



**Scope**

This specification sheet applies to Nipron model NSP6F-220P-S10 Power Supply. The normal temperature and normal humidity is applied for testing if it has no caution. This power supply is "Nonstop power supply". Battery backup operation is available during blackout by connecting optional dedicated battery pack. Regarding optional battery pack, this specification sheet is not applied, and regulations on battery pack specification sheet are prior.

**General Specifications**

	Items	Specifications	Conditions
AC Input	Rated Input Voltage	AC100-240V/2.2-0.92A	
	Input Voltage Range	85(Notes 1)-264V	
	Input Frequency	50 / 60 Hz	Allowable frequency range: 47 Hz-63 Hz
	Inrush Current	40Apeak(100V)/100Apeak(240V) ※Cold starting of the power thermistor at 25°C.	Needs more than 60s after previous shutdown
	Power Factor	90% min	At rated output
	Efficiency	72% min (74% typ)	At rated output
DC Input	Rated Input Voltage	16.8V/12A	At rated output ※DC startup impossible
	Applicable battery pack	BP03A-H16/2.5L or BS03A-H16/2.5L (16.8V/2.5Ah/Ni-MH)	Battery pack is optional (sold separately)
	Efficiency	85% min (90% typ)	At rated output
	Backup time	5 minutes min (10minutes typ)	At rated output ※default value with full charged new product
Environment	Operating temperature	0 ~ 60°C(Notes 1) / 10 ~ 90% RH	At no condensation
	Storage temperature	-20 ~ 75°C / 10 ~ 95% RH	At no condensation
	Vibration	To endure the acceleration of 2G with frequency from 10~55 Hz for 10 sweep cycles in each X, Y, and Z directions.	According to JIS C 60068-2-6 At no operation
	Mechanical Shock	No failure is detected by the test that one side of bottom is lifted up (to slant the unit) and, for each of 4 sides, let it fall down 3 times from the position of 50 mm high.	According to JIS C 60068-2-31 At no operation
Other	Insulation Resistance	50MΩ min between AC input and DC output/FG	At DC 500V
	Hi-pot Voltage	1500 VAC for 1 minute, between AC input and DC output/FG	1s at production line Cut off current: 20mA max
	Leakage Current	0.5mA max (at 100V)/1mA max (at 200V)	
	Line Noise Immunity	±2 kV at a pulse width of 100 ns/1000 ns, repetitive cycle: 30~100Hz, Common/Normal mode with Positive/Negative polarity for 1 minute	Measured by INS-410 (at AC100/240V) No DC-factor voltage fluctuation in outputs and no malfunction
	Surge Immunity	According to IEC-61000-4-5 class3, 5 repetitive tests with a common/normal mode pulse; Common mode: ±2 kV Normal mode: ±1 kV	No operating error of auto-recovery impossible at 100/240V AC
	Electrostatic discharge	According to IEC-61000-4-2 level 3, Contact discharge: ±6 kV, 10 times	No operating error of auto-recovery impossible at 100/240V AC
	EMI	VCCI/FCC part15/CISPR 22/EN55022 class A	Measured with single unit of power supply at AC100/240V
	AC Harmonics Current	IEC61000-3-2 (Ver. 2.1) Class D	At AC100/240V
	Safety Standard	UL60950-1, CSA60950-1(c-UL) 	As Class I
	Cooling	Forced air cooling	Low speed at standby mode
	Dimension	100mm(W)×63.5mm(H)×145mm※(D) *Projected fan is included.	Refer to the Outline Drawing (※Projected FAN is equipped at rare side)
	Weight	1.25Kg typ	
	Life expectancy	7 years min (Short life expectancy components: Electrolytic capacitors and fan motors)	Continuous operation at rated input/output at 35°C.
	M.T.B.F.	80,000 hours	According to EIAJ RCR-9102
	Reliability Grade	FA	Nipron's quality criteria
	Restriction of Hazardous Substances	RoHS directive	
Warranty	12 months after delivery. However, if any faults belong to us, the defective unit shall be repaired or replaced at our cost.	Warranty applies to the use under specified operating conditions.	
Packing	Packing configuration	Pack the power supply into a plastic bag and then into a individual package box. One carton includes 12 pcs of power supply in this individual package box. (6 units×2 stages) Individual package box and carton are made of cardboard.	
	Dimensions/Weight	400mm(W)×400mm(D)×260mm(H) /17Kg	Standard value for 1 carton case (including 12 units)
	Buildup	3 stages max (Number of boxes from top to bottom.)	1 carton case (including 12 units) is as first stage
	Vibration	To endure the acceleration of 0.75g with frequency from 5~50 Hz in Y directions for 40 minutes.	According to JIS Z 0200 (Motor truck, Distributing distance: 2,000 Km max)
	Mechanical Shock	No failure is detected by fall down from the position of 35 cm high.	According to JIS Z 0200 (distributing condition: Level III)

(Note 1) Min. AC input voltage at rated voltage. Refer to the Derating Factor at Min. AC input voltage at peak current or at low/high temperature. During backup operation by connecting optional battery pack, battery pack is installed under the environment 10 deg C or more.

Drawn by	Reviewed by	Approved by	Series Name:	Drawing No:	 27.6.08 (株)ニプロン 技術管理
A-Shiai	T-Hanano	A-Takeda	NSP6F-220P-S10	5131-01-4-520A (Block diagram: 5131-01-4-541)	
Due to the technical improvement, the specifications and functions are subject to change without notice.					

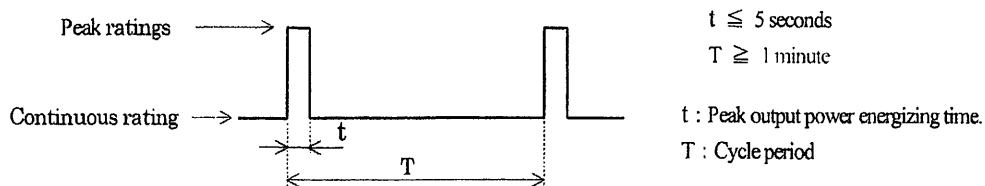
# Output specifications

(The voltage measurement point must be the output connector terminal of the power supply and the contact resistance of the connector does not include it.)

Items		CH1	CH2	CH3	CH4	CH5	Conditions	
Output ratings	Rated voltage [V]	+3.3	+5	+12	-12	+5VSB	Measurement condition of input and output characteristics Total rated power: 159.4W	
	Rated current [A]	6	7	8	0.3	1		
	Rated power [W]	19.8	35	96	3.6	5		
	Max current [A]	10	10	10	0.3	1.5	Max total output power (Continuous)	
	Max power [W]	33	50	120	3.6	7.5		
	Total 160 max (Refer to derating characteristics at the other page)							
	Peak current [A]	10	10	14	0.3	1.8	Peak total output power (Within 5s)	
Peak power [W]	33	50	168	3.6	9			
Total 220 max (refer to fig.1 and derating characteristics at the other page)								
Min current [A]	0	0	0	0	0	Min. load current to satisfy output/sequence characteristics		
Output characteristics	Voltage accuracy [%]	±5 max	±5 max	±5 max	±10 max	±5 max	Accuracy of rated output voltage value when input voltage (min. to max.) and loads of each output are changed statically according to Output Power Restriction Diagram.	
	Ripple voltage [mVp-p]	50 max	50 max	120 max	120 max	50 max	To measure on the test board with a capacitor 47uF. The test board shall be within 150mm from the output terminal.	
	Noise voltage [mVp-p]	100 max	100 max	170 max	170 max	100 max		
	Rise time [mS]	1 min, 20 max					Rise time from 10% to 90% at rated load (resistance load).	
	Hold-up Time [mS]	17 min (without battery pack connected)					Time to reach 90% of rated output voltage with rated load (resistance) after input voltage is turned off.	
Protection and others	O.V.P.	Method	Hold down, then CH1 - CH4 outputs go to latch lock			Hold down	CH5 short makes all outputs stop (Note 1 and 2)	
		O.V.P. knee point [A]	10.5 min	10.5 min	-	0.32 min	1.9 min	All outputs except the output to be measured are in rated current mode.
			-	-	14.1 min	-	-	All outputs except the output to be measured are in rated current mode.
	Recovery	Re-entry PS_ON# signal or turning on the AC input after 60 seconds again.				Note 1	Except during battery operation (Note 2)	
	O.V.P.	Method	All outputs go to latch lock					
		Over-voltage Protection [V]	3.7 ~4.3	5.7 ~7.0	13.8 ~15.6	-13.8 ~ -15.6	5.7 ~7.0	External over voltage shall not be applied to CH1, CH2, and CH3 due to circuit characteristics.
		Recovery	Turning on the AC input after 60 seconds again.					
	Charging	Method	Timer controlled charging (Proportionally-controlled backup time)					Note 3
		Voltage / Current	Open voltage: DC22V typ Charging current: 0.25A typ (constant current)					
		Time	Max 16 hours					Note 3
Under voltage lock	All outputs are shut down when discharge cut-off voltage detected during backup operation.					Recover by reentry of AC input		
Output GND isolation	Common for all outputs and FG					Common with GND of optional battery package		

- Note 1. When CH5 is completely shorted (with output voltage less than one volt), all other outputs shut down, and all outputs recover automatically when CH5 short circuit is cleared. However, when CH5 is incompletely shorted (with output voltage leaving 1 to 3 volts due to hold-down current limiting), all outputs go to latch lock, and all outputs other than 5CH are not recovered even if CH5 short circuit is cleared. In this case, it recovers by turning on the AC input after 60 seconds again.
- Note 2. All outputs go to latch lock when OCP circuit operates during backup operation by optional battery pack (Recovers by turning on the AC input after 60 seconds again.)
- Note 3. It takes 75 times as long as backup time (Battery discharging time). Because of the charging system, use the full charged battery pack when installing/exchanging the power supply. Do not storage for long term with no AC input after installation to the system. (Refer to specification of battery pack for storage conditions)

Fig.1. Duty ratio for peak current and power



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# Signal input/output specifications

Signal	Function	Specification	Circuit
Input	PS_ON#	Output CH1 to CH4 by 'L' signal in AC operation. Shutdown CH1 to CH4 by 'H' or 'OPEN' signal in AC input, and also in the case that outputs are shutdown due to OCP operation, latch lock circuit is reset. In addition, reclosing period from 'H' or 'OPEN' input of PS_ON# (output OFF) to 'L' input (output ON) shall be 5 seconds or longer. Even if all outputs are forced OFF by 'H' or 'OPEN' signal during backup operation by optional battery pack, outputs can recover only by AC input recovery.	Fig1
	SHUT DOWN	Forced shutdown during backup operation	Fig2
Output	PWR_OK	Output OK signal	Fig3
	FAN M	FAN cycle signal	Fig4
	AC FAIL	AC fail detective	Fig5
	BATT LOW	Battery low voltage detective	Fig5

Fig 1. PS\_ON# signal input circuit

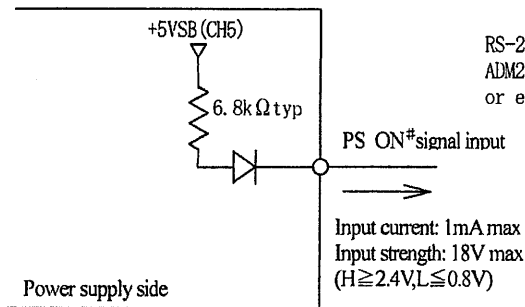


Fig 2. SHUT DOWN signal input circuit

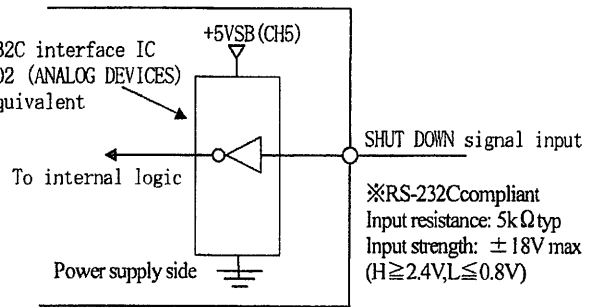


Fig 3. PWR\_OK signal output circuit

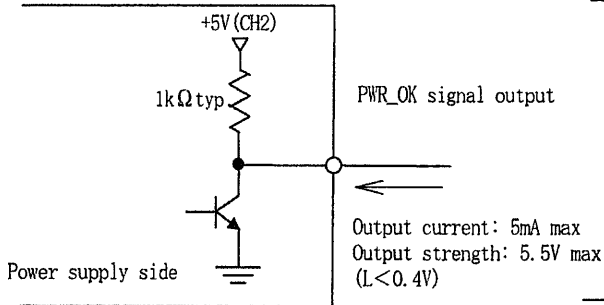


Fig 4. FAN M signal output circuit

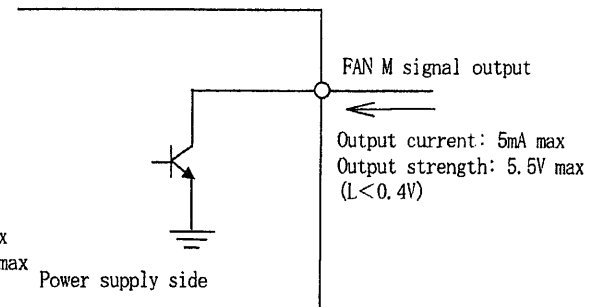


Fig 5. AC FAIL/BATT LOW signal output circuit

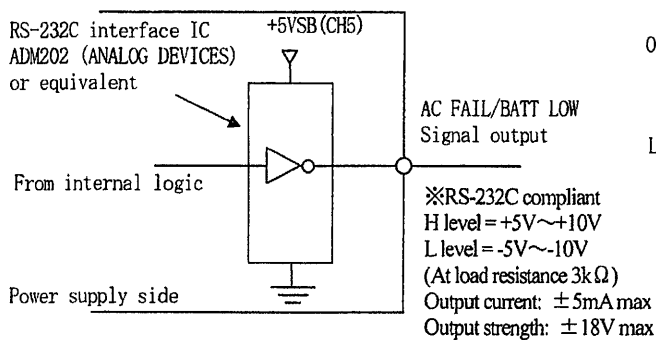
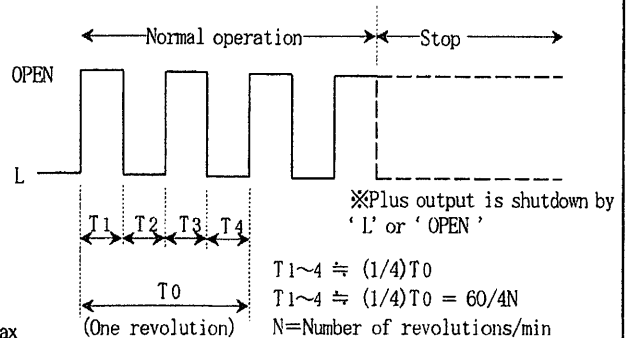


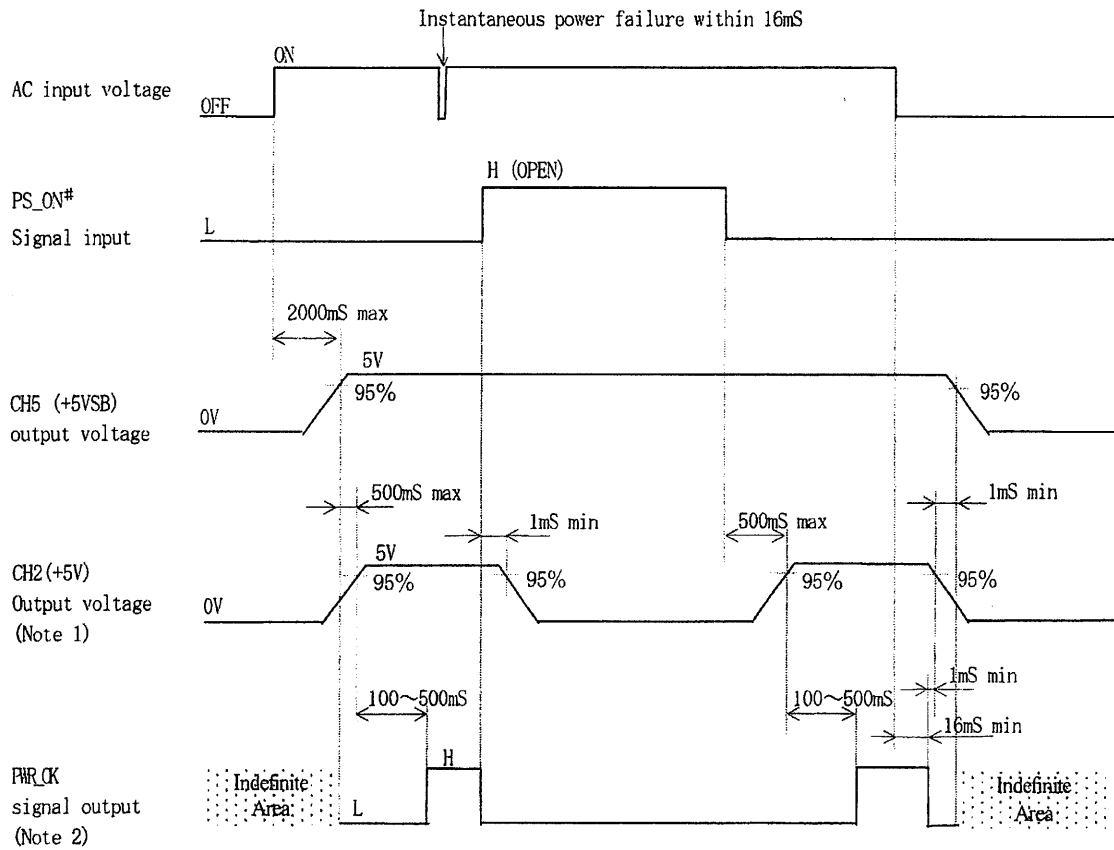
Fig 6. FAN M signal output waveform



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**Timing diagram 1** (At rated input and output WITHOUT optional battery pack.)

**CAUTION: Ineffective for SHUT DOWN/BATT LOW/AC FAIL input/output signal because of no connection with battery pack.**



Note 1. The timing diagrams for other DC outputs are almost same as CH2 (+5V) except for DC voltage level. The voltage rise timing difference from CH2 (+5V) is within 30mS. And the voltage rise timing level of the CH2 (+5V) and CH3 (+12V) are more than the level of CH1 (+3.3V). There is no definition about the rank and the level of the each output voltage when the output voltage descends.

Note 2. The rise-up time and the fall-down time are within 1mS at the condition of no connection with the capacitor to the PWR\_OK terminal.

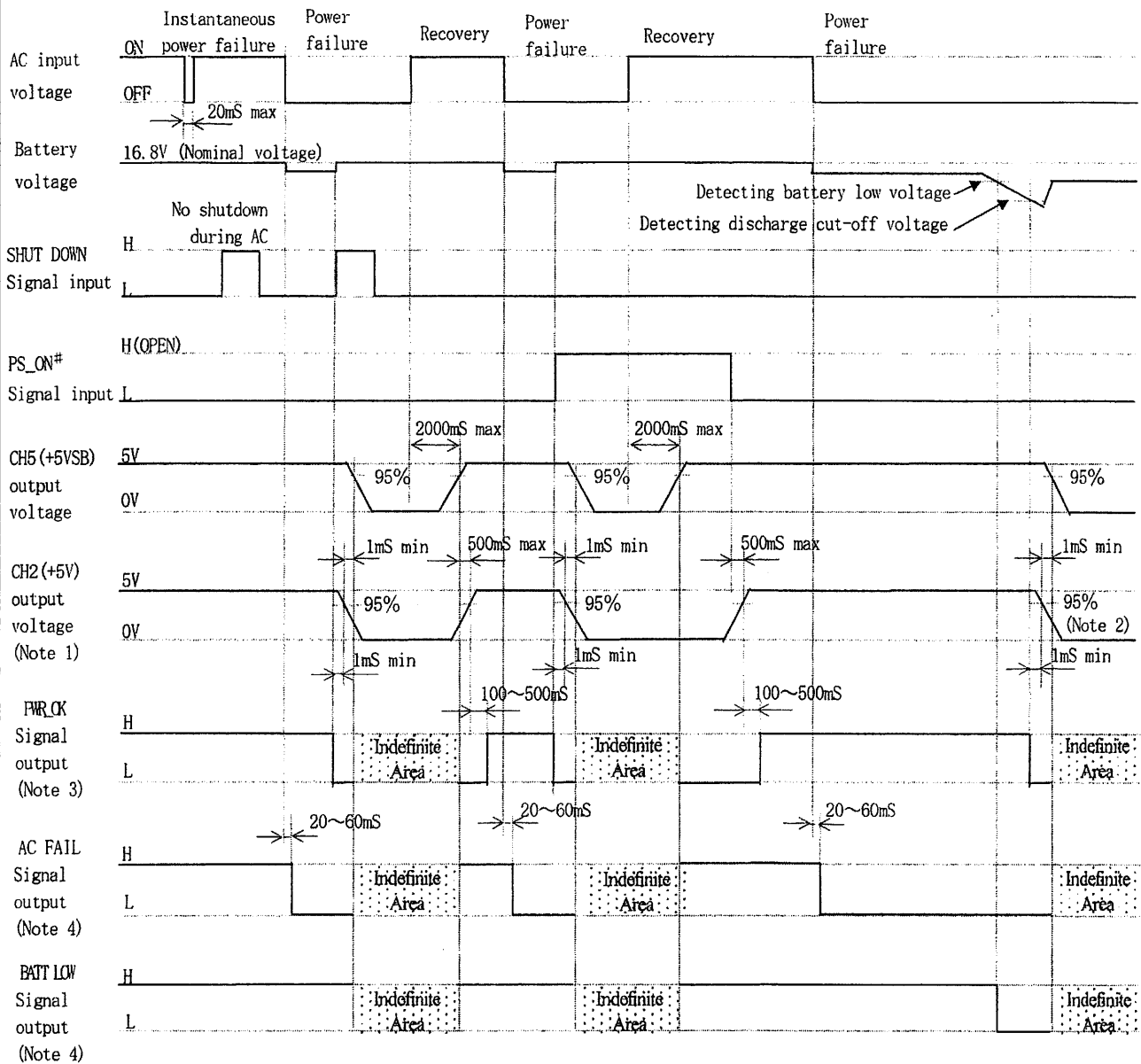


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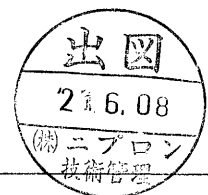
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**Timing diagram 2** (At rated input and output WITH optional battery pack.)



- Note 1. The timing diagrams for other DC outputs are almost same as CH2 (+5V) except for DC voltage level. The voltage rise timing difference from CH2 (+5V) is within 30mS. And the voltage rise timing level of the CH2 (+5V) and CH3 (+12V) are more than the level of CH1 (+3.3V). There is no definition about the rank and the level of the each output voltage when the output voltage descends.
- Note 2. After BATT LOW signal detection, voltage regulation accuracy of CH3 (+12V) is out of specified range.
- Note 3. Rise time and fall time of PWR\_OK signal is within 1mS or less. (At no capacitive load connected to output signal)
- Note 4. Rise time and fall time of AC FAIL/BATT LOW signal is within 10 mS. (At no capacitive load connected to output signal)



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## Output Power Restriction Diagram

Each output current of this power supply are restricted by total output power value.

Each output power (= output voltage x load current) should satisfy the condition (1) and (2).

1. Max. output current/power of output specification should follow Fig 1.2.
2. Peak output current/power of output specification should follow Fig 2. In case of high temperature/low voltage, refer to derating conditions.

Fig 1. Continuous output

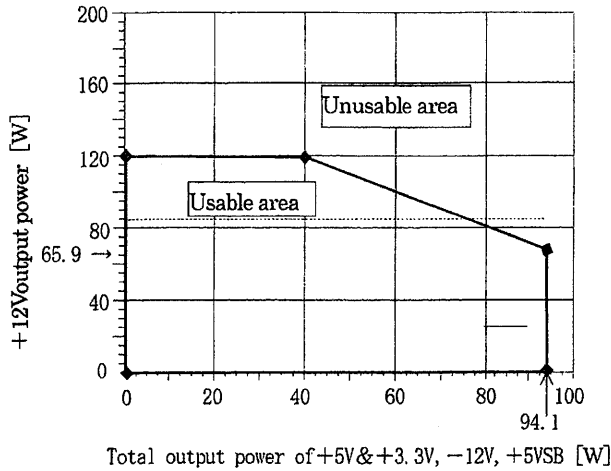
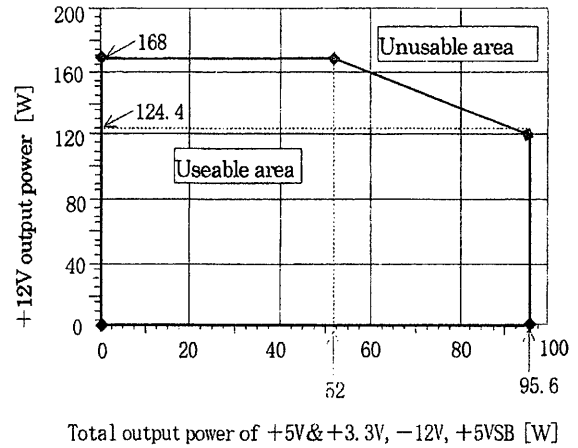


Fig 2. Peak output (Within 5s)



## Derating Conditions

At high/low (Note 1) temperature operation, follow the derating installation direction (1) to (3) for Output current and Power. For continuous rating, however, it is provided that load factor for max. output current/power defined in the output specification for each CH is 100%, and total max. output power of CH1 to CH5 is also 100% (Note 2)

- Note 1. At more than 10°C for backup operation of battery pack.  
 Note 2. Refer to Output Power Restriction Diagram for max./peak total output power.

1. In case of the high temperature circumstance or in case of the lower input voltage, the output power must be derated according to the Fig. 1 or Fig. 2.
2. About the continuous rating — Follow solid line of Fig.2 at input voltage 90V or less. Also follow Fig 1 at ambient temperature 10°C or less/40°C or more. (Continuous output power must be derated as the multiplication value of Fig.1 and Fig.2)
3. About the Peak rating — Follow dash line of Fig.2 at input voltage 90V or less. Also follow Fig 1 at ambient temperature 10°C or less/40°C or more. (Peak output power must be derated as the multiplication value of Fig.1 and Fig.2)

Fig 1. Temperature derating

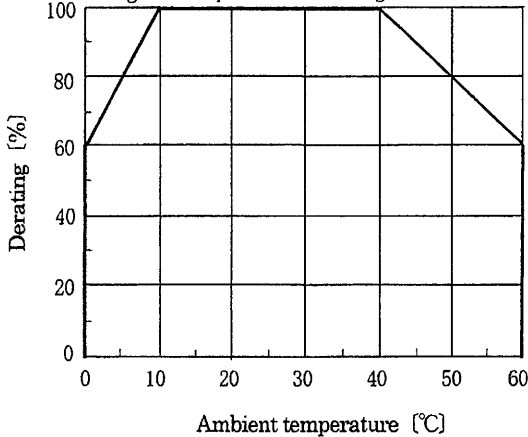
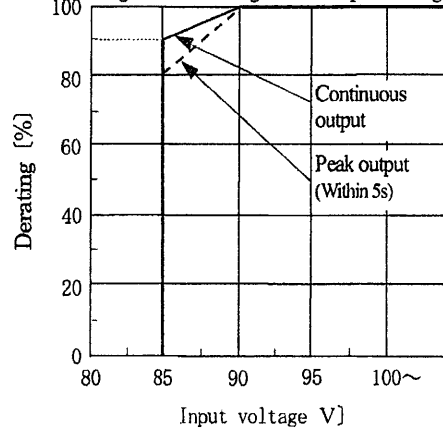


Fig 2. Derating for low input voltage



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## Output Connector Pin Assignments table

The maximum current that can be taken out of the output connector is as follows.

But the total current at each pin is not exceeded to the maximum output current on the output specification.

Refer to outline diagram about connector model name and wire length.

Connector	Pin #	Output Signal	Max Pin Current	Wire Size	Pin #	Output Signal	Max Pin Current	Wire Size		
P1 + P2 (Main) When used as 24pin (Note 1)	P1 (Main) When used as 20 pin (Note 1)	1	+3.3V	5.0A	AWG18	13	+3.3V&SENSING	5.0A	AWG18+AWG22 (Note2)	
		2	+3.3V	5.0A		14	-12V	1.0A	AWG20	
		3	GND	5.0A		15	GND	5.0A	AWG18	
		4	+5V	5.0A		16	PS ON*	1mA	AWG22	
		5	GND	5.0A		17	GND	5.0A	AWG18	
		6	+5V	5.0A		18	GND	5.0A		
		7	GND	5.0A		19	GND	5.0A		
		8	PWR OK	5mA		AWG22	20	N.C.	-	-
		9	+5VSB	2.0A		AWG18	21	+5V	5.0A	AWG18
		10	+12V	5.0A			22	+5V	5.0A	
	P2 (Note 1)	11	+12V	5.0A	23		+5V	5.0A		
		12	+3.3V	5.0A	24		GND	5.0A		

Note 1. Main connector is separated to P1 (20 pin) and P2 (4 pin). Able to use as both 20 and 24 pin.

Note 2. Double pressure bonding for +3.3V output wire (AWG18) and +3.3 SENSING wire (AWG22)

Connector	Pin #	Output Signal	Max Pin Current	Wire Size	Note	
P3 (12V Power)	1	GND	5.0A	AWG18		
	2	GND	5.0A			
	3	+12V	5.0A			
	4	+12V	5.0A			
P4, P10, P11 (Peripheral)	1	+12V	5.0A	AWG18		
	2	GND	5.0A			
	3	GND	5.0A			
	4	+5V	5.0A			
P5, P6, P8, P9 (Serial ATA)	Wire 5	1	+3.3V	2.0A	AWG18	
		2	+3.3V	2.0A		
		3	+3.3V	2.0A		
	Wire 4	4	GND	2.0A	AWG18	
		5	GND	2.0A		
		6	GND	2.0A		
	Wire 3	7	+5V	2.0A	AWG18	
		8	+5V	2.0A		
		9	+5V	2.0A		
	Wire 2	10	GND	2.0A	AWG18	
		11	GND	2.0A		
		12	GND	2.0A		
		13	+12V	2.0A		
	Wire 1	14	+12V	2.0A	AWG18	
		15	+12V	2.0A		
1		+5V	1.0A	AWG20		
2	GND	1.0A				
3	GND	1.0A				
4	+12V	1.0A				
P12 (RS-232C Signal)	1	BATT LOW	5mA	AWG24	RS232C signal input/output	
	2	N.C.	-	-		
	3	GND	20mA	AWG24		
	4	N.C.	-	-		
	5	N.C.	-	-		
	6	N.C.	-	-		
	7	SHUT DOWN	5mA	AWG24		
	8	N.C.	-	-		
	9	AC FAIL	5mA	AWG24		
	10	(Polarizing key)	-	-		
P13 (FAN M Signal)	1	GND	5mA	AWG22		
	2	N.C.	-	-		
	3	FAN M	5mA	AWG22		
BATT (Battery Input)	1	BATT +	20A	AWG14	For dedicated optional battery pack	
	2	BATT -	20A			
	3	Connecting recognition	5mA			AWG22



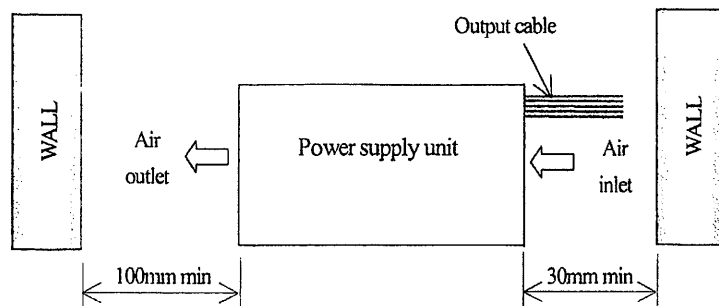
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## Installation condition

1. This power supply unit should be installed with the clearance as shown below from the wall to its air inlet and outlet.
2. Temperature around the air inlet area of the power supply unit should not exceed the maximum operating temperature. (Refer to the temperature de-rating.)



## Warnings and Cautions on operation

### 1. WARNING: Grounding

This power supply is designed as safety class I apparatus. For operator safety, be sure to ground the power supply by connecting the Earth terminal to earth ground.

### 2. WARNING: Electrical shock hazards

High potentials exist inside the power supply. When integrating the power supply into an instrument or system, use appropriate safe procedure to avoid electrical shock hazards.

### 3. CAUTION: Do not short DC outputs

Do not short the DC outputs of the power supply. Shorting the outputs makes internal capacitors quickly discharge and causes dangerous spark and heat generation that may result in serious accident such as fire. Furthermore, it will shorten the operating life of power supply.

### 4. CAUTION: Power on procedure to prevent harmful inrush current

To restrict the surge current into smoothing capacitor, a power thermistor is used inside the unit. If AC input is re-entered soon without allowing the power thermistor to cool down after the AC input was disconnected before, an excessive surge current may flow into the power supply. Be sure to allow at least 5 seconds before the re-entry of AC input.

### 5. CAUTION: Sound of power ON/OFF

Low-frequency sound, which may be occurred by AC input or PS\_ON signal, results from low-frequency vibration of high-frequency choke coil depends on input power frequency. Very small low-frequency sound, which may be occurred during applying current (at operation/standby), also results from low-frequency vibration of high-frequency choke coil depends on input power frequency. Both cases are not ineffective for product characteristics, lifetime and others.

### 6. CAUTION: Load side of motherboard

Depends on types of M/B, peak current beyond our specification range comes into the power supply. In this case over current protection circuit is operated and outputs are shutdown.

### 7. CAUTION: Hold the main unit for carrying the power supply

Do not grasp the output cables to hang the unit when carrying the power supply. Doing so will damage the output cables and connectors. Hold the main unit when carrying the power supply

## Inspections

Inspections are according to Nipron's criteria.

Inspection sheets are stored at our side and are not sent to your side. (If needed, able to send as pay service after talks)



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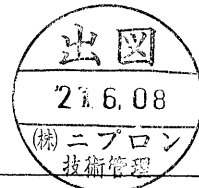
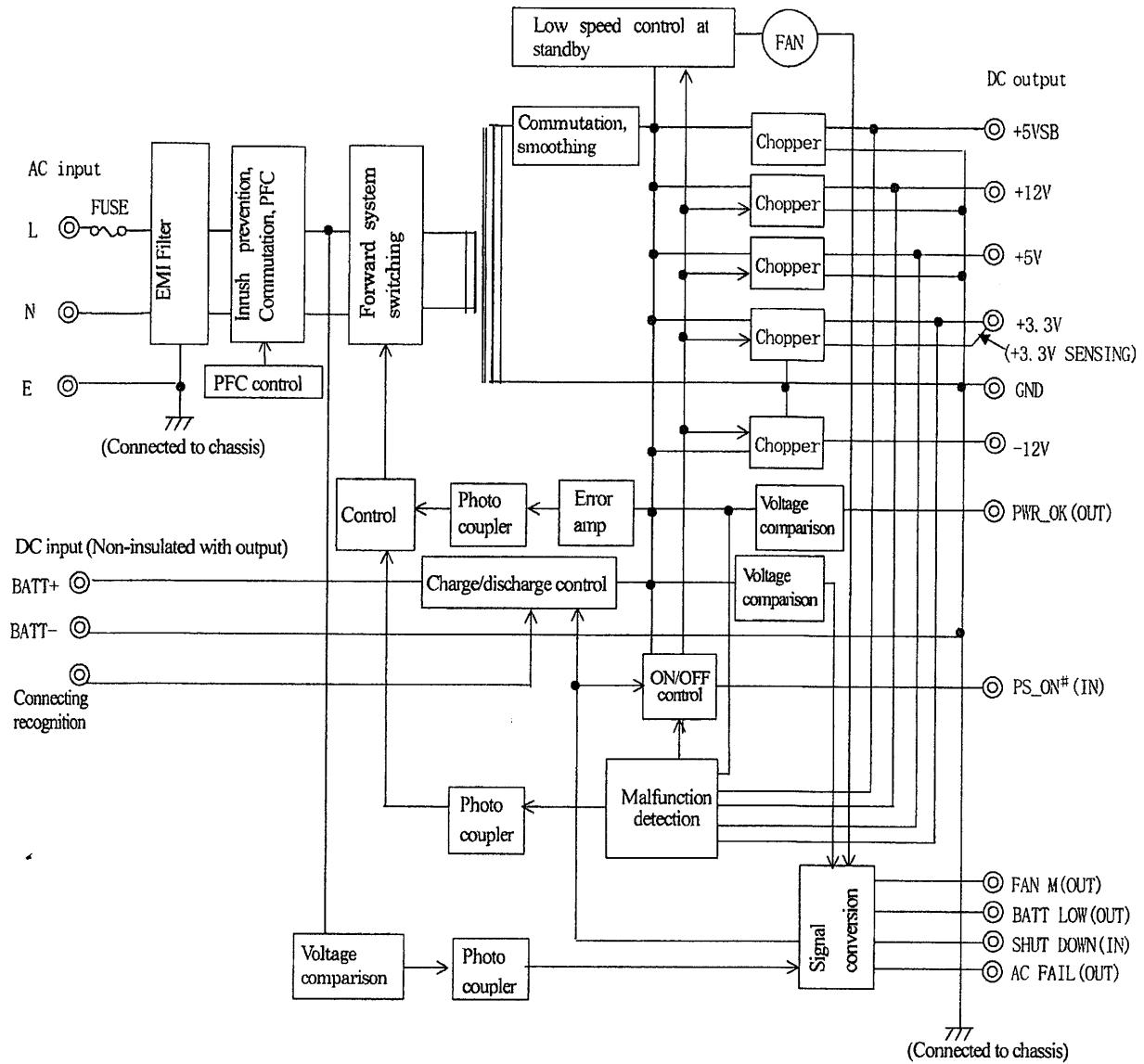
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# Block Diagram

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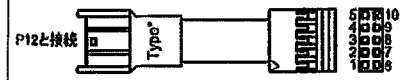
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Due to the technical improvement, the specifications and functions are subject to change without notice.

※1  
MainコネクタはP1(20ピン)とP2(2ピン)が分離した20/24ピン兼用タイプです。  
マザーボードが20ピンの場合はP1のみを、24ピンの場合はP1とP2を組合せて挿入願います。  
尚、24ピンにて使用の場合、先ずP2を1,1,2,23,24ピン位置に挿入し、その後P1を挿入願います。

※2  
停電時の自動シャットダウンを行うためのRS232C Signal コネクタP12には、以下の変換ハーネスを用意しています。(別売り)

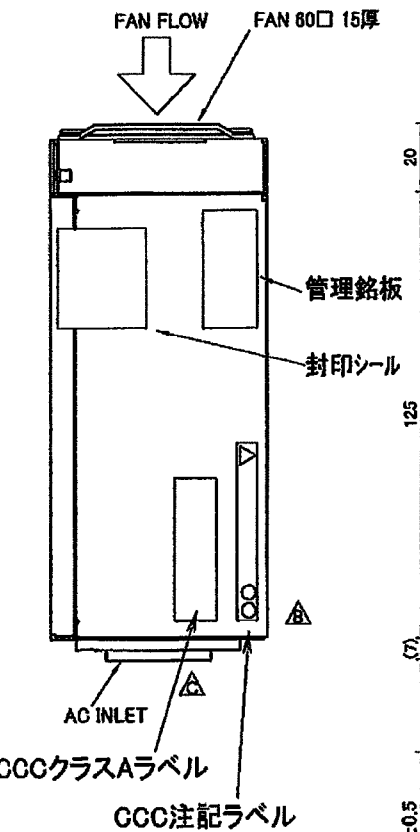


●Type1 注文形式:WH-10RF04KAR-150

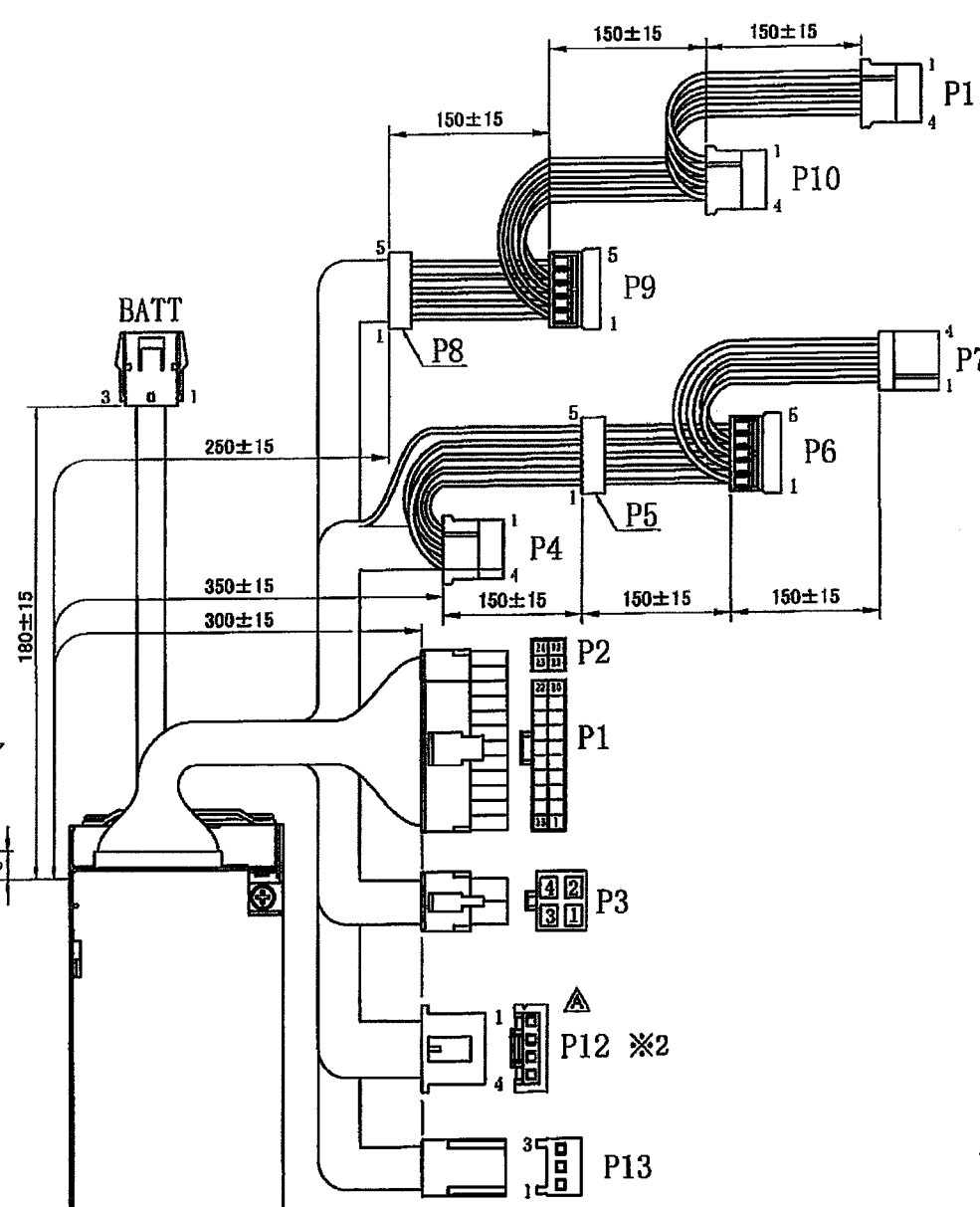
Pin No.	FUNCTION	COLOR	WIRE TYPE	CONNECTOR TYPE
1	BATT LOW	白 White	UL1007 AWG#24	Housing: RF-10(JST)
4	SHUT DOWN	黄 Yellow	UL1007 AWG#24	Terminal: RF-SC2210(JST)
5	GND	黒 Black	UL1007 AWG#24	
8	AC FAIL	青 Blue	UL1007 AWG#24	Polarizing key: PK-RF-1(JST) or equivalent
10	Polarizing key			
other N.C.				

●Type2 注文形式:WH-10RF04KAR-150-D1

Pin No.	FUNCTION	COLOR	WIRE TYPE	CONNECTOR TYPE
1	BATT LOW	白 White	UL1007 AWG#24	Housing: RF-10(JST)
3	GND	黒 Black	UL1007 AWG#24	Terminal: RF-SC2210(JST)
7	SHUT DOWN	黄 Yellow	UL1007 AWG#24	
8	AC FAIL	青 Blue	UL1007 AWG#24	Polarizing key: PK-RF-1(JST) or equivalent
10	Polarizing key			
other N.C.				



※指定なき寸法公差は±1とする。



CONECTOR TYPE	PIN No.	FUNCTION	WIRE		CONNECTOR TYPE
			COLOR	TYPE	
(MAIN)	P1	1	3.3V	橙 Orange	UL1007 AWG#18
		2	3.3V	橙 Orange	UL1007 AWG#18
		3	GND	黒 Black	UL1007 AWG#18
		4	5V	赤 Red	UL1007 AWG#18
		5	GND	黒 Black	UL1007 AWG#18
		6	5V	赤 Red	UL1007 AWG#18
		7	GND	黒 Black	UL1007 AWG#18
		8	PWR_OK	灰 Gray	UL1007 AWG#22
		9	5VSB	紫 Purple	UL1007 AWG#18
		10	12V	黄 Yellow	UL1007 AWG#18
	P2	11	12V	黄 Yellow	UL1007 AWG#18
		12	3.3V	橙 Orange	UL1007 AWG#18
		13	3.3V	橙 Orange	UL1007 AWG#18
		14	3.3V SENSING	茶 Brown	UL1007 AWG#22
	P1	15	-12V	青 Blue	UL1007 AWG#18
		16	GND	黒 Black	UL1007 AWG#18
		17	PS_ON#	緑 Green	UL1007 AWG#22
		18	GND	黒 Black	UL1007 AWG#18
		19	GND	黒 Black	UL1007 AWG#18
		20	N.C.		
		21	5V	赤 Red	UL1007 AWG#18
		22	5V	赤 Red	UL1007 AWG#18
		23	5V	赤 Red	UL1007 AWG#18
		24	GND	黒 Black	UL1007 AWG#18
(12V Power)	P3	1	GND	黒 Black	UL1007 AWG#18
		2	GND	黒 Black	UL1007 AWG#18
		3	12V	黄 Yellow	UL1007 AWG#18
		4	12V	黄 Yellow	UL1007 AWG#18
(Peripheral)	P4, P10	1	12V	黄 Yellow	UL1007 AWG#18
		2	GND	黒 Black	UL1007 AWG#18
		3	GND	黒 Black	UL1007 AWG#18
		4	5V	赤 Red	UL1007 AWG#18
	P11	1	12V	黄 Yellow	UL1007 AWG#18
		2	GND	黒 Black	UL1007 AWG#18
		3	GND	黒 Black	UL1007 AWG#18
		4	5V	赤 Red	UL1007 AWG#18
(Serial ATA)	P5, P8	Wire 1	12V	黄 Yellow	UL1007 AWG#18
		Wire 2	GND	黒 Black	UL1007 AWG#18
		Wire 3	5V	赤 Red	UL1007 AWG#18
		Wire 4	GND	黒 Black	UL1007 AWG#18
		Wire 5	3.3V	橙 Orange	UL1007 AWG#18
	P6, P9	Wire 1	12V	黄 Yellow	UL1007 AWG#18
		Wire 2	GND	黒 Black	UL1007 AWG#18
		Wire 3	5V	赤 Red	UL1007 AWG#18
		Wire 4	GND	黒 Black	UL1007 AWG#18
		Wire 5	3.3V	橙 Orange	UL1007 AWG#18
(Floppy)	P7	1	5V	赤 Red	UL1007 AWG#20
		2	GND	黒 Black	UL1007 AWG#20
		3	GND	黒 Black	UL1007 AWG#20
		4	12V	黄 Yellow	UL1007 AWG#20
(RS-232C Signal)	P12	1	GND	黒 Black	UL1007 AWG#22
		2	SHUT DOWN	黄 Yellow	UL1007 AWG#22
		3	AC FAIL	青 Blue	UL1007 AWG#22
		4	BATT LOW	白 White	UL1007 AWG#22
(FAN M Signal)	P13	1	GND	黒 Black	UL1007 AWG#22
		2	N.C.		
		3	FAN M	紫 Purple	UL1007 AWG#22
(Battery Input)	BATT	1	BATT+	赤 Red	UL1015 AWG#14
		2	BATT-	黒 Black	UL1015 AWG#14
		3	TH (接続記録)	白 White	UL1015 AWG#22

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 B版 △×1:2015.03.27 花野 I-270348  
 A'版 △×1:2011.05.12 花野 I-231229  
 A版 △×3:2011.05.12 花野 I-221236



DRAWN BY	CHECK BY	APPROVED BY	SCALE	MATERIALS	TITLE
花野	白井	武田	1/2		
ISSUED	2010.01.29		UNITS	FINISH	DRAWING NO.
			m/m		
			3RD ANGLE PROJECTION		5131-01-3-050-C