

## SA500 Modular Power Supply



### Features:

- 500 Watt
- Modular power supply system
- Up to 5 modules fitted in any combination
- Modules available 3-5v, 12-14v, 24v and 48v.
- Size 125 x 275 x 65 (H) mm
- Competitive cost
- Low touch currents
- Meets requirements of EN55022 'B' for conducted noise

### Specification:

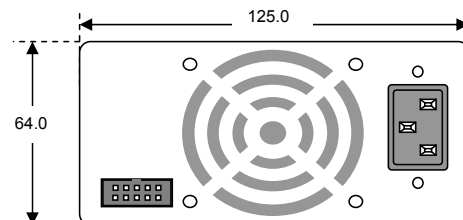
INPUT	
Input voltage	100 – 230 Vac +/-10%
Frequency Range	50-60Hz
Temperature Range	0 – 50°C ambient
Input fuse	T8H 250V
Maximum Input Current	6A rms (100Vain, 500W load)
Power Factor	0.95 (230Vacin, Full load)
Start Up	Less than 2 seconds, 100Vacin
Stand by power	10 watts
OUTPUT	
Continuous Output Power	500W 100-253Vacin in a 50°C ambient (max) derate 10 % below 100Vac
Efficiency	Typically > 85% (230Vacin, Full load, dependent on modules fitted)
Hold up	20 mS at full power
5 Volt Stand By Current	100mA
Other features	Remote enable, All outputs good open collector signal, Input power good open collector signal
ENVIRONMENT	
Temperature	0°C to +70°C (Derate 2.5% / °C above 50°C)
Cooling	Integral fan fitted
Humidity	10-95% non-condensing
Storage	-25°C to +85°C
MTBF	>25,000hrs 25°C (MIL217F parts count method)
OUTPUT MODULES	
Output Power	100W 50°C ambient (Derate 2.5%/°C above 50°C)
Output Voltage and current	3-5.5 Volts @16Amps
Output Voltage and power	12-13.8 Volts @100watts
Output Voltage and power	24-27.6 Volts @100watts
Output Voltage and power	48-56Volts @100watts
OVP	105-125% (latching and non dissipative) recycle mains to reset
Over current / Short Circuit	Constant current output (voltage will fall)
Other features	Remote off, Remote adjust, Remote sense,
Load regulation	Output good on main PSU, Power share/Current monitor +/- 1%
Line regulation	+/- 0.1%
Noise & ripple	< 1% (DC – 10MHz) (230vacin – Full load)

### Specification:

SAFETY & REGULATORY SPECIFICATIONS	
PSU Class	Class I:- Component part
Safety	Certified to EN60950, CE marked against LVD Designed to meet to UL60950
Flash test	I/p to O/p, 4300V DC I/p to O/p & E, 2200V DC
Earth leakage current	<1mA rms (230Vacin 50Hz))
Output touch current	<1uA rms (230Vacin 50Hz))
EMC – Conducted	Designed to meet requirements of EN55022 “Class B”
EMC – Radiated	Designed to meet requirements of EN55022 “Class A”
EMC - Power Factor	Designed to meet requirements of EN61000-3-2 “Class D”
EMC – Fast Transients	Designed to meet requirements of EN61000-4-4
EMC – Surge	Designed to meet requirements of EN61000-4-5
EMC – Voltage Dips & Fluctuations	Designed to meet requirements of EN61000-4-11
MECHANICAL	
Dimensions	275.0mm x 125.0mm x 65.0mm (H)
Fixings	M4 positioned as below on side and base
Mains Input Connector	IEC
Output / Input Connectors (signals)	10 way boxed headers
Output Connector (power)	3.5mm Screw terminals (other options available)
Pin-out	See below
Weight	2.1 Kg

Technical specification may be subject to change – contact sales office before ordering.

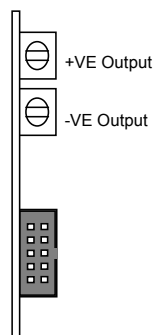
### Connection Diagram



9	7	5	3	1
10	8	6	4	2

- Pin 1 = Universal Remote
- Pin 2 = 0v / Return
- Pin 3 = Supply Good Signal Output
- Pin 4 = 0v / Return
- Pin 5 = Output and Fan Good Signal Output
- Pin 6 = 0v / Return
- Pin 7 = 5v Aux Output
- Pin 8 = 0v / Return Enable Control Input
- Pin 9 = Not Connected
- Pin 10 = Not Connected

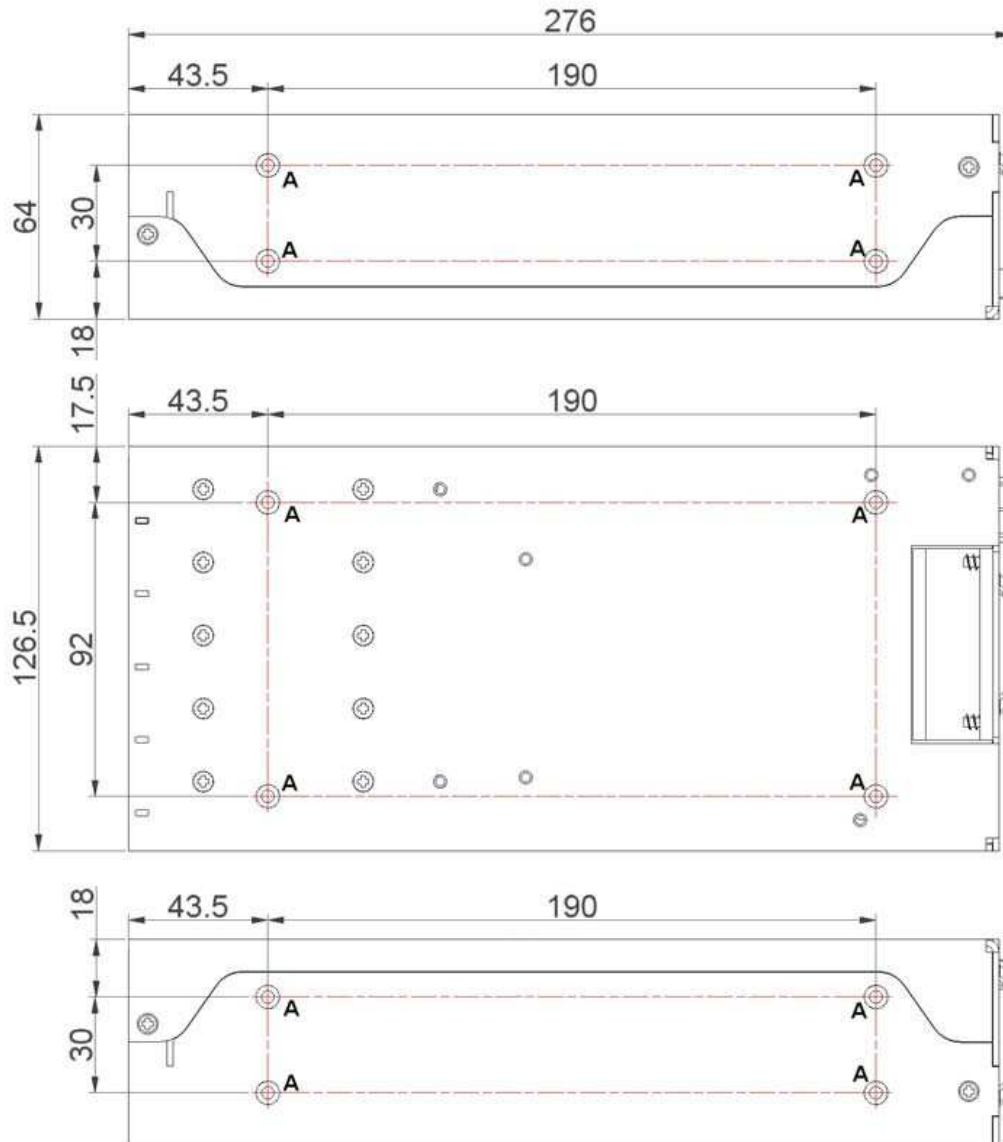
### Module connections:



9	7	5	3	1
10	8	6	4	2

- Pin 1 = Remote off +V Control Input
- Pin 2 = Remote off 0v Control Input
- Pin 3 = Not Connected
- Pin 4 = Not Connected
- Pin 5 = Remote Adjust Input / Temperature Monitor Out
- Pin 6 = Power Share / Current Monitor Out
- Pin 7 = Not Connected
- Pin 8 = Not Connected
- Pin 9 = + Remote Sense Input
- Pin 10 = - Remote Sense Input

### Mechanical Diagram



(All dimensions in mm)

Data sheets are subject to change without notice

Rev no. 05112008