# Rack Mount Power Supply PC1U-210P Series

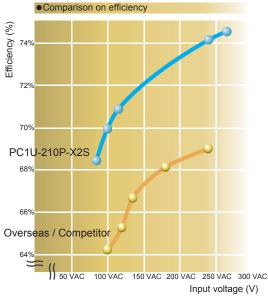
Resonance & Synchronous Rectifying Circuit Equipped High Efficiency 1U Power Supply



Model	Description			Stock			
PC1U-210P-X2S				Standard stock			
PC1U-210P-X2S-02	With output h	arness		Standard stock			
■Model Name Coding PC1U - 210 P - X 2 S ① 2 3 4 5 0		<ol> <li>Series name</li> <li>Output power</li> <li>Peak output compliant</li> </ol>	4. ATX output 5. +3.3V output equippe 6. Standard	7 : No output harness 02: With output harness			

### Features

- 40.5mm in height compliant to 1U rack servers.
- Resonance & Synchronous rectification circuit equipped resulting in high efficiency power supply.
- Mag. Amp. constant voltage control for +12V output.
- Slow speed of fan even at standby mode to reduce the heat of +5VSB
- Output harnesses can be easily customized to meet various requirements.
- Double-sided through hole PCB suitable for industrial use.



Refer to	o "Product	: Page Gu	ideline" or	n p.13	
Safety standard / Approval	UL	CSA	EN	CE	CCC
Reliability Grade	HFA	FA	HOA	OA	

Function



#### Input

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AC input
                85 - 264V (worldwide range)
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#### Output

	Output voltage	+3.3V	+5V	+12V	-5V	-12V	+5VSB			
	Max. current / max. power (continuous)	6A 12A		8A	0.3A	0.8A	1.5A			
		Total	80W							
		Т	otal 140V	V						
		Total 160W								
	Dealerment	14A	24A	10A	0.3A	0.8A	2.5A			
	Peak current / peak power (5 sec max.)	Total 24/	A / 120W							
	pour power (o coo max.)	Total 210W								
	Min. current	0A	1.5A	0A	0A	0A	0A			
	Min. current	0A	1.5A	0A	0A	0A	0A			

### Dimensions

#### Output connector

PC1U-210P-X2S (optional compor	nent)
	2V     12V     PCI-E     PCI-E     HDD     S-ATA     FDD       80     60     6-20     FDD     FDD     FDD
Refer to p.321 "Detachable Output	l lornooo" for dotoilo
Trefer to p.521 Detachable Output	Harness for details
PC1U-210P-X2S-02	

## General Specification Condition: at normal temperature and humidity unless otherwise specified

Max. Spike Voltage (mVp-p)         100 max.         100		Items		Specificatio	n					Measurement conditions, etc.		
Open         50 / fold         50 / fold         47 - 63Hz         47 - 63Hz           Efficiency         70% tip, 100 VAD; 74% typ; (240 VAC) "Characteristic data: Fig.3         A1 radie input/odupti           Innush Current         500 Apst, 100 VAD; 100 Apst, 174% typ; (240 VAC) "Characteristic data: Fig.3         A1 radie input/odupti           Relet Output VA         320V Amax. "Characteristic data: Fig.3         A1 radie input/odupti         A1 radie input/odupti           Relet Output VA         320V Max.         15X         Nas. output and the construction of		Rated Voltage		100 240 \/AC	(85 264 VAC	<u>\</u>				Worldwide range		
Description         Total Control         Total Control         A raised input/output           Prover Factor         986 mm. (100 VAC). 274 mi, 240 VAC). "Characteristic data: Fig.3         A raised input/output           Read Voltage         930 VAC). Total control         400 Pack         410 Vac). 100 Pack           Read Voltage         930 VAC). Total control         930 VAC). Total control         410 Vac). 100 Vac).					(05 - 204 VAC	)						
PD         Description         Other VACL 925 mm (240 VAC): (Characteristic data Fig.3         Interval           Interval         6X0 peak (100 VAC): (DA pauk (200 VAC): (DA pauk (200 VAC): (Characteristic data Fig.4         At rated input/output at cold start (25°C)           Interval         6X0 peak (100 VAC): (DA pauk (200 VAC): (	AC				VAC) 74% two	(240 \/AC) *C	haractoristic da	ta: Eig 2				
Impat Current         Solv Pask (100 Arc), fruid 240 V/A)         Characteristic data (rg. 4)         All rate input output at dool start (25 C)           Rated Vatlage         43.3V         450V         412X         50V         412X         45V3           Rated Current         6.A         12.A         6.A         0.8.A         0.8.A         15.A           Max. Current / Power         6.A         12.A         6.A         0.8.A         15.A           Max. Current / Power         6.A         12.A         0.A         0.8.A         15.A           Peak Current / Power         6.A         15.A         0.A         0.8.A         0.8.A         15.M           Max. Current / Power         6.A         15.A         0.A	In	,								At fated input/output		
Ingut VA         120/VA max         Characteristic data         Fig.3         At rated input /output           Rated Vorterit         6A         12A         5A         0.3A         0.8A         1.5A           Max, Current / Power         6A         12A         5A         0.3A         0.8A         1.5A           Max, Current / Power         6A         12A         5A         0.3A         0.8A         1.5A           Peak Current / Power         14A         24A         10A         0.3A         0.8A         2.5A           Min: Current         0A         15A         0A         0A         0A         0A           Total Voltage Accuracy (%)         ±5 max         ±5 max         ±5 max         ±5 max         ±5 max         ±6 max         100 max <td>out</td> <td></td> <td></td> <td></td> <td></td> <td>. ,</td> <td></td> <td></td> <td></td> <td>At roted input/output at cold start (25°C)</td>	out					. ,				At roted input/output at cold start (25°C)		
Relect Voltage         1132V         1132V         1132V         1132V           Relect Voltage         0.6.1         12A         5A         0.3A         0.8A         1.5A           Max. Current / Power         0.6.1         12A         8A         0.3A         0.8A         1.5A           Max. Current / Power         14A         2AA         10A         0.8A         1.5A           Peak Current / Power         14A         2AA         10A         0.8A         1.5A           Max. Current         0.A         1.5A         0.A         0.A         0.A         0.A           Total Voltage (mVp-p)         50 max.         15 max.         15 max.         15 max.         15 max.         15 max.         100 max.						, ,	Characteristic	uala. Fig.4		,		
Pack Current         GA         12A         5A         0.3A         0.8A         1.5A           Max. Current / Power         GA         12A         8A         0.3A         0.8A         1.5A           Pack Current / Power         14A         2AA         140W max.         0.8A         1.5A           Pack Current / Power         14A         2AA         140W max.         0.8A         2.5A           Min. Current         A         15A         0.A         0.A         0.A           Min. Current         A         15A         0.A         0.A         0.A           Max. Ripple Voltage (mVp-p)         50 max.         150 max.         150 max.         150 max.         100 max.           Max. Sple Voltage (mVp-p)         100 max.         100 max.         100 max.         100 max.         100 max.         100 max.           Protection         GP Point (A)         14.1 min.         14.min.         11.min.         10.min.         100 max.         100 max.           Protection         Method         AI outputs shutdown except for +5VSB         -         -         -           Protection         AI outputs shutdown except for +5VSB         -         -         -         -           Protection	_					-	<b>E</b> \/	101/	15\/CD			
Max. Current / Power         6A         12A         8A         0.3A         0.8A         1.5A         Max. output power: 160W           Peak Current / Power         14A         24A         10A         0.3A         0.8A         1.5A         Max. output power: 210W           Peak Current / Power         14A         24A         10A         0.3A         0.8A         2.5A           Min. Current         0A         15A         0A         0A         0A         0A           Max. Current / Power         15B max.         15 max.         15 max.         15 max.         15 max.         15 max.           Max. Sple Voltage (mVp-p)         50 max.         50 max.         100		Ū.					-					
Bow max         Bow max <t< td=""><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td>10014</td></t<>						-				10014		
Open         1400 max.         0 <t< td=""><td></td><td>Max. Current / Pow</td><td>er</td><td></td><td></td><td>8A</td><td>0.3A</td><td>0.8A</td><td>1.5A</td><td>Max. output power: 160W</td></t<>		Max. Current / Pow	er			8A	0.3A	0.8A	1.5A	Max. output power: 160W		
Open         Teach Current         Teach Current         Teach Current         Teach Current         OA         D.3A         D.3A         D.3A         D.3A         Deak current / Prover         Teach Sec or Teach o				8070			-					
Open         Z4A / 120W max         Description         Description <thdescription< th=""> <thdescription< th=""> <th< td=""><td></td><td>D 1 0 1/D</td><td></td><td></td><td></td><td>101</td><td></td><td>0.04</td><td>0.54</td><td></td></th<></thdescription<></thdescription<>		D 1 0 1/D				101		0.04	0.54			
Ope         2447 / 2001 max.         Duty ratio of repetitive locat: 10% or less         Product 10% or less           Min. Current         0.A         1.5A         0.A         0.A         0.A         0.A           Min. Current         0.A         1.5A         0.A         0.A         0.A         0.A           Max. Ripple Voltage (mVp-p)         50 max.         15 max.         15 max.         15 max.         15 max.         15 max.         100 max.         160 max.         100		Peak Current / Power				10A	0.3A	0.8A	2.5A	Time: 5 sec or less		
Total Voltage Accuracy (%)         ±5 max.         total accuracy of temperature, input, and load functuations           Max. Ripple Voltage (mVp-p)         50 max.         100 max.         10	Outp			24A / 12	uw max.					Duty ratio of repetitive load: 10% or less		
Max. Riple Voltage (mVp-p)         50 max.         100 max.         120 max.         100	ut	Min. Current		0A	1.5A	0A	0A	0A	0A			
Max. Spike Voltage (mVp-p)         100 max.         100		Total Voltage Accu	racy (%)	±5 max.	±5 max.	±5 max.	±5 max.	±5 max.	±5 max.			
Inscription         Contract         Too Index         Too Index <thtoo index<="" th=""> <thtoo index<="" th=""> <th< td=""><td></td><td>Max. Ripple Voltag</td><td>e (mVp-p)</td><td>50 max.</td><td>50 max.</td><td>120 max.</td><td>100 max.</td><td>150 max.</td><td>50 max.</td><td>Two wires are coming out from the output connector</td></th<></thtoo></thtoo>		Max. Ripple Voltag	e (mVp-p)	50 max.	50 max.	120 max.	100 max.	150 max.	50 max.	Two wires are coming out from the output connector		
Overcurrent Protection         CCP Point (A)         14.1 min.         26.4 min.         11 min.         Short protection         All observabulats Fig.15           Protection         Method         All outputs shutdown except for +5VSB         Fold back current limiting         All outputs are at rated input/output.           When measuing +5V, min. current on other output.         Recovery         Recosing AC input (5 sec min. interval)         Automatic recovery           Protection         Method         All outputs shutdown except for +5VSB         Fold back current limiting         All outputs shutdown except for +5VSB         -           Protection         Method         All outputs shutdown except for +5VSB         -         -         -           Protection         Method         All outputs shutdown except for +5VSB         -         -         -           Storage Temp. / Humidity         -20 to 50%         No condensation         No condensation         JIS-C-040-1995           Vibration         Displacement ampilude: 0.15mr (1/0-55H2). Sweep cycles: 10. Test duration: 45 minutes each axis JIS-C-040-1995         JIS-C-040-1995           Insulation Resistance         Accientation fibres for 1mm one time each in the X and 2 directions. No malfunction.         JIS-C-040-1995           Insulation Resistance         Accientation fibres for 1mm one time each in the X and 2 directions. No malfunction.         JIS-C-040-19		Max. Spike Voltage	e (mVp-p)	100 max.	100 max.	170 max.	100 max.	200 max.	100 max.	and connected into one at the edge of 50cm max.		
Overcurrent Protection         OCP Point (A)         14.1 min.         26.4 min.         11 min.         Short protection         All other outputs are at rated input/output.           Protection         Method         All outputs shutdown except for +5VSB         Fold back current limiting         All outputs         When measuring +5V, min. current on other output.           Overvoltage         Overvoltage         OVP Point (V)         3.8 - 4.3         6.0 - 7.0         14 - 15.6         -         -           Protection         Method         All outputs shutdown except for +5VSB         -         -         -           Overvoltage         OVP Point (V)         3.8 - 4.3         6.0 - 7.0         14 - 15.6         -         -         -           Protection         Method         All outputs shutdown except for +5VSB         -         -         -           Overvoltage         Ford output 5 act min. interval)         -         -         -         -           Storage Temp. / Humidity         0 to 50°C / 10 to 90%         No condensation         Mos condensation         Mos condensation           Vibration         Displacement amplitude: 0.15mm (10-55Hz), Sweep cycles: 10, Test duration: 45 minutes each axis         JIS-C-0040-1995         JIS-C-0040-1995           Insulation Resistance         AC input - Co cutput/FG: 1500 VAC for 1 min	AC Input Output Protection Environment Insulation EMC Others									capacitor are placed on it and it is measured by the		
Protection         Method         All outputs shutdown except for +5VSB         Fold back current limiting         All outputs shutdown           Protection         Recovery         Reclosing AC input (5 sec min. interval)         Automatic recovery           Overvoltage         OVP Point (V)         3.8 - 4.3         6.0 - 7.0         14 - 15.6         -         -           Recovery         Reclosing AC input (5 sec min. interval)         -         -         -           Recovery         Reclosing AC input (5 sec min. interval)         -         -         -           Recovery         Reclosing AC input (5 sec min. interval)         -         -         -           Recovery         Reclosing AC input (5 sec min. interval)         -         -         -           Vibration         Displacement amplitude: 0.15mm (10-55Hz), Swee cycles: 10, Test duration: 45 minutes each axis         JIS-C-0040-1995         JIS-C-0040-1995           Mechanical Shock         Acceleration of 150ms' for 11ms one time each in the X Y and 2 directions.         JIS-C-0040-1995         JIS-C-0040-1995           Insulation Resistance         AC Input - DC output/FG: 1500 VAC for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)           Line Noise Immunity         42000 /Uput/G: 1500 VAC for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)           Line Noise Immunity <td></td> <td colspan="2" rowspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>20MHz oscilloscope. *Characteristic data: Fig.15</td>										20MHz oscilloscope. *Characteristic data: Fig.15		
Decision         Method         Fall objects strutdown (2000)         Fold black call of within the object of strutdown (2000)           Protection         Recovery         Reclosing AC input (5 sec min. interval)         Automatic recovery           Overvoltage         OVP Point (V)         3.8 -4.3         6.0 - 7.0         14 - 15.6         -         -           Protection         Method         All outputs shutdown except for +SVSB         -         -         -           Recovery         Reclosing AC input (5 sec min. interval)         -         -         -         -           Operating Temp. / Humidity         0 to 50°C / 10 to 90%.         No condensation         No condensation         No condensation           Vibration         Displacement amplitude: 0.15mm (10-55Hz), Sweep cycles: 10. Test duration: 45 minutes each axis         JIS-C-0040-1995         No condensation           No mafunction, damage, loosening or coming-off         Methanize (2000 VC) (10 mask); for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)         Leakage Current         0.5m Am ax: (100 VAC) (1mA max. (200 VAC) Characteristic data: Fig. 5         YEW. YPF3226 (1kG) or equivalent           Isolation Resistance         AC input - DC output/FG: 5000 Arin.         At 500 VDC (Humidity: 60% max.)         Leakage Current         0.5m Am ax: (100 VAC) (1mA max. (200 VAC) Characteristic data: Fig. 5         YEW. YPF3226 (1kG) or equivalent <td></td> <td>14.1 min.</td> <td>26.4 min.</td> <td>11 min.</td> <td></td> <td>Short protection</td> <td></td> <td colspan="3">All other outputs are at rated input/output.</td>				14.1 min.	26.4 min.	11 min.		Short protection		All other outputs are at rated input/output.		
Open for the second s		Protection	Method	All outputs s	shutdown excep	ot for +5VSB	Fold back cu	urrent limiting		When measuring +5V, min. current on other output.		
Protection         Method         All outputs shutdown except for +5VSB         -         -         -           m         Operating Temp. / Humidity         0 to 50°C / 10 to 90%         No condensation           Storage Temp. / Humidity         25 to 70°C / 10 to 95%         No condensation           Wihation         Displacement amplitude: 0.15mm (10-55Hz), Sweep cycles: 10, Test duration: 45 minutes each axis         JIS-C-0040-1995           Mechanical Shock         Acceleration of 150m/s² for 11ms one time each in the X, Y and Z directions. No malfunction, damage, loosening or coming-off         JIS-C-0040-1995           insulation Resistance         AC input - DC output/FG: 1500 VAC for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)           Leakage Current         0.5mA max. (100 VAC) / 1mA max. (240 VAC) "Characteristic data: Fig. 5         YEW. TYPE3226 (1kΩ) or equivalent           Line Noise Immunity         ±2000V (pulse with: 100/800ns, repetitive cycle: 10-50ms)         No malfunction           Electoristic Discharge         EN1000-4-2 compliant         Fast Transient Burst         EN61000-4-3 compliant           Radiated, Radio-Frequency EM Field         EN61000-4-5 compliant         EN61000-4-5 compliant         Encorespliant           Voltage Dip / Regulation         EN61000-4-5 compliant         Encorespliant         At rated input/output           Voltage Dip / Regulation         EC61000-3-2 Class A, EN61000-3-	P			shutdown								
Protection         Method         All outputs shutdown except for +5VSB         -         -           m         Operating Temp. / Humidity         0 to 50°C / 10 to 90%         No condensation           Storage Temp. / Humidity         -25 to 70°C / 10 to 95%         No condensation           Vibration         Displacement amplitude: 0.15mm (10-55Hz), Sweep cycles: 10, Test duration: 45 minutes each axis         JIS-C-0040-1995           Mechanical Shock         Acceleration of 150m/s² for 11ms one time each in the X, Y and Z directions. No malfunction, damage, loosening or coming-off         JIS-C-0040-1995           insulation Resistance         AC input - DC outputFG: 1500 VAC for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)           Leakage Current         0.5mA max. (100 VAC) / 1mA max. (240 VAC) "Characteristic data: Fig. 5         YEW. TYPE3226 (1kΩ) or equivalent           Line Noise Immunity         ±2000V (pulse with: 100/800ns, repetitive cycle: 10-50ms)         No malfunction           Electoristic Discharge         EN61000-4-2 compliant         Fast Transient Burst         EN61000-4-3 compliant           Radiated, Radio-Frequency EM Field         EN61000-4-5 compliant         EN61000-4-5 compliant         FR Conducted Immunity           Voltage Dip / Regulation         EN61000-4-5 compliant         EN61000-4-5 compliant         At rated input/output           Voltage Dip / Regulation         EN61000-4-2 compliant	.ote		Recovery	Red	closing AC input	(5 sec min. inter						
Protection         Method         All outputs shutdown except for +5VSB         -         -           Recovery         Recovery         Recovery         Recovery         Recovery           Machine         Depreting Temp. / Humidity         0 to 50°C / 10 to 90%         No condensation           Storage Temp. / Humidity         -25 to 70°C / 10 to 95%         No condensation           Witration         Displacement amplitude: 0.15mm (10-55Hz), Sweep cycles: 10, Test duration: 45 minutes each ass         JIS-C-0040-1995           Mechanical Shock         Acceleration of 150m/s² for 11ms one time each in the X, Y and Z directions. No mathunction, damage, loosening or coming-off         JIS-C-0040-1995           Insulation Resistance         AC input - DC outputFG: 1500 VAC for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)           Leakage Current         0.5mA max. (100 VAC) / 1mA max. (240 VAC) "Characteristic data: Fig. 5         YEW. TYPE3226 (1kΩ) or equivalent           Line Noise Immunity         ±2000V (pulse with: 100/800ns, repetitive cycle: 10-50ms)         No matfunction           Electoristic Discharge         EN1000-4-2 compliant         Fast Transient Burst         EN61000-4-3 compliant           RF Conducted Immunity         EN61000-4-6 compliant         EN61000-4-1 compliant         Fast Transient Burst         EN61000-4-1 compliant           Voltage Dip / Regulation         IC61000-4-3 compliant	ctic						recovery					
Instruction         Product Strength         Product Strength         Product Strength           Operating Temp. / Humidity         0 to 50°C / 10 to 95%         No condensation           Storage Temp. / Humidity         -25 to 70°C / 10 to 95%         No condensation           Without         Displacement amplitude: 0.15mm (10-55Hz), Sweep cycles: 10, Test duration: 45 minutes each axis         JIS-C-0040-1995           Mechanical Shock         Acceleration of 150m/s* for 11ms one time each in the X, Y and Z directions. No malfunction, damage, loosening or coming-off         JIS-C-0040-1995           Insulation Resistance         AC input - DC output/FG: 1500 VAC for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)           Lakage Current         0.5mA max. (100 VAC) / 1mA max. (240 VAC) "Characteristic data: Fig. 5         YEW. TYPE3226 (1kD) or equivalent           Line Noise Immunity         ±20007 (public width: 100/s00ns, repetitive cycle: 10-50ms)         No malfunction           Electrostatic Discharge         EN61000-4-2 compliant         Field EN61000-4-2 compliant           Radiated, Radio-Frequency EM Field         EN61000-4-3 compliant         Field EN61000-4-3 compliant           Fee Conducted Immunity         EN61000-4-4 compliant         Field Timmunity           Voitage Dip / Regulation         EN61000-4-5 compliant         Field Timmunity           Voitage Dip / Regulation         EN61000-4-1 compliant         Fiel	n						-	-	-			
m         Operating Temp. / Humidity         0 to 50°C / 10 to 90%         No condensation           Storage Temp. / Humidity         -25 to 70°C / 10 to 90%         No condensation           Vibration         Displacement amplitude: 0.15mm (10-55Hz), Sweep cycles: 10, Test duration: 45 minutes each axis         JIS-C-0040-1995           Mechanical Shock         Acceleration of 150m/s <sup>2</sup> for 11ms one time each in the X, Y and Z directions.         JIS-C-0040-1995           Mechanical Shock         Acceleration of 150m/s <sup>2</sup> for 11ms one time each in the X, Y and Z directions.         JIS-C-0040-1995           Insulation Resistance         AC input - DC output/FG: 1500 VAC for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)           Leakage Current         0.5mA max. (100 VAC) / 1mA max. (240 VAC) 'Characteristic data: Fig. 5         YEW. TYPE3226 (1kΩ) or equivalent           Line Noise Immunity         ±2000V (pulse width: 100/800ns, repetitive cycle: 10-50ms)         No malfunction           Electrostatic Discharge         EN61000-4-2 compliant         Fast Transient Burst         EN61000-4-2 compliant           Fast Transient Burst         EN61000-4-6 compliant         Conducted Immunity         EN61000-4-6 compliant           Voltage Dip / Regulation         EN61000-4-6 compliant         Conducted Emission         VCCI-8 compliant           Conducted Emission         VCCI-8 compliant         Characteristic data: Fig.6 and 7         Harm				All outputs s	shutdown excep	ot for +5VSB	-	-	-			
Storage Temp. / Humidity         -25 to 70°C / 10 to 95%         No condensation           Vibration         Displacement amplitude: 0.15mm (10-55Hz), Sweep cycles: 10, Test duration: 45 minutes each axis         JIS-C-0040-1995           Mechanical Shock         Acceleration of 150m/s for 11ms one time each in the X, Y and Z directions.         JIS-C-0040-1995           Ibelectric Strength         Acceleration of 150m/s for 11ms one time each in the X, Y and Z directions.         JIS-C-0040-1995           Insulation Resistance         AC input - DC output/FG: 1500 VAC for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)           Iseakage Current         0.5mA max. (100 VAC) / tmA max. (240 VAC) "Characteristic data: Fig. 5         YEW. TYPE3226 (1k0) or equivalent           Line Noise Immunity         ±2000V (pulse width: 100/800ns, repetitive cycle: 10-50ms)         No malfunction           Electrostatic Discharge         EN61000-4-2 compliant         EN61000-4-3 compliant           Fast Transient Burst         EN61000-4-3 compliant         ER Conducted Immunity           KF Conducted Immunity         EN61000-4-6 compliant         EN61000-4-16 compliant           Voltage Dip / Regulation         EN61000-4-8 compliant         EN61000-4-16 compliant           Voltage Dip / Regulation         EN61000-4-2 Cass A Los 100         Acterestic data: Fig. 6 and 7           Harmonic Current Regulation         EC6100-3-2 Class A Compliant         At r			Recovery	Reclosing A	AC input (5 sec r	nin. interval)	-	-	-			
Dielectric Strength         AC input - DC output/FG: 1500 VAC for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)           Insulation Resistance         AC input - DC output/FG: 1500 VAC for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)           Leakage Current         0.5mA max. (100 VAC) / 1mA max. (240 VAC) "Characteristic data: Fig. 5         YEW. TYPE3226 (1kQ) or equivalent           Line Noise Immunity         ±2000V (pulse width: 100/800ns, repetitive cycle: 10-50ms)         No malfunction           Electrostatic Discharge         EN61000-4-2 compliant         No           Radiated, Radio-Frequency EM Field         EN61000-4-2 compliant         EN61000-4-3 compliant           Fast Transient Burst         EN61000-4-4 compliant         EN61000-4-6 compliant           Ragenetic Field Immunity         EN61000-4-6 compliant         Magnetic Field Immunity           Voltage Dip / Regulation         EN61000-4-2 compliant         Magnetic Field Immunity           Voltage Dip / Regulation         EN61000-3-2 Class A, EN61000-3-2 Class A compliant         At rated input/output           Safety Standard         UL60950, CSA C22.2 No. 950 (c-UL), IEC60950.1         Cooling System         Forced air cooling           Output Hold-up Time         PWR_OK holds up 16ms min. after AC failure "Characteristic data: Fig.12         At rated output           Reliability Grade         FA (industrial equipment grade, double-sided through hole	Щ	Operating Temp. /	Humidity	0 to 50°C / 10	to 90%					No condensation		
Dielectric Strength         AC input - DC output/FG: 1500 VAC for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)           Insulation Resistance         AC input - DC output/FG: 1500 VAC for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)           Leakage Current         0.5mA max. (100 VAC) / 1mA max. (240 VAC) "Characteristic data: Fig. 5         YEW. TYPE3226 (1kQ) or equivalent           Line Noise Immunity         ±2000V (pulse width: 100/800ns, repetitive cycle: 10-50ms)         No malfunction           Electrostatic Discharge         EN61000-4-2 compliant         No           Radiated, Radio-Frequency EM Field         EN61000-4-2 compliant         EN61000-4-3 compliant           Fast Transient Burst         EN61000-4-4 compliant         EN61000-4-6 compliant           Ragenetic Field Immunity         EN61000-4-6 compliant         Magnetic Field Immunity           Voltage Dip / Regulation         EN61000-4-2 compliant         Magnetic Field Immunity           Voltage Dip / Regulation         EN61000-3-2 Class A, EN61000-3-2 Class A compliant         At rated input/output           Safety Standard         UL60950, CSA C22.2 No. 950 (c-UL), IEC60950.1         Cooling System         Forced air cooling           Output Hold-up Time         PWR_OK holds up 16ms min. after AC failure "Characteristic data: Fig.12         At rated output           Reliability Grade         FA (industrial equipment grade, double-sided through hole	lvir	Storage Temp. / Hu	umidity	-25 to 70°C / 10 to 95%						No condensation		
Dielectric Strength         AC input - DC output/FG: 1500 VAC for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)           Insulation Resistance         AC input - DC output/FG: 1500 VAC for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)           Leakage Current         0.5mA max. (100 VAC) / 1mA max. (240 VAC) "Characteristic data: Fig. 5         YEW. TYPE3226 (1kQ) or equivalent           Line Noise Immunity         ±2000V (pulse width: 100/800ns, repetitive cycle: 10-50ms)         No malfunction           Electrostatic Discharge         EN61000-4-2 compliant         No           Radiated, Radio-Frequency EM Field         EN61000-4-2 compliant         EN61000-4-3 compliant           Fast Transient Burst         EN61000-4-4 compliant         EN61000-4-6 compliant           Ragenetic Field Immunity         EN61000-4-6 compliant         Magnetic Field Immunity           Voltage Dip / Regulation         EN61000-4-2 compliant         Magnetic Field Immunity           Voltage Dip / Regulation         EN61000-3-2 Class A, EN61000-3-2 Class A compliant         At rated input/output           Safety Standard         UL60950, CSA C22.2 No. 950 (c-UL), IEC60950.1         Cooling System         Forced air cooling           Output Hold-up Time         PWR_OK holds up 16ms min. after AC failure "Characteristic data: Fig.12         At rated output           Reliability Grade         FA (industrial equipment grade, double-sided through hole	onr	Vibration		Displacement a	mplitude: 0.15mn	n (10-55Hz), Swe	ep cycles: 10, Te	st duration: 45 mir	utes each axis	JIS-C-0040-1995		
Dielectric Strength         AC input - DC output/FG: 1500 VAC for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)           Insulation Resistance         AC input - DC output/FG: 1500 VAC for 1 minute         Cut-off current: 10mA (Humidity: 60% max.)           Leakage Current         0.5mA max. (100 VAC) / 1mA max. (240 VAC) "Characteristic data: Fig. 5         YEW. TYPE3226 (1kQ) or equivalent           Line Noise Immunity         ±2000V (pulse width: 100/800ns, repetitive cycle: 10-50ms)         No malfunction           Electrostatic Discharge         EN61000-4-2 compliant         No           Radiated, Radio-Frequency EM Field         EN61000-4-2 compliant         EN61000-4-3 compliant           Fast Transient Burst         EN61000-4-4 compliant         EN61000-4-6 compliant           Ragenetic Field Immunity         EN61000-4-6 compliant         Magnetic Field Immunity           Voltage Dip / Regulation         EN61000-4-2 compliant         Magnetic Field Immunity           Voltage Dip / Regulation         EN61000-3-2 Class A, EN61000-3-2 Class A compliant         At rated input/output           Safety Standard         UL60950, CSA C22.2 No. 950 (c-UL), IEC60950.1         Cooling System         Forced air cooling           Output Hold-up Time         PWR_OK holds up 16ms min. after AC failure "Characteristic data: Fig.12         At rated output           Reliability Grade         FA (industrial equipment grade, double-sided through hole	nei	Mechanical Shock					the X, Y and Z dir	ections.		JIS-C-0040-1995		
Insulation Resistance         AC input - DC output/FG: 50MΩ min.         At 500 VDC (Humidity: 60% max.)           Leakage Current         0.5mA max. (100 VAC) / 1mA max. (240 VAC) *Characteristic data: Fig. 5         YEW. TYPE3226 (1kΩ) or equivalent           Line Noise Immunity         ±2000V (pulse width: 100/800ns, repetitive cycle: 10-50ms)         No malfunction           Electrostatic Discharge         EN61000-4-2 compliant         No           Radiated, Radio-Frequency EM Field         EN61000-4-2 compliant         Image: Compliant           Fast Transient Burst         EN61000-4-4 compliant         Image: Compliant           Lightning Surge         EN61000-4-5 compliant         Image: Compliant           Magnetic Field Immunity         EN61000-4-6 compliant         Image: Compliant           Voltage Dip / Regulation         EN61000-4-8 compliant         Image: Compliant           Voltage Dip / Regulation         EN61000-4-10 compliant         Image: Compliant           Conducted Emission         VCCI-B compliant *Characteristic data: Fig.6 and 7         Image: Compliant *Characteristic data: Fig.6 and 7           Harmonic Current Regulation         IEC61000-3-2 Class A, EN61000-3-2 Class A compliant         At rated input/output           Cooling System         Forced air cooling         At rated output         Cooling System           Output Hold-up Time         FWE_OK holds up 16ms min. after AC f	٦ŧ			No malfunction,	damage, loosenir	ng or coming-off						
Line Noise Immunity         ±2000V (pulse width: 100/800ns, repetitive cycle: 10-50ms)         No malfunction           Electrostatic Discharge         EN61000-4-2 compliant         EN61000-4-3 compliant         EN61000-4-3 compliant           Fast Transient Burst         EN61000-4-4 compliant         EN61000-4-6 compliant         EN61000-4-6 compliant           Lightning Surge         EN61000-4-6 compliant         EN61000-4-6 compliant         EN61000-4-6 compliant           Wagnetic Field Immunity         EN61000-4-6 compliant         EN61000-4-10 compliant         EN61000-4-11 compliant           Conducted Emission         VCCI-B compliant "Characteristic data: Fig.6 and 7         Harmonic Current Regulation         IEC61000-3-2 Class A, EN61000-3-2 Class A compliant         At rated input/output           Safety Standard         UL60950, CSA C22.2 No. 950 (c-UL), IEC60950, EN60950-1         Cooling System         Forced air cooling         At PS_ON# 'H', fan rotates at low speed           Output Grounding         Capacitor grounding         Output Hold-up Time         PWR_OK holds up 16ms min. after AC failure "Characteristic data: Fig.12         At rated output           Reliability Grade         Follow our standard         Based on EIAJ RCR-9102         Weight         1.0kg typ. (PC1U-210P-X2S) / 1.2kg typ. (PC1U-210P-X2S-02)	Insi	Dielectric Strength		AC input - DC	output/FG: 150	0 VAC for 1 mi		Cut-off current: 10mA (Humidity: 60% max.)				
Line Noise Immunity         ±2000V (pulse width: 100/800ns, repetitive cycle: 10-50ms)         No malfunction           Electrostatic Discharge         EN61000-4-2 compliant         EN61000-4-3 compliant         EN61000-4-3 compliant           Fast Transient Burst         EN61000-4-4 compliant         EN61000-4-6 compliant         EN61000-4-6 compliant           Lightning Surge         EN61000-4-6 compliant         EN61000-4-6 compliant         EN61000-4-6 compliant           Wagnetic Field Immunity         EN61000-4-6 compliant         EN61000-4-10 compliant         EN61000-4-11 compliant           Conducted Emission         VCCI-B compliant "Characteristic data: Fig.6 and 7         Harmonic Current Regulation         IEC61000-3-2 Class A, EN61000-3-2 Class A compliant         At rated input/output           Safety Standard         UL60950, CSA C22.2 No. 950 (c-UL), IEC60950, EN60950-1         Cooling System         Forced air cooling         At PS_ON# 'H', fan rotates at low speed           Output Grounding         Capacitor grounding         Output Hold-up Time         PWR_OK holds up 16ms min. after AC failure "Characteristic data: Fig.12         At rated output           Reliability Grade         Follow our standard         Based on EIAJ RCR-9102         Weight         1.0kg typ. (PC1U-210P-X2S) / 1.2kg typ. (PC1U-210P-X2S-02)	Jlati	Insulation Resistan	ce	AC input - DC output/FG: 50MΩ min.								
Electrostatic Discharge         EN61000-4-2 compliant           Radiated, Radio-Frequency EM Field         EN61000-4-3 compliant           Fast Transient Burst         EN61000-4-4 compliant           Lightning Surge         EN61000-4-5 compliant           RF Conducted Immunity         EN61000-4-6 compliant           Voltage Dip / Regulation         EN61000-4-6 compliant           Conducted Emission         VCCI-B compliant           Coling System         Forced air cooling           Output Grounding         Capacitor grounding           Output Hold-up Time         PWR_OK holds up 16ms min. after AC failure "Characteristic data: Fig.12           Reliability Grade         FA (industrial equipment grade, double-sided through hole PCB)           MTBF         80,000H min.           Weight         1.0kg typ. (PC1U-210P-X2S) / 1.2kg typ. (PC1U-210P-X2S-02) <td>ion</td> <td>Total Voltage Accuracy (%)         Max. Ripple Voltage (mVp-p)         Max. Spike Voltage (mVp-p)         Max. Spike Voltage (mVp-p)         Overcurrent Protection       OCP Point (A) Method         Recovery         Overvoltage Overvoltage Temp. / Humidity         Storage Temp. / Humidity         Vibration         Mechanical Shock         Dielectric Strength Insulation Resistance         Leakage Current         Line Noise Immunity         Electrostatic Discharge         Radiated, Radio-Frequency EM Field Fast Transient Burst         Lightning Surge         RF Conducted Immunity         Voltage Dip / Regulation         Conducted Emission         Harmonic Current Regulation         Safety Standard         Cooling System         Output Hold-up Time         Reliability Grade</td> <td>0.5mA max. (10</td> <td>0 VAC) / 1mA m</td> <td>ax. (240 VAC) *</td> <td>Characteristic dat</td> <td>a: Fig. 5</td> <td></td> <td>YEW. TYPE3226 (1kΩ) or equivalent</td>	ion	Total Voltage Accuracy (%)         Max. Ripple Voltage (mVp-p)         Max. Spike Voltage (mVp-p)         Max. Spike Voltage (mVp-p)         Overcurrent Protection       OCP Point (A) Method         Recovery         Overvoltage Overvoltage Temp. / Humidity         Storage Temp. / Humidity         Vibration         Mechanical Shock         Dielectric Strength Insulation Resistance         Leakage Current         Line Noise Immunity         Electrostatic Discharge         Radiated, Radio-Frequency EM Field Fast Transient Burst         Lightning Surge         RF Conducted Immunity         Voltage Dip / Regulation         Conducted Emission         Harmonic Current Regulation         Safety Standard         Cooling System         Output Hold-up Time         Reliability Grade	0.5mA max. (10	0 VAC) / 1mA m	ax. (240 VAC) *	Characteristic dat	a: Fig. 5		YEW. TYPE3226 (1kΩ) or equivalent			
Radiated, Radio-Frequency EM Field         EN61000-4-3 compliant           Fast Transient Burst         EN61000-4-4 compliant           Lightning Surge         EN61000-4-5 compliant           RF Conducted Immunity         EN61000-4-6 compliant           Magnetic Field Immunity         EN61000-4-6 compliant           Voltage Dip / Regulation         EN61000-4-6 compliant           Conducted Emission         VCCI-B compliant *Characteristic data: Fig.6 and 7           Harmonic Current Regulation         IEC61000-3-2 Class A, EN61000-3-2 Class A compliant           Safety Standard         UL60950, CSA C22.2 No. 950 (c-UL), IEC60950, EN60950-1           Cooling System         Forced air cooling           Output Hold-up Time         PWR_OK holds up 16ms min. after AC failure *Characteristic data: Fig.12           Must Hold-up Time         FWR_OK holds up 16ms min. after AC failure *Characteristic data: Fig.12           MTBF         80,000H min.           Weight         1.0kg typ. (PC1U-210P-X2S) / 1.2kg typ. (PC1U-210P-X2S-02)		Line Noise Immunit	У	±2000V (pulse	width: 100/800	ns, repetitive cy	/cle: 10-50ms)			No malfunction		
Fast Transient Burst       EN61000-4-4 compliant         Lightning Surge       EN61000-4-5 compliant         RF Conducted Immunity       EN61000-4-6 compliant         Magnetic Field Immunity       EN61000-4-6 compliant         Voltage Dip / Regulation       EN61000-4-6 compliant         Conducted Emission       EN61000-4-8 compliant         Voltage Dip / Regulation       EN61000-4-1 compliant         Conducted Emission       VCCI-B compliant *Characteristic data: Fig.6 and 7         Harmonic Current Regulation       IEC61000-3-2 Class A, EN61000-3-2 Class A compliant         Safety Standard       UL60950, CSA C22.2 No. 950 (c-UL), IEC60950, EN60950-1         Cooling System       Forced air cooling         Output Grounding       Capacitor grounding         Output Hold-up Time       PWR_OK holds up 16ms min. after AC failure *Characteristic data: Fig.12         Reliability Grade       FA (industrial equipment grade, double-sided through hole PCB)         Follow our standard       Based on EIAJ RCR-9102         Weight       1.0kg typ. (PC1U-210P-X2S) / 1.2kg typ. (PC1U-210P-X2S-02)												
Image: Eightning Surge       EN61000-4-5 compliant         RF Conducted Immunity       EN61000-4-6 compliant         Magnetic Field Immunity       EN61000-4-6 compliant         Voltage Dip / Regulation       EN61000-4-8 compliant         Conducted Emission       VCCI-B compliant *Characteristic data: Fig.6 and 7         Harmonic Current Regulation       IEC61000-3-2 Class A, EN61000-3-2 Class A compliant         Safety Standard       UL60950, CSA C22.2 No. 950 (c-UL), IEC60950, EN60950-1         Cooling System       Forced air cooling         Output Grounding       Capacitor grounding         Output Hold-up Time       PWR_OK holds up 16ms min. after AC failure *Characteristic data: Fig.12         At rated output       Follow our standard         MBF       80,000H min.         Weight       1.0kg typ. (PC1U-210P-X2S) / 1.2kg typ. (PC1U-210P-X2S-02)												
Magnetic Field Immunity         EN61000-4-8 compliant           Voltage Dip / Regulation         EN61000-4-11 compliant           Conducted Emission         VCCI-B compliant *Characteristic data: Fig.6 and 7           Harmonic Current Regulation         IEC61000-3-2 Class A, EN61000-3-2 Class A compliant           Safety Standard         UL60950, CSA C22.2 No. 950 (c-UL), IEC60950, EN60950-1           Cooling System         Forced air cooling           Output Grounding         Capacitor grounding           Cuput Hold-up Time         PWR_OK holds up 16ms min. after AC failure *Characteristic data: Fig.12           Reliability Grade         FA (industrial equipment grade, double-sided through hole PCB)           Follow our standard         Based on EIAJ RCR-9102           Weight         1.0kg typ. (PC1U-210P-X2S) / 1.2kg typ. (PC1U-210P-X2S-02)			st									
Magnetic Field Immunity         EN61000-4-8 compliant           Voltage Dip / Regulation         EN61000-4-11 compliant           Conducted Emission         VCCI-B compliant *Characteristic data: Fig.6 and 7           Harmonic Current Regulation         IEC61000-3-2 Class A, EN61000-3-2 Class A compliant           Safety Standard         UL60950, CSA C22.2 No. 950 (c-UL), IEC60950, EN60950-1           Cooling System         Forced air cooling           Output Grounding         Capacitor grounding           Cuput Hold-up Time         PWR_OK holds up 16ms min. after AC failure *Characteristic data: Fig.12           Reliability Grade         FA (industrial equipment grade, double-sided through hole PCB)           MTBF         80,000H min.           Weight         1.0kg typ. (PC1U-210P-X2S) / 1.2kg typ. (PC1U-210P-X2S-02)	ΕN			1								
Voltage Dip / Regulation         EN61000-4-11 compliant           Conducted Emission         VCCI-B compliant *Characteristic data: Fig.6 and 7           Harmonic Current Regulation         IEC61000-3-2 Class A, EN61000-3-2 Class A compliant           Safety Standard         UL60950, CSA C22.2 No. 950 (c-UL), IEC60950, EN60950-1           Cooling System         Forced air cooling           Output Grounding         Capacitor grounding           Output Hold-up Time         PWR_OK holds up 16ms min. after AC failure *Characteristic data: Fig.12           Reliability Grade         FA (industrial equipment grade, double-sided through hole PCB)           MTBF         80,000H min.           Weight         1.0kg typ. (PC1U-210P-X2S) / 1.2kg typ. (PC1U-210P-X2S-02)	1C			1								
Conducted Emission         VCCI-B compliant *Characteristic data: Fig.6 and 7           Harmonic Current Regulation         IEC61000-3-2 Class A, EN61000-3-2 Class A compliant         At rated input/output           Safety Standard         UL60950, CSA C22.2 No. 950 (c-UL), IEC60950, EN60950-1         At PS_ON# 'H', fan rotates at low speed           Cooling System         Forced air cooling         At PS_ON# 'H', fan rotates at low speed           Output Grounding         Capacitor grounding         Output Hold-up Time           PWR_OK holds up 16ms min. after AC failure *Characteristic data: Fig.12         At rated output           Reliability Grade         FA (industrial equipment grade, double-sided through hole PCB)         Follow our standard           MTBF         80,000H min.         Based on EIAJ RCR-9102         Weight		Ų	,									
Harmonic Current Regulation         IEC61000-3-2 Class A, EN61000-3-2 Class A compliant         At rated input/output           Safety Standard         UL60950, CSA C22.2 No. 950 (c-UL), IEC60950, EN60950-1         Cooling System         At rest on provide the second seco		0 1 0										
Safety Standard         UL60950, CSA C22.2 No. 950 (c-UL), IEC60950, EN60950-1           Cooling System         Forced air cooling           Output Grounding         Capacitor grounding           Output Hold-up Time         PWR_OK holds up 16ms min. after AC failure "Characteristic data: Fig.12           Reliability Grade         FA (industrial equipment grade, double-sided through hole PCB)           MTBF         80,000H min.           Weight         1.0kg typ. (PC1U-210P-X2S) / 1.2kg typ. (PC1U-210P-X2S-02)												
Cooling System         Forced air cooling         At PS_ON# 'H', fan rotates at low speed           Output Grounding         Capacitor grounding         Output Grounding           Output Hold-up Time         PWR_OK holds up 16ms min. after AC failure "Characteristic data: Fig.12         At rated output           Reliability Grade         FA (industrial equipment grade, double-sided through hole PCB)         Follow our standard           MTBF         80,000H min.         Based on EIAJ RCR-9102           Weight         1.0kg typ. (PC1U-210P-X2S-02)         Eine Standard			Regulation							At rated input/output		
Output Grounding         Capacitor grounding           Output Hold-up Time         PWR_OK holds up 16ms min. after AC failure *Characteristic data: Fig.12         At rated output           Reliability Grade         FA (industrial equipment grade, double-sided through hole PCB)         Follow our standard           MTBF         80,000H min.         Based on EIAJ RCR-9102           Weight         1.0kg typ. (PC1U-210P-X2S) / 1.2kg typ. (PC1U-210P-X2S-02)						) (c-UL), IEC60						
Output Hold-up Time         PWR_OK holds up 16ms min. after AC failure *Characteristic data: Fig.12         At rated output           Reliability Grade         FA (industrial equipment grade, double-sided through hole PCB)         Follow our standard           MTBF         80,000H min.         Based on EIAJ RCR-9102           Weight         1.0kg typ. (PC1U-210P-X2S) / 1.2kg typ. (PC1U-210P-X2S-02)         Follow our standard				1	•			At PS_ON# 'H', fan rotates at low speed				
MTBF         80,000H min.         Based on EIAJ RCR-9102           Weight         1.0kg typ. (PC1U-210P-X2S) / 1.2kg typ. (PC1U-210P-X2S-02)         EiAJ RCR-9102					0							
MTBF         80,000H min.         Based on EIAJ RCR-9102           Weight         1.0kg typ. (PC1U-210P-X2S) / 1.2kg typ. (PC1U-210P-X2S-02)         Example 10,000 min.	)th		ne									
MTBF         80,000H min.         Based on EIAJ RCR-9102           Weight         1.0kg typ. (PC1U-210P-X2S) / 1.2kg typ. (PC1U-210P-X2S-02)         EiAJ RCR-9102	ers				equipment grad	e, double-sided	through hole P	CB)				
										Based on EIAJ RCR-9102		
Warranty 3 years after delivery. If any faults belong to us, the defective unit shall be repaired or replaced at our cost. Execution contract on proteins not lists		•										
vvarianty		Warranty		3 years after deli	very. If any faults	pelong to us, the d	efective unit shall	be repaired or repla	aced at our cost.	Except for errors caused by operation not listed		

### Fig.1 Duty Ratio

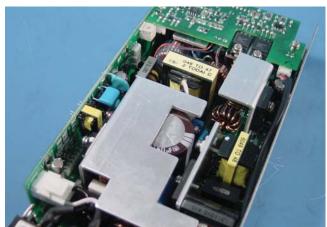
Peak current/power shall be 5 sec or less continuously. For repetitive loads, duty ratio shall be 10% or less.  $t \leq 5 \text{ sec}$ 

## Signal Input / Output Specification Condition: at normal temperature and humidity unless otherwise specified

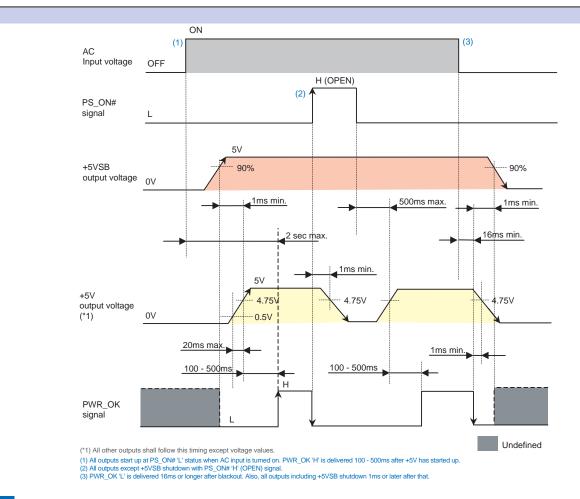
	Items	Specification	, +5V +12V, -5V, and -12V outputs shutdown with 'H' or 'OPEN' input.       Signal input between the pin 14 of Output1(MAIN) connector and COM         put terminal to detect the voltage of +3.3V output; by connecting to the load al, only the line drop of the + side of the output cable is compensated.       The pin 11 of Output1(MAIN) connect         nal is delivered when the +5V output is normal (detection delay time: 100 - 500ms).       The pin 8 of Output1(MAIN) connect         Signal Circuit         Opting of the + side of the output cable is compensated.         In is delivered when the +5V output is normal (detection delay time: 100 - 500ms).         Dutside         Opting of the + SV output is normal (detection delay time: 100 - 500ms).         Dutside         Opting of the + SV output is normal (detection delay time: 100 - 500ms).         Dutside         In is 10 mA         At Q1 on         Is 1.6 mA         V Solve				
Image: Signal Output ON / OFF Control Signal (PS_ON#)       +3.3V, +5V +12V, -5V, and -12V outputs shutdown with 'H' or 'OPEN' input.       Signal input between the pin 14 of Output1(MAIN) connector and COM         Image: Signal Output ON / OFF Control Signal (PS_ON#)       The input terminal to detect the voltage of +3.3V output; by connecting to the load terminal, only the line drop of the + side of the output cable is compensated.       The pin 11 of Output1(MAIN) connector and COM         Image: Signal Output Signal (PWR_OK)       'H' signal is delivered when the +5V output is normal (detection delay time: 100 - 500ms).       The pin 8 of Output1(MAIN) connector         Image: Signal Circuit       Signal Circuit       Signal Circuit       Signal Circuit			Signal input between the pin 14 of Output1(MAIN) connector and COM pin				
Input Signal Circui	+3.3V SENSE		The pin 11 of Output1(MAIN) connector				
Output Signal	with the provided of the provid						
		Signal	Circ	uit			
				(PWR	2_OK)		
out Signal Circuit	. –	Outside $\lim_{n \to \infty} \ln \leq 10 \text{ mA}$ $\lim_{n \to \infty} At Q1 \text{ on}$ $\lim_{n \to \infty} \ln \leq 1.6 \text{ mA}$	Signal	Inside +5V	Outside		

## Internal Structure

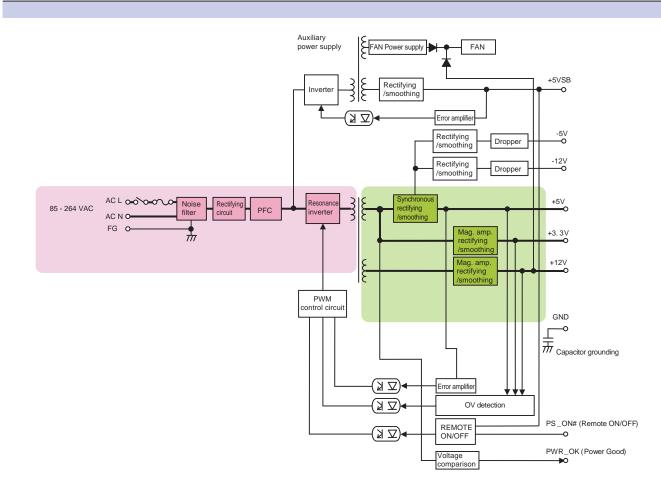




## Sequence Diagram

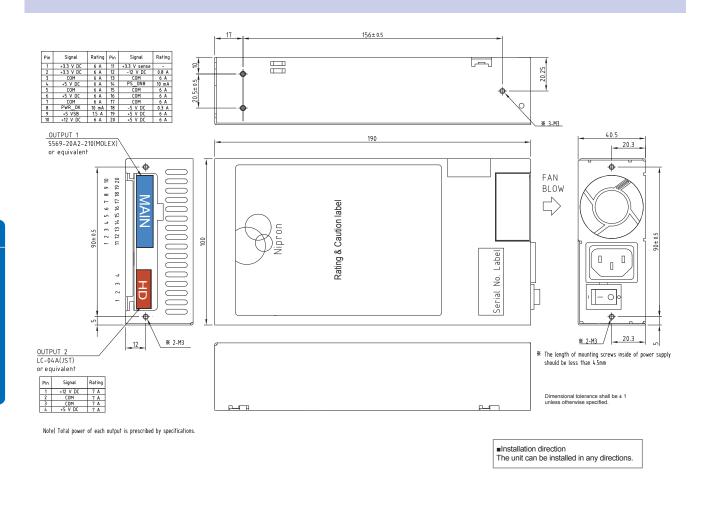


## Block Diagram



BRAIN POWER Supply

Non-backup Power Supply



### Optional Components Sold Separately

Detachable Output Harness			
Model	Length and Type of Connector	Output Port Allocation	
Main power cable MAIN			
WH-M2420-400	400±15 24-pin		
WH-M2020-400	400±15 20-pin		
WH-M2020-192	192±15		
WH-MAT20-400	400±15 AT for +3.3V		Acceptable cable(s)
HD power cable HD			1 model 1 model
WH-PV404-600	300±20 150±10 150±10 150±10 FD 300±20 FD 300±20 FD +12V 4-pin		
*PC1U-210P-X2S-02 comes with V			

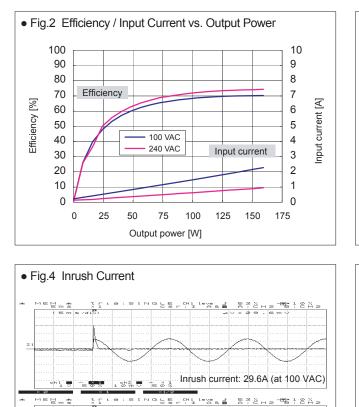
## Optional Components Sold Separately

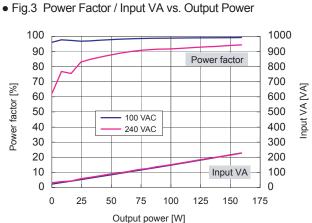
Cable			
Picture	Model	Туре	Description
Q	WH2753	AC power cord	125 VAC 12A [PSE]
	WH2753-02	AC power cord	125 VAC 12A (tracking resistance type) [PSE]

Other Optional Co	omponents		
Model	Description	Model	Description
ACC2637	Automatic startup unit	WH5105	12V 4-pin connector conversion harness (80mm)
WH2820	20-pin extension harness (600mm)	WH5105-02	12V 4-pin connector conversion harness (320mm)
WH2747	20-pin extension harness (450mm)	WH5055	AT connector conversion harness
WH2892-02	20-pin extension harness (200mm)	ACC5046	Harness with PS_ON switch
WH2812	PCI-E 6-pin connector conversion harness	ACC5077	PS_ON terminal short connector
		WH5073	PS_ON terminal short 20-pin harness

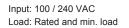
## Characteristics Data (Examples of actual measurement)

Inrush current: 64.0A (at 240 VAC)

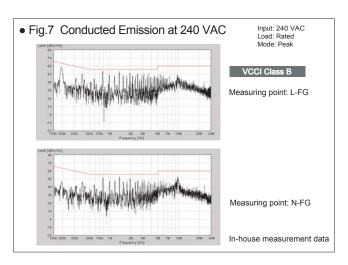


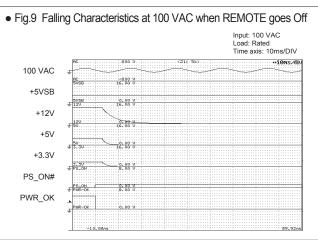




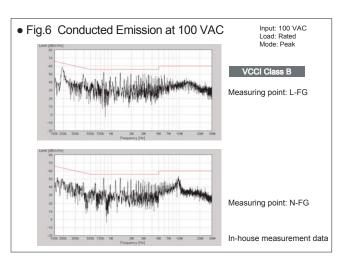


	Rated load	Min. load
100 VAC	0.18mA	0.16mA
240 VAC	0.38mA	0.36mA

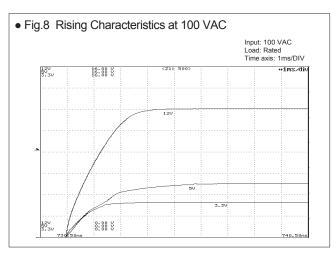




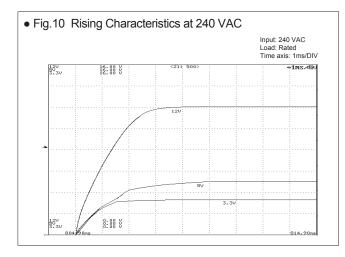
BRAII Powe Suppl



ch2 1 Ø r



### Characteristics Data (Examples of actual measurement)



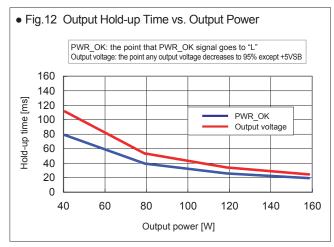
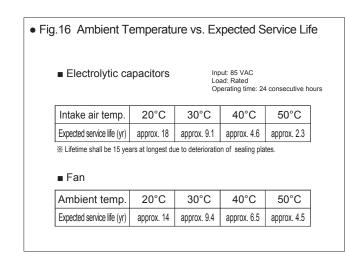
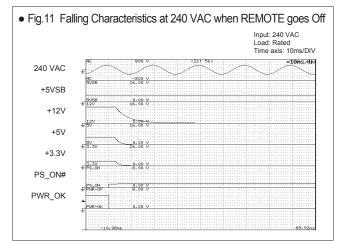


Fig.14 Output Voltage Regulation									
			0	utput	Min	load	Rated	load	Peak loa
			+1	2V output		A	5A		10A
				5V output 3V output		5A IA	12		24A 14A
			10.	ov odipul			07		14/1
AC input voltage	85 VAC	100 VAC	132 VAC	176 VA	١C	240	VAC	264	VAC
+12V output (min. load)	12.185 V	12.187 V	12.189 V	12.190	) V	12.1	90 V	12	.190 V
+12V output (rated load)	12.068 V	12.071 V	12.073 V	12.076	ìΥ	12.0	)77 V	12	.078 V
+12V output (peak load)	12.001 V	12.008 V	12.012 V	12.015	5 V	12.0	18 V	12	.023 V
+5V output (min. load)	5.128 V	5.128 V	5.128 V	5.128	3 V	5.1	28 V	5	.128 V
+5V output (rated load)	5.029 V	5.029 V	5.029 V	5.029	) V	5.0	29 V	5	.029 V
+5V output (peak load)	4.967 V	4.967 V	4.967 V	4.967	7 V	4.9	67 V	4	.967 V
+3.3V output (min. load)	3.353 V	3.353 V	3.353 V	3.353	3 V	3.3	53 V	3	.353 V
+3.3V output (rated load)	3.298 V	3.299 V	3.299 V	3.299	) V	3.2	99 V	3	.299 V
+3.3V output (peak load)	3.255 V	3.255 V	3.256 V	3.256	iν	3.2	56 V	3	.256 V





• Fig.13 Dynamic Load Fluctuation Characteristics at 1kHz

