## **TECHNICAL SPECIFICATION**

MAINS INPUT	195-255VAC 50/60Hz
OUTPUT	13.8VDC @Full load
VOLTAGE REGULATION	+/- 5% Maximum
RIPPLE	<2% of output voltage
ENVIRONMENT	Ambient temp20 to +40°C Relative humidity 10 to 90%
BATTERY	Up to 2 x 9Ah SLA
FUSES	PTC self-resetting fuses for load and battery protection Mains fuse as per table

			Mai	ins
			Bat	tery
			O/F Fau	
G N L MAINS input	Battery - +	Load - +	Tamper	
		13.8VDC	NO contact	Tamper switch
Copyright © 2017, RGL Electronics		2		Ver 1.3

# 12VDC SWITCH MODE POWER SUPPLY

Model	1201SM	1202SM	1203SM	1205SM
Maximum DC Output	1.3A	2.3A	2.3A	5.5A
Load Current	1.0A	2.0A	3.0A	5.0A
Battery charging Current	0.25A	0.25A	0.25A	0.25A
Mains Indicator	Green LED			
Battery Indicator	Yellow LED			
Output Fault Indicator	Red LED			
Load Fuse	PTC			
Battery Fuse	PTC			
Max Battery Size	2 x 9 Ah Sealed Lead Acid			
Mains Fuse	T250mA	T500mA	T500mA	T630mA

#### **FEATURES**

User friendly high quality Power Supply for use in security and access control systems requiring 12VDC supply.

- 13.8VDC regulated output
- Full current to load
- Additional battery charging current
- Overload indication and protection
- Short-circuit protection with automatic restart
- Internal current limiting
- Deep-discharge battery protection
- PTC self-resetting fuses

#### **IMPORTANT BATTERY INFORMATION**

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This power supply has a battery discharge protection circuit. The PSU output cuts off at approx. 10.5VDC at the battery. This protects the life of the battery.

To activate the charging circuit on installation, only good/new battery with a voltage above 10.5VDC must be fitted.

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## **GENERAL INFORMATION**

- This power supply unit is intended for installation by qualified persons only.
- There are no user serviceable parts under the cover, therefore no regular maintenance is required other than ensuring all cables are securely fixed and free from damage.
- Batteries should be tested periodically with suitable battery testing equipment. Please refer to battery manufacturer's specifications.
- The tamper switch terminals are voltage free contacts and must not be used for any other purpose.

#### CAUTION!

Risk of explosion if battery is replaced with incorrect type. Use only rechargeable sealed lead acid (SLA) batteries. Dispose of batteries in accordance with local and national regulations

#### FAULT DIAGNOSIS

LED Indicators (Battery Connected)		Condition	Action		
Green	Yellow	Red			
ON	OFF	OFF	No Fault		
ON	OFF	ON	Overload	Reduce load	
OFF	OFF	OFF	AC Fail	Check Mains fuse	
ON	ON	OFF	Reversed Battery	Check battery leads	
OFF	OFF	ON	Battery discharge protection active	Monitor or replace battery	
			Output short -circuit	Check load for fault	
Battery Not Connected					
OFF	OFF	OFF	Output short-circuit	Check load for faults	

#### INSTALLATION INSTRUCTIONS

# SUITABLE FOR FIXED INSTALLATION ONLY. THIS UNIT MUST NOT BE CONNECTED EXTERNALLY.

- 1. Mount box on a flat vertical surface in correct orientation with hinge on the left hand side (if applicable). The PSU should be installed to allow maximum air movement where possible. Avoid areas with high humidity.
- 2. Connect a suitable mains supply with an external disconnect device. This must be a 3 Amp fused unswitched spur installed by a qualified Electrician certified to Part P.
- 3. On connection of a serviceable battery, the voltage will rise to 13.8 14VDC. If voltage does not rise battery is unserviceable.
- 4. Remove Mains Fuse.
- 5. Connect load and all associated wiring observing correct polarity at DC outputs. The cable size must be of sufficient rating to carry currents for all loads connected to the PSU.
- 6. Mains and low voltage cables should be routed separately. Where entry/exit holes are used in the cabinet the close fitting cable protective bushes should be used. All cables should be securely fastened within the cabinet with suitable cable ties.
- 7. Refit mains fuse
- 8. Connect Sealed Lead Acid battery if applicable. (Red +, Black -)
- 9. Ensure green/yellow earth lead is connected and pushed fully onto tab on the lid. Close lid and secure with screw provided.