH GND 7
- 5.3 INSULATION RESISTANCE 7

6.0 CE REQUIREMENTS **7**
- 6.1 CONDUCTED EMI 7
- 6.2 SAFETY STANDARDS 7

7.0 MTBF AT 25°C (demonstrated) 7

8.0 DIMENSIONS 7

9.0 CABLING 8

1.0 INPUT:

1.1 VOLTAGE
Minimum: 90Vrms
Nominal: 100~240Vrms
Maximum: 264Vrms

1.2 FREQUENCY
47Hz ~ 63Hz

1.3 CURRENT
115Vac / 6.0A max. 230Vac / 3.0A max.

1.4 INRUSH CURRENT
55A max. when AC input 115Vac at 25°C cold start.
110A max. when AC input 230Vac at 25°C cold start.

1.5 POWER EFFICIENCY
80% minimum under the load conditions defined in below table and 115Vac input.
Loading Table for Efficiency Measurements:

500W (loading shown in Amps						
Load	+12V1	+12V2	+5V	+3.3V	-12V	+5Vsb
Full	15.5	15.5	10.89	17.42	0.26	2.58
Typical	7.75	7.75	5.45	8.71	0.13	1.29
Light	3.10	3.10	2.18	3.48	0.05	0.52

1.6 LEAKAGE CURRENT
3.5mA max.

1.7 POWER FACTOR
PF > 0.9

2.0 OUTPUT

Voltage	+12V1	+12V2	+5V	+3.3V	-12V	+5Vsb
Max. load*[1]	18.0A	18.0A	15.0A	24.0A	0.3A	3.0A
Min. load	0.3A	0.5A	0.5A	0.3A	0A	0A
Peak load	19.0A	19.0A	--	--	--	3.5A
Regulation*[2]	+/-5%	+/-5%	+/-5%	+/-5%	+/-10%	+/-5%
Ripple&noise*[3]	120mV	120mV	50mV	50mV	120mV	50mV

*1 The continuous total output power is 500W max.
The combined output power of +5V and +3.3V is 130W max.
Peak current may last up to 12 seconds with no more then one occurrence per minute.

*2 Add 0.1μF and 10 μF capacitors across output terminals during the ripple&noise test.

*3 Load regulation test table:

	+12V1	+12V2	+5V	+3.3V	-12V	+5Vsb
LOAD1	0.3A	0.5A	0.5A	0.3A	0.0A	0.0A
LOAD2	0.8A	0.8A	0.5A	0.8A	0.0A	0.1A
LOAD3	0.3A	0.5A	4.0A	0.3A	0.1A	0.5A
LOAD4	2.5A	2.0A	8.0A	7.5A	0.2A	1.0A
LOAD5	17.0A	16.0A	3.0A	0.3A	0.3A	2.0A
LOAD6	17.0A	16.0A	12.0A	7.5A	0.1A	1.0A
LOAD7	15.0A	15.0A	10.0A	24.0A	0.1A	1.0A
LOAD8	6.5A	6.0A	15.0A	16.5A	0.3A	3.0A
LOAD9	15.0A	14.0A	10.0A	24.0A	0.3A	3.0A

2.1 REMOTE ON/OFF
TTL High/PS-OFF; TTL Low/PS-ON
V_{IL}=0.8Vmax, I_{IL}=-1.6mAmax @Vin=0.4V
V_{IH}=2.0Vmin @Iin=-200uA, V_{IH}=5.25Vmax @open ckt.

2.2 HOLD-UP TIME
16msec (minimum) at 80% of full load at 230Vac input.

2.3 POWER GOOD DELAY
100-500 msec.

2.4 POWER FAIL DELAY
>1 msec.

2.5 TURN-ON DELAY TIME
2000 msec max.At Nominal Line Full Load.

2.6 TRANSIENT OVERSHOOT

DC output transient step sizes as below table:

Output Voltage	+12V1	+12V2	+5V	+3.3V
Max. step size	60%	40%	30%	30%

Load changing repetition rate: 10ms

Load slew rated 1.0A/μs and capacitive load as below:

+12V1	+12V2	+5V	+3.3V	-12V	+5Vsb
10.000μF	10.000μF	10.000μF	10.000μF	330μF	4.700μF

2.7 RISE TIME

20ms max at full load.

3.0 PROTECTION:

When OCP, OVP, OPP or short protection is triggered, the main outputs will be latched off. The main outputs can be reset by cycling the DC remote on/off or AC power.
+5Vsb output is auto recovering when fault condition removed.

3.1 OVER CURRENT PROTECTION

+5V output: 18A~32A
+3.3V output: 28A~42A
+12V1,+12V2 output: 20A~32A

3.2 No-load operation

No damage or hazardous condition should occur with all the DC output connectors disconnected from the load. The power supply may latch into the shutdown state.

3.3 OVER VOLTAGE PROTECTION

+3.3V output 4.5 Vmax.
+5.0V output 7.0 Vmax.
+12.0V output 15.6 Vmax.

3.4 SHORT PROTECTION

All output to GND.

3.5 OVER POWER PROTECTION

120%~160% of full load

4.0 ENVIRONMENT:

4.1 OPERATING TEMP. 10°C to +50°C

4.2 STORAGE TEMP. -20°C to +70°C

4.3 OPERATING HUMIDITY 20% to 90%, non-condensing

4.4 STORAGE HUMIDITY 5% to 95%, non-condensing

4.5 OPERATING ALTITUDE 0 to 10,000 feet

4.6 STORAGE ALTITUDE 0 to 50,000 feet

5.0 HI-POT (Input/Output isolation):

5.1 PRIMARY TO SECONDARY
3535Vdc for 3 seconds

5.2 INSULATION RESISTANCE
Primary to earth ground 500Vdc , 50M ohms Min.

6.0 CE REQUIREMENTS

6.1 CONDUCTED EMI
1. MEET FCC: Class B
2. MEET CISPR22: Class B
3. MEET BSMI: Class B

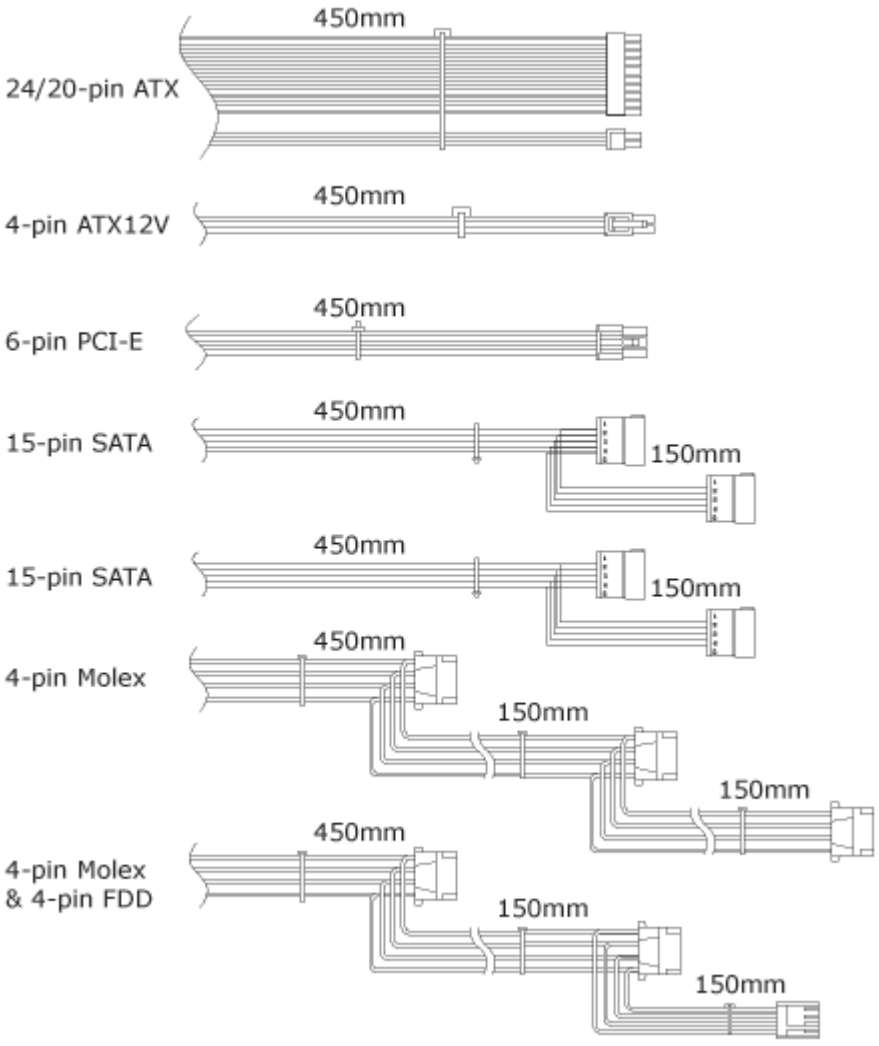
6.2 SAFETY STANDARDS
1. MEET CUL (UL 60950)
2. MEET TUV EN60950
3. MEET CB (IEC 950)
4. MEET CE
5. MEET CCC

6.3 HARMONIC
MEET IEC1000-3-2, Class D

7.0 MTBF at 25°C (demonstrated)
100K hrs minimum

8.0 DIMENSIONS
WxHxD = 150x86x160mm

9.0 CABLING



All specifications are subject to change without prior notification.