Defender Range

With Automatic Voltage Regulation

The **Defender Range** uses Automatic Voltage Regulation (AVR) to minimise the effects of fluctuations in input voltage, protecting your valuable equipment from power line disturbances.

To protect your valued equipment against damaging surges, the Defender has been designed to incorporate the best surge protection in its class.

The stylish LCD display, user replacable, hot swappable batteries and Australian sockets makes the Defender the complete package at this level.

Features

ENHANCED PROTECTION LINE INTERACTIVE

Surge Protection

- Offering the best protection in its class, the Defender protects against damaging surges

Informative LCD display

- Modern, stylish LCD display indicates voltage in/out, amount of load and remaining capacity

Microprocessor control

- Excellent Microprocessor control guarantees high reliability

Buck and Boost AVR for Voltage Stabilization

- The AVR automatically bucks/boosts unstable fluctuating utility voltages, bringing them within 10% of nominal voltage range and thereby protecting valuable equipment.

Applications include:

- Home office applications
- Workstations
- Security applications
- Point of sale equipment
- NAS Drives

Hot Swappable batteries

- Batteries are easily hot swappable and user replaceable, extending the service life of your UPS

Silent Operation (no fans)

- Power Shield Engineers have designed the Defender range to run cool without fans. This makes it the perfect complement to Audio Visual

Auto restart when AC recovers

- After an extended power outage the UPS will turn back on and resume equipment functionality once power has returned

Off-mode Charging

- The plugged in UPS will continue to charge internal batteries whether the unit is on or off

Cold start function

- The UPS can turn on equipment when it is off, simply by connecting equipment and turning the UPS on. This is excellent when you need to power equipment for a short time

USB communication with sophisticated NetGuard software

- The free, downloadable NetGuard software provides complete power monitoring. Parameters such as input/output voltage, battery capacity and load level are easily viewed. It also ensures a safe and orderly shutdown in the event of a prolonged outage.

DESIGNED BY AUSTRALIANS FOR AUSTRALIAN CONDITIONS

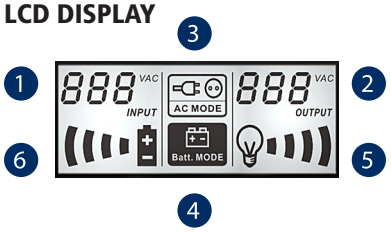
PowerShield®

DEFENDER RANGE SELECTION GUIDE

MODEL	DEFENDER 650	DEFENDER 1200	DEFENDER 1600
Model Number	PSD650	PSD1200	PSD1600
Capacity	650VA / 390W	1200VA / 720W	1600VA / 960W
Topology	Line Interative		
INPUT			
Voltage	240Vac (Nominal)		
Voltage Range	177-290Vac		
Frequency Range	50/60Hz ± 5Hz (auto sensing)		
OUTPUT			
Output Voltage	240Vac ± 10%		
Frequency	AC mode tracks utility		
Frequency Range (Batt. Mode)	50Hz or 60Hz ±1Hz		
Transfer Time	6ms (Typical)		
Waveform (Batt. Mode)	Simulated Sine Wave		
Australian Outlets - UPS & Surge Protection	2	3	
Australian Outlets - Surge Protection	0	3	
BATTERY			
Battery Type & Number	12V / 9AH (x1)	12V / 7AH (x2)	12V / 9AH (x2)
Typical Recharge Time	6 hours recover to 90% capacity		
Backup Time (50% Load)	6 min.	13 min.	10 min.
PROTECTION			
Full Protection	Overload, discharge, thermal, short circuit and overcharge protection		
Surge Protection	312Joules / 6500Amps	936Joules / 19500Amps	
COMMUNICATIONS & MANAGEMENT			
Interface	USB interface		
Software	NetGuard® supports - Windows®, Linux, Unix and Mac (Free Download)		
LCD Alarm	AC Mode, Battery Mode, Low Battery (Batt. Mode), Fault, Overload		
Audible Alarm	Battery Mode, Low Battery (Batt. Mode), Fault, Overload		
PHYSICAL			
Dimension L x W x H (mm)	323 x 97 x 144	393 x 146 x 202	
Net Weight (kgs)	5.2	11.5	11.9
OPERATING ENVIRONMENT			
Temperature	0-40°C		
Humidity	0-90% RH (non-condensing)		
Noise Level	Less than 5dBA @ 1 meter (no fan)		
COMPLIANCE			
Safety/EMC	(A-tick PSD650) EN62040-1 -1 2003, IEC60950-1 : 2001, EN62040-2 2006		
RoHS	Directive 2011/65/EU		

* Specifications are subject to change without prior notice.
* UPS output capacity is calculated at PF = 0.7.

LCD DISPLAY



1. Input voltage
2. Output voltage
3. AC mode indicator
4. Battery mode indicator
5. Load level indicator, flashing indicates overload
6. Battery capacity indicator, flashing indicates low battery level

REAR VIEW

PSD650

PSD1200, PSD1600

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