

規格承認書 (SPECIFICATIONS)

表單編號	E-56-01	電腦表單檔名	規格承認書	保存年限	永久
文件編號		電腦文件檔名		制訂日期	92年04月07日
客戶機型/料號		客戶名稱			
機種型號	PC-XX28-A	機種版本	A1	頁次	1/7
品名規格	熱插拔 3+1 備援式通信電源供應器				
產品說明	1.3+1 Redundancy Power Supply, Hot Swap power module *4EA 熱插拔式,可並聯運轉.				
	2. Automatic Output Fault Isolation & Load Sharing $\pm 10\%$ of rated output current.				
	3. Total Output Power : 2671W.				
簡要規格	輸入規格	Input Power : 180VAC ~ 264VAC , 3 PHASE, 57~63Hz.			
		Nominal: 220VAC, 3 PHASE, 60Hz.			
	輸出規格	(1). V1 : +28VDC $\pm 0.5\%$, 0-52A , 1456W.			
		(2). V2 : +13.5VDC $\pm 0.5\%$, 0-90A , 1215W.			
	其它規格	1. Meet FCC level " A "(EMI test report provided only).			
		3. Operating Ambient Temperature : -10°C ~ +50°C.			
		4. Operating Relative Humidity : 20%~85% (non-condensed).			
		5. Reliability (MTBF): Minimum for ten years.			
客戶名稱：			寶虹電子股份有限公司		
核准者	審核者	研發主管 (審核)	專案負責人 (制訂)		
		葉國豪	簡志舜		
年 月 日	年 月 日	92年4月8日	92年4月7日		

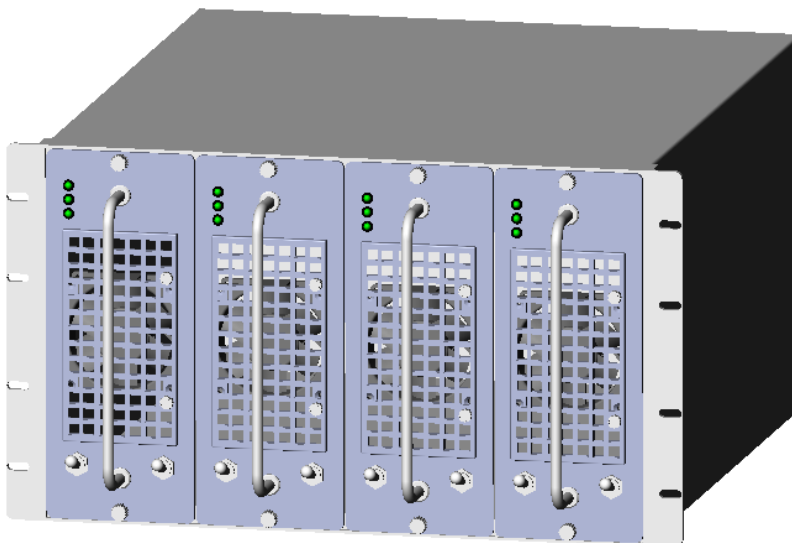
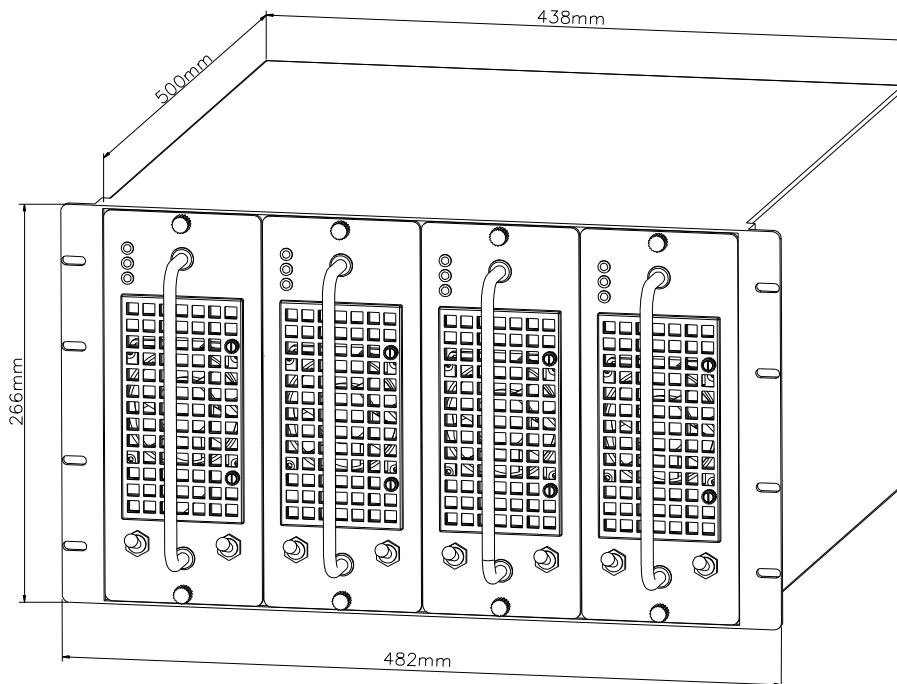
NSN :

MODEL NO.: PC-XX28-A

熱插拔 3+1 備援式通信直流電源供應器

DRAWING:

W x D x H=482mm x 500mm x 266mm



Special Features :

- * 3+1 Redundancy Power Supply , Hot Swap power module *4EA 熱插拔式可並聯運轉。
- * Automatic Output Fault Isolation & Load Sharing $\pm 10\%$ of rated output current 。
- * All DC power supply should be switching and modulated type 。
- * Input Circuit Fuses Provided 。
- * LED Display for every output to indicate output normal 。
- * 9pin D-type 接頭(Remote Control ON/OFF 控制輸出 . Open=each power off , Short=each power on) 。
- * Cooling Fans provided 。
- * Input/ Output Isolation 。
- * Low Ripple & Noise 。
- * EMI: Meet FCC Level "A" 。
- * Current Limited , Over Voltage Protection 。
- * Input Transient Surge Protection 。
- * All PCBs Coating 。
- * MTBF : >100,000 hours 。
- * Industrial terminal blocks for inputs and outputs 。
- * Output fault alarm(蜂鳴器) for each power module 。
- * Two on/off switches on front panel for each power module 。

MODEL NO.: PC-XX28-A**Electrical Specifications:**

Input	3 PHASE , 180VAC~264VAC(RMS) , 57~63Hz				
Output Power	No.	O/P Voltage	O/P Current	V-nom	Ripple & Noise
	1	+28.0VDC±0.5%	52A	28V	100mV _{PP}
	2	+13.5VDC±0.5%	90A	15V	100mV _{PP}
	Input Voltage		Rated Output Voltage and Output Current		
Rated Voltage (Vdc)	180VAC~264VAC (Nominal 220Vac)		+28.0VDC±0.5%	+13.5VDC±0.5%	
Rated Current (A)	Power Module		0~17.33A	0~30A	
	Power Supply (3+1)		0~52A	0~90A	
Rated Power (W)	Power Module		485.3W	405W	
			890.3W		
	Power Supply (3+1)		1456W	1215W	
			2671W		
Line Regulation	±0.2% max. at Full Load and Low Line Input or High Line Input.				
Load Regulation	±0.4% max. at Nominal Line Input from 10% Load to 100% Load.				
Output Protection	O/P Voltage	OVP Set-point	Current Limit	Short Current	
	+28.0VDC	31.5V~33.9V	54.6A~69.9A	37.5A~69.9A	
	+13.5VDC	17.1V~18.5V	102A~130.5A	69.9A~130.5A	
Input Fault Protection	Over Voltage; Transient Surge.				
Inrush Current	Maximum 40A.				
EMI	Meet FCC Level "A" (EMI Test Report Provided Only).				
Safety	UL, CSA, VDE, TÜV, CE, BABT (No Compliance Approvals Provided).				
Efficiency	> 80%.				
Remote Control ON/OFF	"Short" for each power ON ; "Open" for each power OFF (9-pin D-type connector interface).				
Operation Temperature	-10°C ~ +50°C Ambient.				

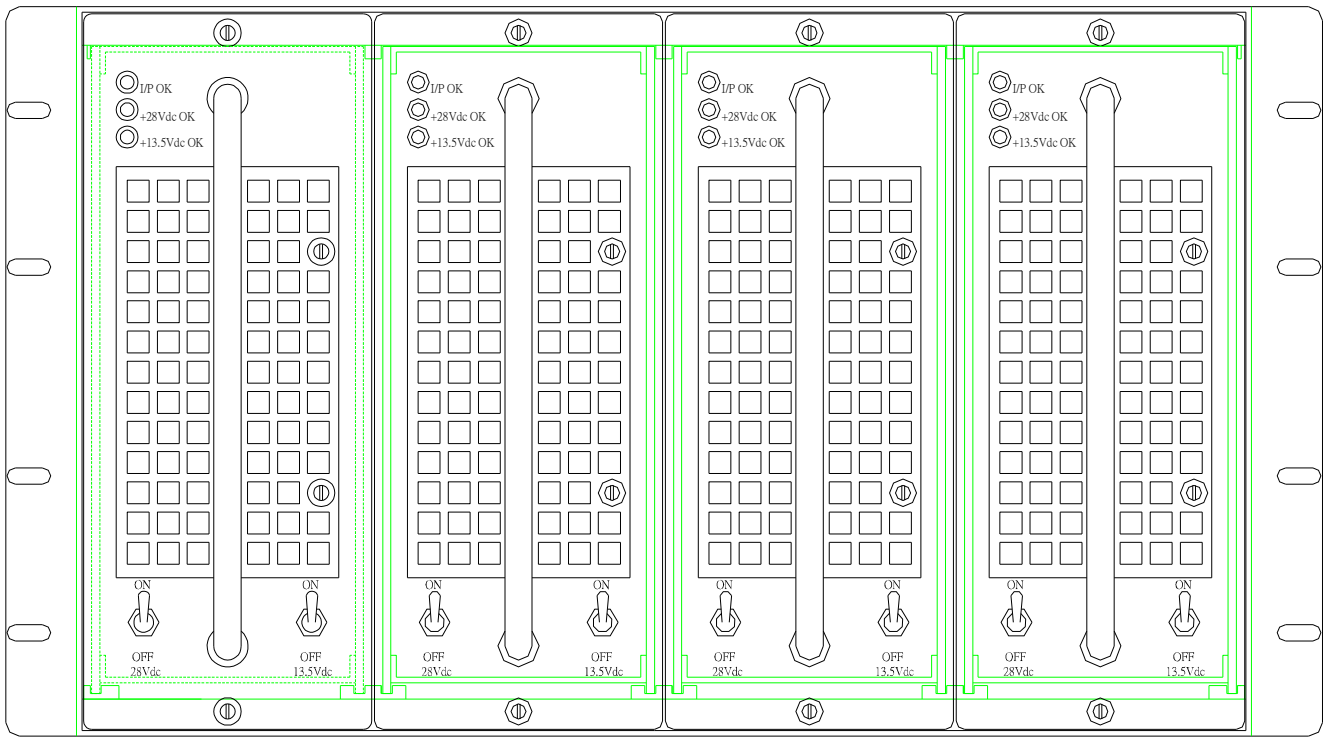
Storage Temperature	- 40°C ~ +85°C.
Temperature Coefficient	0.02 %/°C max.
Isolation	Leakage Current : ≤1mA @Test Voltage=500Vdc; Test Time=2 sec. for I/P to O/P.
Insulation Resistance	≥10MΩ @Test Voltage= 100Vdc test for I/P to O/P; I/P to Chassis; O/P to Chassis.
Parallel operating & automatic load sharing & fault isolation	(1) <10% current difference of rated output current between each power module for each output. (2) 3+1 Redundancy Power Supply, Hot swap power module *4EA 3+1 備援式電源供應器,4 支熱插拔式可並聯運轉之電源模組. (3) Automatic Output Fault Isolation & Load Sharing ±10% of rated output current.
Cooling	Force Air Cooling by Fans for each power module.
Size	482mm(W) * 500mm(D) * 266mm(H) (max.).
Mechanical	See Attached Drawing: (1) 19” Standard Rack. (2) Power Supply: *Four “9.2cm” cooling fans on rear panel. and Four “9.2cm” cooling fans on front panel *Two Green LED display for each output normal operating on front panel (28V OK, 13.5V OK) for each power module. *Green LED display for input normal operating on front panel (INPUT OK) for each power module. *Three terminal blocks on rear panel. (Input * 4pin; Output 28V*6pin, Output 13.5V *12pin) (輸出正以紅色標示,輸出負以黑色標示). *Two on/off switches on front panel for each power module. *One 9-pin D-type connector on rear panel for power supply remote control ON/OFF. *每模組一支把手(插拔用).
Case Material	AL5052-H32, t=2mm +/-5%.

Terminal Blocks Power Pin Assignment:

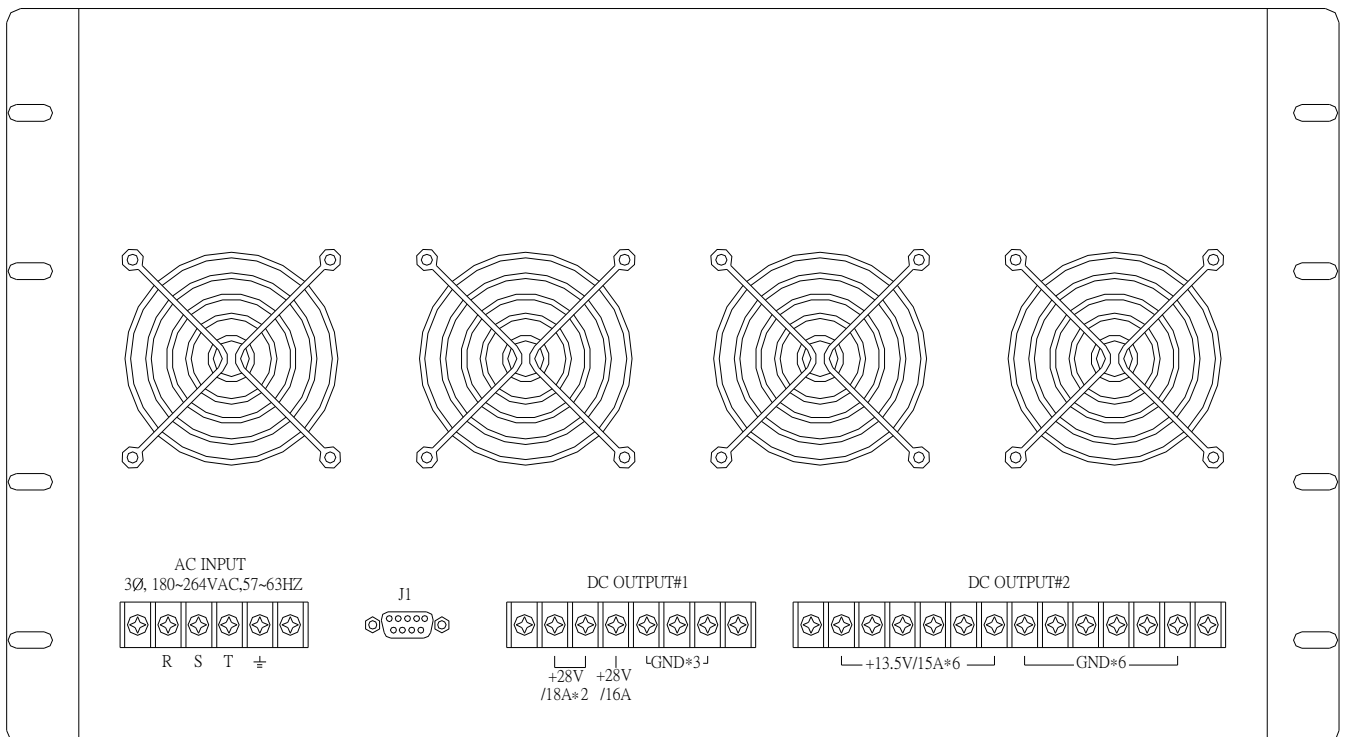
INPUT 220VAC/20A 4 PIN	PIN 腳名稱	PIN 腳功能	線材
PIN1	AC/R	AC 輸入 R	
PIN2	AC/S	AC 輸入 S	
PIN3	AC/T	AC 輸入 T	
PIN4	Chassis GND	Chassis GND	
OUTPUT#1 28VDC/52A 6PIN	PIN 腳名稱	PIN 腳功能	
PIN1	+28VDC/18A	28VDC 輸出正	橙色
PIN2	+28VDC/18A	28VDC 輸出正	橙色
PIN3	+28VDC/16A	28VDC 輸出正	橙色
PIN4	GND	28VDC 輸出負	黑色
PIN5	GND	28VDC 輸出負	黑色
PIN6	GND	28VDC 輸出負	黑色
OUTPUT#2 13.5VDC/90A 12PIN	PIN 腳名稱	PIN 腳功能	
PIN1	+13.5VDC/15A	13.5VDC 輸出正	紅色
PIN2	+13.5VDC/15A	13.5VDC 輸出正	紅色
PIN3	+13.5VDC/15A	13.5VDC 輸出正	紅色
PIN4	+13.5VDC/15A	13.5VDC 輸出正	紅色
PIN5	+13.5VDC/15A	13.5VDC 輸出正	紅色
PIN6	+13.5VDC/15A	13.5VDC 輸出正	紅色
PIN7	GND	13.5VDC 輸出負	黑色
PIN8	GND	13.5VDC 輸出負	黑色
PIN9	GND	13.5VDC 輸出負	黑色
PIN10	GND	13.5VDC 輸出負	黑色
PIN11	GND	13.5VDC 輸出負	黑色
PIN12	GND	13.5VDC 輸出負	黑色

J1 D-Type Connector Pin Assignment:

9 PIN 信號	PIN 腳名稱	PIN 腳功能	線材
PIN1	Remote control 正	Short: each Power ON Open: each Power OFF	
PIN2	Remote control 負		
PIN3,4,5,6,7,8,9		空 PIN	



前面板圖



後背板圖