

3P Power

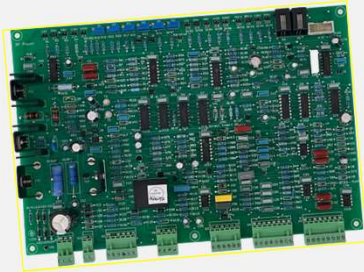
Passion Profession Perfection



PRODUCT CATALOGUE

Brilliant Series Industrial DC Power Supply

Brilliant Series Industrial DC Power Supply



Design and Development in Singapore

Our Universal Rectifier Control cards, Thyristors, Triggering Cards and Alarm Display Cards are designed, developed, and assembled locally in Singapore.

This assures that our products are in the highest quality control.

Input Single Phase 220/230/240VAC
Output Refer to catalogue

FEATURES

- **ADAPTABILITY**

Designed to accept a wide range of input voltages and frequency range, this DC UPS is capable to cope with the worst utility conditions.

- **DIVERSIFICATION**

Carefully designed and engineered PCB cards, our DC UPS has the ability to eliminate harmful distortion from utility power and withstand all kinds of severe impacts from various loads. This DC UPS possesses the capability to support heavy duty equipment and production equipment.

- **ROBUST CABINET DESIGN**

Considering the various environmental conditions, our cabinet is designed to fit all industries from marine sector to data center.

- **FLEXIBLE BATTERY CONFIGURATION**

Battery quantity and battery types can be adjusted flexibly according to the various power demands

- **UNIQUE MAN-MACHINE INTERFACE**

This DC UPS has an unique panel interface which allows end user to have a better understanding to the current running mode of the live system

- **FRONT ACCESS**

User access is made simple by ensuring the accessibility of the operational controls according to individual site's requirements. Electronic cards and power components are easily accessible from the front panel for further maintenance and/or replacements

SUITABLE FOR INDUSTRIAL & COMMERCIAL APPLICATIONS



* Industrial application such as Process and Control system, Industrial Machinery, Instrument and Measurement, Process monitoring, Control and Security



* Infrastructures application such as Hospital, Airport, Data Centre, Telecommunication, Semiconductor, Water treatment, Transportation



* Energy industry application such as Oil & Gas, Petrochemicals, Power Plant, Power Transmission



* Military application such as Energy Storage Charger

Brilliant Series Single Phase Input 24Vdc Output Technical Data

Model	SPDC24-10	SPDC24-20	SPDC24-40	SPDC24-50	SPDC24-75	SPDC24-100
Output Capacity	24V/10A	24V/20A	24V/40A	24V/50A	24V/75A	24V/100A
RECTIFIER INPUT						
Phase	1 Phase, L+N+G					
Input PF	0.8 at nominal input and float voltage					
Input Voltage	220V / 230V / 240V +/- 15%					
Input frequency	50Hz / 60Hz +/- 5%					
RECTIFIER DC OUTPUT						
Adjustable Range	From 80% to 135% of nominal voltage at +/- 15% of rectifier input					
Stability (Static)	+/- 1.5% @ +/- 15% of rectifier AC input					
Stability (Dynamic)	-/+ 5% at load changed from 0% to 100% and vice visa @ +/- 15% of rectifier AC input					
Recovery Time	< 250ms to be in static state					
Ripple Voltage	< 5% as standard (0.1%, 1% & 2% offered as option) without battery connected					
Nominal DC Current	From 10Adc to 100Adc (Higher ratings are available on request)					
Adjustable Range	0 to 100% both rectifier current limit and battery current limit					
Current Accuracy	+/- 1.5% of set point					
DC Overcurrent	110% continuous of nominal DC current					
Characteristic	Constant current / constant voltage according to IU IEC 60478-1					
High Pot Test	2.0KV / 1min					
Megger Test	500Vdc					
MECHANICAL SPECIFICATION						
Human Machine Interface	Brilliant M2000 controller with 5 inch Touch Screen Size					
	Standard: 1024 Events Log, Option: For > 1024 Events					
Alarm Communications	Standard: Modbus and Dry Contact (C-NC-NO), Option: TCP/IP					
Degree of Protection	IP 20 according to IEC 60529 & 60144 Standard (Other IP ratings are available on request)					
Equipment Colour	RAL7035 come with powder and anti-rust coating (Other colours are available on request)					
Acoustic Noise Level	≤ 65dB at 1m away typically					
Connection	Top or Bottom Entry as per customer requirement					
ENVIRONMENTAL						
Type Of Cooling	Natural cooling up to 75A & forced cooling above 75A					
Operating Temperature	0 Degree Celsius to 55 Degree Celsius					
Storage Temperature	-20 Degree Celsius to 70 Degree Celsius					
Humidity	< 95% (Non Condensing)					
Installation Height	0 to 1000m, derating @ 1% per 100m above 1000m					
Safety	IEC 62040-1-2, Functionality IEC 60146-1-1					
Environment	RoHS					
PHYSICAL						
Approx. Gross Weight (KG)	75	90	110	130	180	200
Cabinet Model	CUB0612061					
Dimensions (W*D*H) mm	600 * 600 * 1200					

Brilliant Series Single Phase Input 30Vdc Output Technical Data

Model	SPDC30-06	SPDC30-10	SPDC30-20	SPDC30-40	SPDC30-50	SPDC30-100
Output Capacity	30V/06A	30V/10A	30V/30A	30V/40A	30V/50A	30V/100A
RECTIFIER INPUT						
Phase	1 Phase, L+N+G					
Input PF	0.8 at nominal input and float voltage					
Input Voltage	220V / 230V / 240V +/- 15%					
Input frequency	50Hz / 60Hz +/- 5%					
RECTIFIER DC OUTPUT						
Adjustable Range	From 80% to 135% of nominal voltage at +/- 15% of rectifier input					
Stability (Static)	+/- 1.5% @ +/- 15% of rectifier AC input					
Stability (Dynamic)	-/+ 5% at load changed from 0% to 100% and vice visa @ +/- 15% of rectifier AC input					
Recovery Time	< 250ms to be in static state					
Ripple Voltage	< 5% as standard (0.1%, 1% & 2% offered as option) without battery connected					
Nominal DC Current	From 6Adc to 100Adc (Higher ratings are available on request)					
Adjustable Range	0 to 100% both rectifier current limit and battery current limit					
Current Accuracy	+/- 1.5% of set point					
DC Overcurrent	110% continuous of nominal DC current					
Characteristic	Constant current / constant voltage according to IU IEC 60478-1					
High Pot Test	2.0KV / 1min					
Megger Test	500Vdc					
MECHANICAL SPECIFICATION						
Human Machine Interface	Brilliant M2000 controller with 5 inch Touch Screen Size					
	128MB Standard, External SD Memory Card Optional					
Alarm Communications	Modbus RTU, Dry Contact (C, NC,NO)					
Degree of Protection	IP 20 according to IEC 60529 & 60144 Standard (Other IP ratings are available on request)					
Equipment Colour	RAL7035 come with powder and anti-rust coating (Other colours are available on request)					
Acoustic Noise Level	≤ 65dB at 1m away typically					
Connection	Top or Bottom Entry as per customer requirement					
ENVIRONMENTAL						
Type Of Cooling	Natural cooling up to 75A & forced cooling above 75A					
Operating Temperature	0 Degree Celsius to 55 Degree Celsius					
Storage Temperature	-20 Degree Celsius to 70 Degree Celsius					
Humidity	< 95% (Non Condensing)					
Installation Height	0 to 1000m, derating @ 1% per 100m above 1000m					
Safety	IEC 62040-1-2, Functionality IEC 60146-1-1					
Environment	RoHS					
PHYSICAL						
Approx. Gross Weight (KG)	80	95	118	130	150	200
Battery Compartment	23 Cells x 1.2V 40Ah ~ 80Ah		23 Cells x 1.2V 90Ah ~ 120Ah		23 Cells x 1.2V 150Ah ~ 210Ah	
Dimensions (W*D*H) mm	700 * 450 * 1100 ~ 1400		700 * 700 * 1500		1000 * 700 * 1500	

Brilliant Series Single Phase Input 48Vdc Output Technical Data

Model	SPDC48-10	SPDC48-20	SPDC48-40	SPDC48-50	SPDC48-75	SPDC48-100
Output Capacity	48V/10A	48V/20A	48V/40A	48V/50A	48V/75A	48V/100A
RECTIFIER INPUT						
Phase	1 Phase, L+N+G					
Input PF	0.8 at nominal input and float voltage					
Input Voltage	220V / 230V / 240V +/- 15%					
Input frequency	50Hz / 60Hz +/- 5%					
RECTIFIER DC OUTPUT						
Adjustable Range	From 80% to 135% of nominal voltage at +/- 15% of rectifier input					
Stability (Static)	+/- 1.5% @ +/- 15% of rectifier AC input					
Stability (Dynamic)	-/+ 5% at load changed from 0% to 100% and vice visa @ +/- 15% of rectifier AC input					
Recovery Time	< 250ms to be in static state					
Ripple Voltage	< 5% as standard (0.1%, 1% & 2% offered as option) without battery connected					
Nominal DC Current	From 10Adc to 100Adc (Higher ratings are available on request)					
Adjustable Range	0 to 100% both rectifier current limit and battery current limit					
Current Accuracy	+/- 1.5% of set point					
DC Overcurrent	110% continuous of nominal DC current					
Characteristic	Constant current / constant voltage according to IU IEC 60478-1					
High Pot Test	2.0KV / 1min					
Megger Test	500Vdc					
MECHANICAL SPECIFICATION						
Human Machine Interface	Brilliant M2000 controller with 5 inch Touch Screen Size					
	128MB Standard, External SD Memory Card Optional					
Alarm Communications	Modbus RTU, Dry Contact (C, NC,NO)					
Degree of Protection	IP 20 according to IEC 60529 & 60144 Standard (Other IP ratings are available on request)					
Equipment Colour	RAL7035 come with powder and anti-rust coating (Other colours are available on request)					
Acoustic Noise Level	≤ 65dB at 1m away typically					
Connection	Top or Bottom Entry as per customer requirement					
ENVIRONMENTAL						
Type Of Cooling	Natural cooling up to 75A & forced cooling above 75A					
Operating Temperature	0 Degree Celsius to 55 Degree Celsius					
Storage Temperature	-20 Degree Celsius to 70 Degree Celsius					
Humidity	< 95% (Non Condensing)					
Installation Height	0 to 1000m, derating @ 1% per 100m above 1000m					
Safety	IEC 62040-1-2, Functionality IEC 60146-1-1					
Environment	RoHS					
PHYSICAL						
Approx. Gross Weight (KG)	100	110	130	150	180	220
Cabinet Model	CUB0612061			CUB0616061		
Dimensions (W*D*H) mm	600 * 600 * 1200			600 * 600 * 1600		

Brilliant Series Single Phase Input 48Vdc Output Technical Data

Model	SPDC48-10	SPDC48-20	SPDC48-40	SPDC48-50	SPDC48-75	SPDC48-100
Output Capacity	48V/10A	48V/20A	48V/40A	48V/50A	48V/75A	48V/100A
RECTIFIER INPUT						
Phase	1 Phase, L+N+G					
Input PF	0.8 at nominal input and float voltage					
Input Voltage	220V / 230V / 240V +/- 15%					
Input frequency	50Hz / 60Hz +/- 5%					
RECTIFIER DC OUTPUT						
Adjustable Range	From 80% to 135% of nominal voltage at +/- 15% of rectifier input					
Stability (Static)	+/- 1.5% @ +/- 15% of rectifier AC input					
Stability (Dynamic)	-/+ 5% at load changed from 0% to 100% and vice visa @ +/- 15% of rectifier AC input					
Recovery Time	< 250ms to be in static state					
Ripple Voltage	< 5% as standard (0.1%, 1% & 2% offered as option) without battery connected					
Nominal DC Current	From 10Adc to 100Adc (Higher ratings are available on request)					
Adjustable Range	0 to 100% both rectifier current limit and battery current limit					
Current Accuracy	+/- 1.5% of set point					
DC Overcurrent	110% continuous of nominal DC current					
Characteristic	Constant current / constant voltage according to IU IEC 60478-1					
High Pot Test	2.0KV / 1min					
Megger Test	500Vdc					
MECHANICAL SPECIFICATION						
Human Machine Interface	Brilliant M2000 controller with 5 inch Touch Screen Size					
	128MB Standard, External SD Memory Card Optional					
Alarm Communications	Modbus RTU, Dry Contact (C, NC,NO)					
Degree of Protection	IP 20 according to IEC 60529 & 60144 Standard (Other IP ratings are available on request)					
Equipment Colour	RAL7035 come with powder and anti-rust coating (Other colours are available on request)					
Acoustic Noise Level	≤ 65dB at 1m away typically					
Connection	Top or Bottom Entry as per customer requirement					
ENVIRONMENTAL						
Type Of Cooling	Natural cooling up to 75A & forced cooling above 75A					
Operating Temperature	0 Degree Celsius to 55 Degree Celsius					
Storage Temperature	-20 Degree Celsius to 70 Degree Celsius					
Humidity	< 95% (Non Condensing)					
Installation Height	0 to 1000m, derating @ 1% per 100m above 1000m					
Safety	IEC 62040-1-2, Functionality IEC 60146-1-1					
Environment	RoHS					
PHYSICAL						
Approx. Gross Weight (KG)	100	110	130	150	180	220
Battery Compartment	39 Cells x 1.2V 40Ah ~ 80Ah		39 Cells x 1.2V 90Ah ~ 120Ah		39 Cells x 1.2V 150Ah ~ 210Ah	
Dimensions (W*D*H) mm	700 * 750 * 1700		900 * 850 * 1600		1350 * 900 * 1700	

Brilliant Series Single Phase Input 110Vdc Output Technical Data

Model	SPDC110-10	SPDC110-20	SPDC110-40	SPDC110-50	SPDC110-60	SPDC110-75
Output Capacity	110V/10A	110V/20A	110V/40A	110V/50A	110V/60A	110V/75A
RECTIFIER INPUT						
Phase	1 Phase, L+N+G					
Input PF	0.8 at nominal input and float voltage					
Input Voltage	220V / 230V / 240V +/- 15%					
Input frequency	50Hz / 60Hz +/- 5%					
RECTIFIER DC OUTPUT						
Adjustable Range	From 80% to 135% of nominal voltage at +/- 15% of rectifier input					
Stability (Static)	+/- 1.5% @ +/- 15% of rectifier AC input					
Stability (Dynamic)	-/+ 5% at load changed from 0% to 100% and vice visa @ +/- 15% of rectifier AC input					
Recovery Time	< 250ms to be in static state					
Ripple Voltage	< 5% as standard (0.1%, 1% & 2% offered as option) without battery connected					
Nominal DC Current	From 10Adc to 75Adc (Higher ratings are available on request)					
Adjustable Range	0 to 100% both rectifier current limit and battery current limit					
Current Accuracy	+/- 1.5% of set point					
DC Overcurrent	110% continuous of nominal DC current					
Characteristic	Constant current / constant voltage according to IU IEC 60478-1					
High Pot Test	2.0KV / 1min					
Megger Test	500Vdc					
MECHANICAL SPECIFICATION						
Human Machine Interface	Brilliant M2000 controller with 5 inch Touch Screen Size					
	128MB Standard, External SD Memory Card Optional					
Alarm Communications	Modbus RTU, Dry Contact (C, NC,NO)					
Degree of Protection	IP 20 according to IEC 60529 & 60144 Standard (Other IP ratings are available on request)					
Equipment Colour	RAL7035 come with powder and anti-rust coating (Other colours are available on request)					
Acoustic Noise Level	≤ 65dB at 1m away typically					
Connection	Top or Bottom Entry as per customer requirement					
ENVIRONMENTAL						
Type Of Cooling	Natural cooling up to 50A & forced cooling above 50A					
Operating Temperature	0 Degree Celsius to 55 Degree Celsius					
Storage Temperature	-20 Degree Celsius to 70 Degree Celsius					
Humidity	< 95% (Non Condensing)					
Installation Height	0 to 1000m, derating @ 1% per 100m above 1000m					
Safety	IEC 62040-1-2, Functionality IEC 60146-1-1					
Environment	RoHS					
PHYSICAL						
Approx. Gross Weight (KG)	110	130	140	155	180	210
Cabinet Model	CUB0612061			CUB0616061		
Dimensions (W*D*H) mm	600 * 600 * 1200			600 * 600 * 1600		

Brilliant Series Single Phase Input 220Vdc Output Technical Data

Model	SPDC220-10	SPDC220-20	SPDC220-25	SPDC220-35	SPDC220-40	SPDC220-50
Output Capacity	220V/10A	220V/20A	220V/25A	220V/35A	220V/40A	220V/50A
RECTIFIER INPUT						
Phase	1 Phase, L+N+G					
Input PF	0.8 at nominal input and float voltage					
Input Voltage	220V / 230V / 240V +/- 15%					
Input frequency	50Hz / 60Hz +/- 5%					
RECTIFIER DC OUTPUT						
Adjustable Range	From 80% to 135% of nominal voltage at +/- 15% of rectifier input					
Stability (Static)	+/- 1.5% @ +/- 15% of rectifier AC input					
Stability (Dynamic)	-/+ 5% at load changed from 0% to 100% and vice visa @ +/- 15% of rectifier AC input					
Recovery Time	< 250ms to be in static state					
Ripple Voltage	< 5% as standard (0.1%, 1% & 2% offered as option) without battery connected					
Nominal DC Current	From 10Adc to 75Adc (Higher ratings are available on request)					
Adjustable Range	0 to 100% both rectifier current limit and battery current limit					
Current Accuracy	+/- 1.5% of set point					
DC Overcurrent	110% continuous of nominal DC current					
Characteristic	Constant current / constant voltage according to IU IEC 60478-1					
High Pot Test	2.0KV / 1min					
Megger Test	500Vdc					
MECHANICAL SPECIFICATION						
Human Machine Interface	Brilliant M2000 controller with 5 inch Touch Screen Size					
	128MB Standard, External SD Memory Card Optional					
Alarm Communications	Modbus RTU, Dry Contact (C, NC,NO)					
Degree of Protection	IP 20 according to IEC 60529 & 60144 Standard (Other IP ratings are available on request)					
Equipment Colour	RAL7035 come with powder and anti-rust coating (Other colours are available on request)					
Acoustic Noise Level	≤ 65dB at 1m away typically					
Connection	Top or Bottom Entry as per customer requirement					
ENVIRONMENTAL						
Type Of Cooling	Natural cooling up to 50A & forced cooling above 50A					
Operating Temperature	0 Degree Celsius to 55 Degree Celsius					
Storage Temperature	-20 Degree Celsius to 70 Degree Celsius					
Humidity	< 95% (Non Condensing)					
Installation Height	0 to 1000m, derating @ 1% per 100m above 1000m					
Safety	IEC 62040-1-2, Functionality IEC 60146-1-1					
Environment	RoHS					
PHYSICAL						
Approx. Gross Weight (KG)	130	150	160	170	180	200
Cabinet Model	CUB0612061			CUB0616061		
Dimensions (W*D*H) mm	600 * 600 * 1200			600 * 600 * 1600		

Brilliant Series Industrial DC Power Supply

3P Power One Stop Solution



3P Power

Passion Profession Perfection

3P POWER PTE. LTD.

1 Genting Link, #04-02,
Perfect One Building,
Singapore 349518

T +65 6743 1006 & +65 6019 0772

E enquiry@3ppower.com

W www.3ppower.com