



PSA SERIES

Regulated Dual Output DC Power Supply

PSA1210 PSA126 PSA123



INSTRUCTION MANUAL

IMPORTANT NOTE

GME PSA series power supplies are designed to operate from 240 V AC $\pm$ 10% power sources.

For extended operations, always use the power supply in a well ventilated area and ensure the ventilation slots are clear. Allow at least 100 mm clearance from nearby objects.

INTRODUCTION

The GME PSA series of power supplies use traditional semiconductor technology to produce highly regulated 13.8 volt and 9 volt DC output from a 230-240 volt source. The highly regulated output makes the PSA series of power supplies suitable where variations in AC mains voltage may be encountered. The PSA series are fully filtered producing a low ripple noise output and are designed to be used with our radio communications and telemetry equipment.

The PSA series meets all national safety and EMC requirements. The PSA series are very well protected and feature automatic fold-back current limiting against overload and fail safe thermal protection against excessive overheating. The PSA series are suitable for harsh environments and heavy loads.

This appliance is not a toy and should not be used by young children or the infirm without supervision.

FEATURES

- Suitable for most communications equipment applications or where a stable regulated DC voltage is required.
- Very low ripple noise
- Output short circuit protected
- Fail safe thermal protection

- Maximum current limited
- Over voltage protection

OPERATIONS

Connect the equipment to the power supply terminals observing correct voltage and polarity.

1. The RED terminal is positive (+) 13.8 volts
The BLACK terminal is common negative (-)
The YELLOW terminal is positive (+) 9 volts
2. Ensure the power supply's front panel switch is in the OFF position (except for PSA123).
3. Ensure the 240 volt AC outlet's switch is in the OFF position.
4. Plug the power supply's power cord into a nearby easily accessible AC outlet. Put the AC outlet switch in the ON position.
5. The PSA123 front panel LED's should now glow indicating that the supply is functional.
6. PSA126/PSA1210 - Place the power switch in the ON position. The front panel LED's should now glow indicating that the supply is functional.
7. The equipment's power switch can now be turned ON ready for use.

PROTECTION FEATURES

CURRENT LIMIT CIRCUIT

The GME PSA series power supplies have an automatic fold-back current limiting function that reduces the output voltage and current if the attached equipment draws more current than the power supply's current rating.

If the maximum output current is exceeded on the 9 Volt supply line the current limiting circuit will be triggered protecting the power supply from internal damage.

SPECIFICATIONS

Model	Total peak current (amps) 10% duty cycle	Total Max Rating		Max continuous current @ 13.8 V (amps)	Max continuous current @ 9 V	Overall dimensions (W x H x D) mm	Unit Net Weight (kg)
		Max current (amps)	Duty cycle (%)				
PSA123	4	3	50	1.5	500 mA	102 x 76 x 185	1.73
PSA126	7	6	33	3	500 mA	120 x 85 x 190	2.76
PSA1210	11	10	25	5	500 mA	160 x 105 x 212	4.06

THERMAL PROTECTION

The PSA series incorporate a transformer with a built-in non replaceable thermal fuse and is designed to shut the power supply down into a fail safe mode if for any reason the unit becomes excessively hot. This could conceivably happen if the power supply is used in a high temperature area with insufficient ventilation for long periods of time. Once the thermal protection has been triggered, the power supply will immediately shut down.

The power supply is now in the fail safe condition and will require repairs by authorised service personnel.

Thermal overload problems can usually be resolved by reducing the load or the duty cycle or by using a power supply with a higher current rating.

OVER VOLTAGE PROTECTION (OVP)

The PSA series have an **over voltage protection** feature which is designed to protect any attached equipment from damage should the power supply output exceed the rated voltage.

SERVICE INDICATION

Should the front panel LED's not glow when power supply is connected to an AC mains outlet and switched ON, service will be required.

If the power supply cord is damaged or service is required, the power cord or service must only be replaced or serviced by the manufacturer, their service agent or a qualified person.

GME CONTRACT WARRANTY AGAINST DEFECTS

1. Consumer guarantees

- 1.1 Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.
- 1.2 To the extent we are able, we exclude all other conditions, warranties and obligations which would otherwise be implied.

2. Warranty against defects:

- 2.1 This Warranty is in addition to and does not limit, exclude or restrict your rights under the Competition and Consumer Act 2010 (Australia) or any other mandatory protection laws that may apply.
- 2.2 We warrant our goods to be free from defects in materials and workmanship for the warranty period (see warranty table) from the date of original sale (or another period we agree to in writing). Subject to our obligations under clause 1.2, we will at our option, either repair or replace goods which we are satisfied are defective. We warrant any replacement parts for the remainder of the period of warranty for the goods into which they are incorporated.
- 2.3 To the extent permitted by law, our sole liability for breach of a condition, warranty or other obligation implied by law is limited.
- (a) In the case of goods we supply, to any one of the following as we decide –
- (i) The replacement of the goods or the supply of equivalent goods.
 - (ii) The repair of the goods.
 - (iii) The cost of repairing the goods or of acquiring equivalent goods.
- (b) In the case of services we supply, to any one of the following as we decide –
- (i) The supplying of the services again
 - (ii) The cost of having the services supplied again.
- 2.4 For repairs outside the warranty period, we warrant our repairs to be free from defects in materials and workmanship for three months from the date of the original repair. We agree to re-repair or replace (at our option) any materials or workmanship which we are satisfied are defective.
- 2.5 We warrant that we will perform services with reasonable care and skill and agree to investigate any complaint regarding our services made in good faith. If we are satisfied that the complaint is justified, and as our sole liability to you under this warranty (to the extent permitted at law), we agree to supply those services again at no extra charge to you.
- 2.6 To make a warranty claim you must before the end of the applicable warranty period (see warranty table), at your own cost, return the goods you allege are defective, provide written details of the defect, and give us an original or copy of the sales invoice or some other evidence showing details of the transaction.

Before returning any goods you will be required to follow the available options:

Contact our Customer Support Team on 1300 463 463 or techsupport@gme.net.au. A customer support team member will troubleshoot and validate if your product is faulty. If so, they will email you a product RMA (Return Material Authorisation). Products that are authorised to be returned to GME must include the following: RMA form (Return Material Authorisation) A copy of your proof of purchase, the faulty product, including all accessories

- 2.7 Send your claim to: **GME Pty Ltd**.
17 Gibbon Rd, Winston Hills,
NSW 2153, Australia.
Tel: (02) 8867 6000 Fax: (02) 8867 6199.
Email: servadmin@gme.net.au
- 2.8 If we determine that your goods are defective, we will pay for the cost of returning the repaired or replaced goods to you, and reimburse you for your reasonable expenses of sending your warranty claim to us.

3. What this warranty does not cover:

- 3.1 This warranty will not apply in relation to:
- (a) Goods modified or altered in any way.
 - (b) Defects and damage caused by use with non GME products.
 - (c) Repairs performed other than by our authorised representative.
 - (d) Defects or damage resulting from misuse, accident, impact or neglect.
 - (e) Goods improperly installed or used in a manner contrary to the relevant instruction manual; or
 - (f) Goods where the serial number has been removed or made illegal.

4. Warranty period:

- 4.1 We provide the following warranty on GME and Kingray products. No repair or replacement during the warranty period will renew or extend the warranty period past the period from original date of purchase.

PRODUCT TYPE	WARRANTY PERIOD
Land mobile accessories	1 year



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Part Number: 310384 Drawing Number: 43460-15