

# Specifications PRXMG5050+-V74

The PRXMG5050+-V74 is a Magellan 32-Zone Wireless Transceiver Control Panel.

Features:

- 2 serial outputs master/slave
- M2 two-way FSK hardware ready
- 8 on-board zones (16 with ATZ)
- Built-in transceiver (433 MHz)
- Expandable to 32 zones, 2 partitions, 32 users and 32 remotes
- 4-wire communication bus (connect up to 15 modules)
- Supports IP and cellular IP reporting
- Supports 16 PGMs (any of which can be wireless)
- App-based system control via BlueEye
- In-field firmware upgrade via 307USB And BabyWare remote or local
- Menu-driven programming for the Installer, Master and Maintenance codes
- Multiple telephone numbers for event reporting: 3 monitoring and 5 for Personal Dialing
- Calendar with Daylight savings Time
- StayD Mode
- Sleep arming method
- RF Jamming Supervision
- 512 events buffered.





# Specifications PRX2780000033-P2C

The PRX2780000033-P2C is a metal box enclosure for provision multiple module and panel mounting.

Features:

- Many punch-out holes for simple wiring
- Easy door removal
- Sizes: 28cm X 28cm X 7.6cm (11" x11" x 3")





# **Specifications PRXK-TK278**

The PRXK-TK278 is a BOM Kit for 1x tamper switch PRX2502302000-P2C and 1x tamper bracket PRX2781030000-P2C to suit with Paradox Metal Box Enclosure PRX2780000033-P2C; to protects against tampering (opening door or removal from wall).



# SP5500+ / SP6000+ / SP7000+ User Guide

4 to 32-Zone Expandable Security Systems





# P ▲ R ▲ D O X<sup>™</sup> PMD75N

Installation Manual V1.0

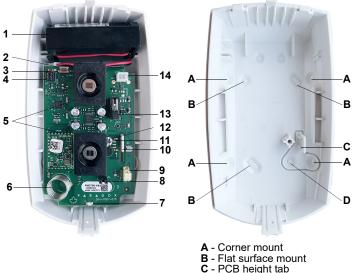
Digital Wireless Motion Detector with Pet Immunity



# Introduction

The PMD75N is a wireless, digital, dual-optic passive infrared (PIR) motion detector designed for compatibility with Paradox alarm systems. It is immune to pets weighing up to 40 kg (90 lbs). The PMD75N is battery-powered and offers precision protection and high performance in maximum security applications.

# Overview



**D** - Tamper hole/Corner mount

Figure 1 – PMD75N PCB Overview

- 1. Battery compartment
- 2. Learn switch
- 3. Single or Dual Edge Processing Jumper (JP3)
- 4. Digital Shield Jumper (JP4)
- 5. Sensors
- 6. Antenna
- 7. Alarm LED
- 8. LED Jumper (JP5)
- 9. Firmware upgrade connector
- 10. PCB height tab
- 11. Height markings
- 12. Height adjustment screw
- 13. Anti-tamper switch
- 14. Battery connector

# Location and Mounting

At the recommended height of 2.1m (7 ft)  $\pm 10\%$ , the PMD75N provides full coverage from 1.5m to 11m (5 ft to 35 ft). The installation height is measured from the center of the detector, refer to Figure 2.

Avoid placing the detector within proximity of the following sources of interference: reflective surfaces, direct airflow from vents, fans, windows, sources of steam/oil vapor, infrared light sources, and objects causing temperature changes such as heaters, refrigerators, and ovens.

Avoid bending, cutting, or altering the antenna or mounting the detector near or on metal as this may affect signal transmission.

Do not touch the sensor surface as this could result in a detector malfunction. If necessary, clean the sensor surface using a soft cloth with pure alcohol.

### PMD75N-EI00 09/2021

# Installing the PMD75N

- Write down the serial number and the location of the PMD75N for future reference. This will be needed to enter into the Paradox BabyWare software.
- 2. Using a screwdriver, pry the cover apart from the backplate, starting at the bottom.
- 3. Using a Phillips screwdriver, loosen the height adjustment screw. Slide the PCB board up and gently lift the PCB out of its casing.
- 4. Remove the battery compartment from the backplate.
- Screw the PMD75N onto the wall through the provided holes. Note: Ensure that the tamper screw is secured through the respective tamper hole, refer to D in Figure 1.
- 6. Reinstall the battery compartment, refer to *Powering the Detector* before completing the following steps.
- 7. Reinstall the PCB and connect the battery connector.
- 8. Adjust the PCB height, refer to the *PCB Height Adjustment* section. Once adjusted, secure the height adjustment screw.
- 9. Reinstall the top cover.

# **Powering the Detector**

- 1. Insert three "AAA" batteries into the battery holder while verifying polarity.
- 2. Insert the battery holder into the back cover and affix the battery connector to the PCB.

After connecting the battery connector, a power-up sequence will begin (lasting 60 seconds). During this time, the red LED will flash and the detector will not detect an open zone or tamper.

### **Replacing Batteries**

- 1. Disconnect the battery connector from the PCB. Remove the battery holder and remove the old batteries.
- 2. Press and release the anti-tamper switch to ensure that the unit has powered down.
- 3. Follow the steps outlined in "Powering the Detector".

# PCB Height Adjustment

The PMD75N is designed for optimal performance at a height of 2.1m (7 ft) but can be installed at a lower or higher height. After you have installed the detector, ensure that the adjustable height markings on the right side of the PCB match the tab inside the back cover. For example, if the detector is installed at a height of 2.1m (7 ft), the PCB should then be adjusted to 2.1m (7 ft). Ensure to align the desired markings (height) with the back cover's plastic tab. If another installation height is called for, readjust the PCB accordingly. Any PCB adjustments should be followed by a walk-test of the protected area, refer to *Testing the PMD75N*.

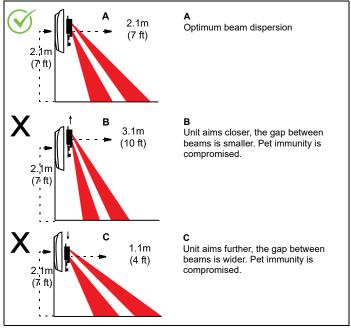


Figure 2 – Beam Dispersion

# Jumper Settings

### Single or Dual Edge Processing (J3)

This setting determines the Digital Signal Processing (DSP) operational mode of the detector. Single Edge Processing mode should be used in normal environments with minimal sources of interference. Dual Edge Processing mode provides better false alarm rejection in the case where the detector is placed near sources of interference that can adversely affect the motion detector

### Digital Shield<sup>™</sup> Setting (J4)

In Normal Shield mode, the detector is set for normal environments. In High Shield mode, the detector is set for high-risk environments (potential interferences) and therefore provides greatly increased false alarm immunity. However, response time and detector speed may be slower.

### LED Setting (J5)

This setting enables or disables the LED. The LED will illuminate for four seconds to indicate detected movement. The motion detector performs a battery test every 12 hours. If the battery voltage is too low, the LED will flash at 5-second intervals and the motion detector will send a low battery signal to the receiver. A trouble will then be generated and transmitted to the central monitoring station. The LED will flash rapidly when the motion detector transmits a signal to the receiver.

Feature	Settings Selection
<b>J3</b>	OFF = Dual edge
Processing Type	ON = Single edge
<b>J4</b> Digital Shield sensitivity	OFF = High Shield (low sensitivity) ON = Normal Shield (high sensitivity)
<b>J5</b>	OFF = Disabled
Alarm LED (Red)	ON = Enabled

After changing jumper settings, power cycle the PMD75N. Snap-on the cover to close the anti-tamper switch or press and release the anti-tamper switch to save the changes.

# Testing the PMD75N

Open the cover to trigger the anti-tamper switch, then snap the cover back into position. This will activate the motion detector's walk-test mode for 3 minutes

At 20°C (68°F), in Normal Shield (J4 = ON) mode and Single Edge Processing mode (J3 = ON), you should not be able to cross more than one complete zone (consisting of 2 beams, left and right sensor detecting elements) in the coverage area with any kind of movement; slow/fast walking or running.

In High Shield mode, the amount of movement required to generate an alarm is doubled. The approximate width of a full-beam at 11m (35 ft) from the detector is 1.8m (6 ft). When walk-testing, always move across the detection path and not toward the detector.

NOTE: Walk-test mode is also activated for 3 minutes once the motion detector is powered on.

# Signal Strength Test

To verify the receiver's reception of the motion detector's signal, perform a signal strength test before finalizing the installation of the motion detector. Before performing the test, make sure the batteries have been inserted into the battery holder to power the detector. Also, verify that the motion detector has been assigned to a zone. For more information on signal strength tests and zone programming, refer to the appropriate receiver's Reference and Installation Manual. If the transmission is weak, relocating the transmitter by a few inches can greatly improve the reception.

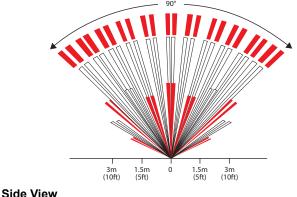
# Alive Software

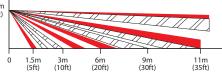
If the motion detector transmits 2 alarm signals (LED on for 4 sec.) within five minutes, the detector falls into Energy Save mode where it won't transmit any alarm signals for approximately 3 minutes. Due to the motion detector's Alive Software, the red LED continues to flash to indicate a detection even when in Energy Saver mode. Once the 3-minute Energy Save mode ends, the motion detector returns to normal operation.

**NOTE:** If the detector's cover is removed and then replaced while in Energy Save mode, the first detection will trigger an alarm signal.

# **Beam Pattern**

**Top View** 





# **Technical Specifications**

Specification	Description
Sensor Type	Two dual opposed infrared sensors
Coverage - 90° (standard)	11m x 11m (35 ft x 35 ft)
Pet Immunity	Up to 40 kg (90 lbs)
Detector Speed	0.2m to 3.5m/sec. (0.6 ft to 11.5 ft/sec.)
Installation Height	2.1m to 2.7m (7 ft to 9 ft)
RF Frequency	433* or 868 MHz
Lens	2nd generation Fresnel lens, LODIFF®, segments
Power	4.5 Vdc (3 x 1.5 Vdc "AAA" alkaline batteries)
Low Battery	3.2V
Battery Life <sup>†</sup>	Up to 3 years for normal use
Transmitter Range	35m (115 ft) with MG6250 70m (230 ft) with MG5000 / MG5050 / RTX3
Anti-Tamper Switch*	Dual - cover and wall
Operating Temperature	0°C to +50°C (+32°F to +122°F)
Certifications	EN 50131-2-2, Security Grade 2, EN 50130-5 Environmental Class II EN 50131-6 Type C Certification Body: Applica Test and Certification
Compatibility	MG5000, MG5050, MG5075, MG6250, RTX3, and RX1

\* Tamper must be enabled on SP Panels.

### FCC and Industry Canada Compliance Statement

This device complies with FCC Rules Part 15 and with Industry Canada license exempt RSS standard(s). Operation is subject to two conditions: 1. This device may not cause harmful interference

Inis device may not cause harmuli interference
 This device must accept any interference that may be received or that may cause undesired operation.
 Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.
 L'exploitation est autorise eux deux conditions suivantes :

 Appareil ne doit pas produire de brouillage, et
 I'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC ID: KDYPMD75N IC: 2438A-PMD75N

<sup>†</sup>Battery life expectancy will vary according to the check-in time interval and the amount of traffic (movement) the detector has processed. A higher check-in time interval and higher traffic will lower battery life.

### FCC WARNING

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not cocur in a particular installation. If this equipment does cause harmful interference to radio communications. However, there is no guarantee that interference will not cocur in a particular installation. If this equipment does cause harmful interference to radio cordinate with the user is no guarantee that interference will not cocur in a particular installation. If this equipment does cause harmful interference to radio cordinate with the user is no guarantee that interference will not cocur in a particular installation. If this equipment does cause harmful interference to radio cordinate with the user is no guarantee that interference will not cocur in a particular installation. If this equipment does cause harmful interference the user is no guarantee that interference will not cocur in a particular installation. If this equipment does cause harmful interference the user is no guarantee of the following measures:

reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: • Reorient or relocate the receiving antenna. • Increase the separation between the equipment and the receiver. • Connect the equipment into an outlet different from that to which the receiver is connected. • Consult the dealer or an experienced radio/TV technician for help. Changes or modifications to this equipment not expressly approved by the party responsible for compliance (Paradox Security Systems Ltd.) could void the user's authority to operate the equipment.

Warranty For complete warranty information on this product, please refer to the Limited Warranty Statement found on the website: www.paradox.com/terms or contact your local distributor. Specifications may change without prior notice. Patents US, Canadian and international patents may apply. Paradox is a trademark or registered trademark of Paradox Security Systems (Bahamas) Ltd.



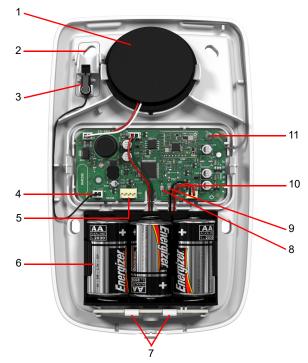
# SR230 Outdoor Wireless Siren with Built-in Strobe Light

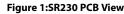
### Installation Manual

# Introduction

The SR230 is a stand-alone, fully supervised outdoor wireless siren with built-in strobe light and wireless transceiver. The SR230 uses 2-way wireless communication, which provides continuous supervision between the panel and siren with fast response to alarm signals within four seconds. With normal use, the SR230 will function up to three years without the need to replace the batteries. The SR230 operates using three 1.5 VDC size "C" alkaline batteries. This guide describes how to install and configure the SR230 wireless siren.

# Overview





Number	Description
1	Siren (100 dB or more)
2	Tamper spacer
3	Wall Tamper switch and Cover Tamper switch
4	Tamper switch connector
5	Infield connector
6	Battery pack
7	Strobe lights
8	Status LED
9	Signal Strength / RF transmission LED
10	Learn switch
11	Antenna



# Installation

Only qualified persons should install, operate, maintain, and repair this equipment.

- Write down the serial number (on the back of the unit) and location of the SR230 for later reference, to insert into the Paradox BabyWare software.
- 2. Remove the top cover from the siren.
  - a. Open the lock at the bottom of the siren with a screwdriver.
  - b. Pry the cover apart from the back plate starting from the bottom.



### Figure 2: Removing the Top Cover

- 3. Screw the SR230 siren onto the wall through the four provided holes.
- 4. Screw the Tamper.

IMPORTANT: Ensure that the Tamper switch is screwed onto the wall through the Tamper Spacer.

- 5. Batteries:
  - a. If the siren already has batteries installed:
    - Remove the plastic tab between the top battery terminals and the battery compartment
    - Leave the cover off until you learn the siren
  - b. If the siren does not have batteries installed:
    - Insert the batteries; ensure correct polarity
    - Leave the cover off until you learn the siren

**Note:** We recommend replacing the batteries every three years to avoid leakage.

6. Reinstall the top cover and lock.

# LED Feedback

LED	Description
Signal strength/ RF transmission LED	Red blinking: sending data Green blinking: receiving data Amber flash 4x: strong signal Amber flash 3x: good signal Amber flash 2x: weak signal Amber flash 1x: very weak signal (relocate) No flash: no signal
Status LED	Red steady on: powered/normal operation Red slow blink: low battery



# Programming

Program the SR230 either through a supported keypad or through the BabyWare software.

Note: Refer to the MG/SP. EVO192 or EVOHD Programming Guide for more details on how to program SR230 wireless sirens.

### Programming with a Keypad

LED	Program					
	MG/SP	EVO192/HD (requires RTX3)				
	Sections correspond to sirens 1-4.	Sections correspond to sirens 1-8.				
Learn Siren	[683] - [686]	[2851] - [2858]				
	Press and hold the <b>Learn</b> switch for 3 seconds after entering the section to learn the siren. <b>WARNING</b> : When pressing the Learn switch, the SR230 squawks and the strobe light flashes five times to confirm siren registration to the panel.					
Assign Partition to Siren	-	[2861] - [2868]				
Display Signal	[687] - [690]	[2871] - [2878]				
Strength	Press and hold the <b>Learn</b> switch for 3 seconds after entering the section to display the siren signal strength that the panel receives. Requires keypad K32LCD V1.3 or higher.					
Label Siren	[691] - [694]	-				
	Labels identify sirens when reporting events for MG/ SP only: via e-mail through the IP Module. Maximum 16 characters.					
Temporary	[695]	[2870]				
Tamper Switch Deactivation for Maintenance	Press [ENTER] after enterin tamper alarm until the cove minutes.					
Denel Sunemister	[587]	-				
Panel Supervision of Siren	ON: Enabled (default) OFF: Disabled					
	The control panel supervise SR230. If lost, the control p supervision options set in tl	anel follows global				

### Programming with BabyWare

- 1. Open BabyWare > Connect your Account.
- 2. In the Main window: Select the Add Item button > Wireless Sirens.
- 3. Fill-in the SR230 label. location and serial number.
- 4. Select Save.

# Upgrading Firmware

Upgrade SR230 firmware through the Paradox InField software (V5.5.9 or higher) using the 307 USB Direct Connect Interface. The SR230 requires the batteries installed in order to upgrade the firmware.

Note: Ensure that the SR230 is awake before beginning the firmware upgrade. To wake-up the siren, press the learn switch (see #10 in Figure 1). The siren provides you a 60 second delay in order to begin the update.

- 1. Remove the front cover (see Figure 2).
- Connect the 307 USB to the InField connector 2.
- 3 Upgrade according to the firmware upgrade instructions: Go to www.paradox.com > Software > InField Firmware Upgrade Instructions.

# Tamper Supervision

If a tamper is detected, the SR230 sounds an alarm and the strobe light flashes for 4 minutes. The control panel follows the global supervision options set in the panel.

# Compatibility

The following Paradox products are compatible with the SR230.

- · EVOHD v1.20 or higher
- EVO192 v3.20 or higher
- MG/SP series v4.0 or higher (except SP4000)
- RTX3: SP Series v1.5 or higher; EVO Series RTX3 v5.30 or higher
- BabyWare v5.4.14 (v2.30 for EVO) or higher
- TM50/TM70 v1.0 or higher
- K32+ v1.0 or higher
- K32LCD v1.3 or higher
- K32LCD+ v1.0 or higher
- K32LX v1.0 or higher
- InField Upgrade software v5.5.9 or higher

## Specifications

Specification	Description
Power Supply	3x 1.5 VDC "C" alkaline batteries.
Battery life	Up to 3 years based on normal use (e.g., 2 alarms per year with strobe for 2.5 hours and 8 squawks per day at an average of 25°C (77°F) with default alarm time set to 4 minutes. If the alarm is set for more than 4 minutes, the battery life may be reduced).
Current Consumption	Standby: 5.75 μΑ, Maximum: 450 mA
Low Battery Voltage Signal	Signal sent at 3.3 VDC
RF frequency	433 MHz (approved for FCC and IC) or 868 MHz
RF range	Up to 70m (230 ft)
Siren	100 dBA or more (1 meter) Acoustic output type: Tone For EN, maximum sound duration should be set to 4 minutes
Siren Type	Туре W
Operating Temperature	-25°C to 55°C (-13°F to 131°F)
Humidity Range	5% to 90%
Dimensions	13.43 x 21.17 x 5.1 cm (5.29 x 8.34 x 2.01 in)
Weight	365g /12.87 oz., 567g/20 oz. with batteries
Certifications	EN 50131-4, EN 50131-1 Grade 2, EN 50130-5 Environmental Class IV, CE IP Rating: IP54 Certification Body: Applica Test and Certification

FCC and Industry Canada Compliance Statement

This device complies with FCC Rules Part 15 and with Industry Canada license exempt RSS standard(s). Operation is subject to two conditions:

3. This device may not cause harmful interference 2. This device must accept any interference that may be received or that may cause undesired operation

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2. l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

ECC ID: KDYSR230 IC: 2438A-SR230

### FCC WARNING

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However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause

harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures

Reorient or relocate the receiving antenna.
 Increase the separation between the equipment and the receiver.
 Connect the equipment into an outlet different from that to which the receiver is connected.
 Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications to this equipment not expressly approved by the party responsible for compliance (Paradox Security Systems Ltd.) could void the user's authority to operate the equipment.

### Warranty

For complete warranty information on this product please refer to the Limited Warranty Statement found on www.paradox.com/terms. Your use of the Paradox product signifies your acceptance of all warranty terms and conditions

### Patents

US, Canadian and international patents may apply. Paradox is a trademark or registered trademark of Paradox Security Systems (Bahamas) Ltd. © 2021 Paradox Security Systems Ltd.

# VRLA 12V7AH

# **SA12V7**

### **Specifications**

Nominal Voltage	12 V
Nominal Capacity 20HR	7.0 AH
Dimensions	Length Width Container Height Total Height (with terminal)
Approx Weight	Approx 2.10 kg (4.63 lbs)
Terminal	F1
Container Material	ABS Plastic
Lead Material	Purity Lead 99.995%
Sulfurid Acid	Distilled Sulfurid Acid (Zero met
Separator	AGM
Rated Capacity	7.00 AH/0.350A 6.53 AH/0.653A 6.00 AH/1.20A 5.37 AH/1.79A 4.55 AH/4.55A
Max. Discharge Current	105A (5s)
Internal Resistance	Approx 23mΩ
Operating Temp.Range	Discharge : -15 - 50°C (5 - 12 Charge : 0 - 40°C (32 - 104 Storage : -15 - 40°C (5 - 10
Nominal Operating Temp.Range	25±3°C (77±5°F)
Cycle Use	Initial Charging Current less that 14.4V - 14.7V at 25°C (77°F) 1

Standby Use

Capacity affected by Temperature

Self Discharge

# 0 AH ength 151±1mm (5.94 inches) //dth 65±1mm (2.56 inches) ontainer Height 95±1mm (3.74 inches) otal Height (with terminal) 100±1mm (3.94 inches) pprox 2.10 kg (4.63 lbs) 1 BS Plastic

ead 99.995%						
Sulfurid Acid (Zero metal content)						
H/ 0.350A	(20hr, 1.80V/cell, 25°C/77°F)					
H/ 0.653A	(10hr, 1.80V/cell, 25°C/77°F)					
H/ 1.20A	(5hr, 1.75V/cell, 25°C/77°F)					
H/ 1.79A	(3hr, 1.75V/cell, 25°C/77°F)					
H/4.55A	(1hr, 1.60V/cell, 25°C/77°F)					
ວົຣ)						

Approx a		°C (5.122°E)					
Discharge : -15 - 50°C (5 - 122°F) Charge : 0 - 40°C (32 - 104°F) Storage : -15 - 40°C (5 - 104°F)							
25±3°C	(77±5°F)						
	0 0	ent less than 2.1A. Voltage °C (77°F) Temp.Coefficient -30mV/	°C				
	No limit on Initial Charging Current Voltage 13.5V - 13.8V at 25°C (77°F) Temp.Coefficient -20 mV/°C						
40°C	(104°F)	103%					
25°C 0°C	(77°F) (32°F)	100% 86%					

Sentry AGM series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.

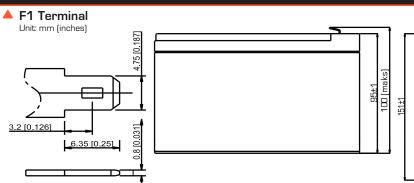


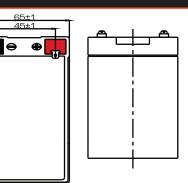
# Applications

ZEA

- All purpose
- Standby Applications
- Recreation Vehicles
- Uninterruptible Power Supply (UPS)
- Electric Power System (EPS)
- Fire & Security
- Generators
- Medical Equipment

### Dimensions

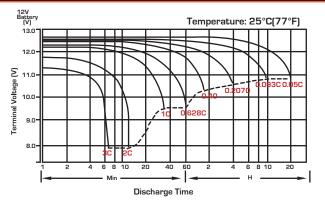




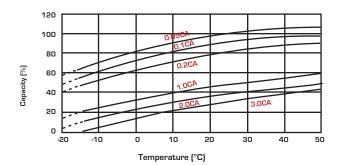
	Constant Current Discharge (Amperes) at 25°C (77°F)														
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	Зh	4h	5h	6h	8h	10h	20h
1.85V/cell	18.0	12.8	10.48	8.79	6.53	4.79	3.86	2.29	1.69	1.36	1.14	0.98	0.774	0.640	0.345
1.80V/cell	21.4	14.3	11.4	9.44	6.94	5.05	4.03	2.38	1.74	1.40	1.17	1.01	0.791	0.653	0.350
1.75V/cell	24.2	15.6	12.2	10.0	7.29	5.27	4.18	2.45	1.79	1.43	1.20	1.03	0.805	0.663	0.357
1.70V/cell	26.7	16.7	12.9	10.5	7.59	5.46	4.32	2.51	1.83	1.46	1.22	1.05	0.817	0.672	0.361
1.65V/cell	28.8	17.7	13.5	10.9	7.86	5.62	4.46	2.57	1.86	1.48	1.23	1.06	0.826	0.680	0.365
1.60V/cell	30.6	18.6	14.1	11.3	8.09	5.76	4.55	2.61	1.89	1.50	1.25	1.07	0.834	0.685	0.367

	Constant Power Discharge (Watts/Cell) at 25°C (77°F)														
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	Зh	4h	5h	6h	8h	10h	20h
1.85V,⁄cell	34.2	24.5	20.2	17.1	12.8	9.44	7.64	4.56	3.37	2.72	2.29	1.99	1.565	1.296	0.701
1.80V/cell	40.2	27.2	21.9	18.3	13.5	9.91	7.96	4.72	3.47	2.79	2.34	2.03	1.593	1.318	0.708
1.75V/cell	45.1	29.5	23.3	19.3	14.2	10.3	8.23	4.85	3.55	2.85	2.39	2.06	1.616	1.344	0.719
1.70V/cell	49.2	31.3	24.5	20.1	14.7	10.6	8.48	4.96	3.62	2.89	2.42	2.09	1.633	1.347	0.725
1.65V/cell	52.6	32.9	25.5	20.8	15.2	10.9	8.73	5.05	3.68	2.93	2.45	2.11	1.649	1.359	0.731
1.60V/cell	55.5	34.3	26.3	21.5	15.5	11.2	8.88	5.12	3.72	2.96	2.47	2.13	1.660	1.367	0.734

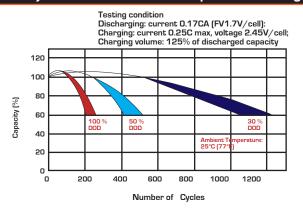
### **Discharge Characteristics**



# Temperature Effects in Relation to Battery Capacity



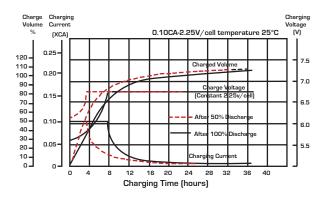
### Cycle Life in Relation to Depth of Discharge



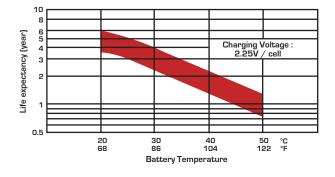
### Charging System

DOD	Currency Limit (A)	Constant Voltage (V)	Fully Charged Time (h)
	0.15C10	13.5-13.8 vpc (12V)	10
20	0.20C10	6.75-6.9 vpc (6V)	8
50	0.15C10	13.5-13.8 vpc (12V)	15
	0.20C10	6.75-6.9 vpc (6V)	12
80	0.15C10	13.5-13.8 vpc (12V)	16
80	0.20C10	6.75-6.9 vpc (6V)	14
100	0.15C10	13.5-13.8 vpc (12V)	20
	0.20C10	6.75-6.9 vpc (6V)	18

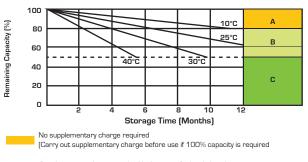
### **Float Charging Characteristics**



### Effect of Temperature on Long Term Float Life



### Self Discharge Characteristics



Supplementary charge required before use. Optional charging way as follows the table charging system.

Supplementary charge may often fail to recover the capacity. The battery should never be left standing still this is reached.

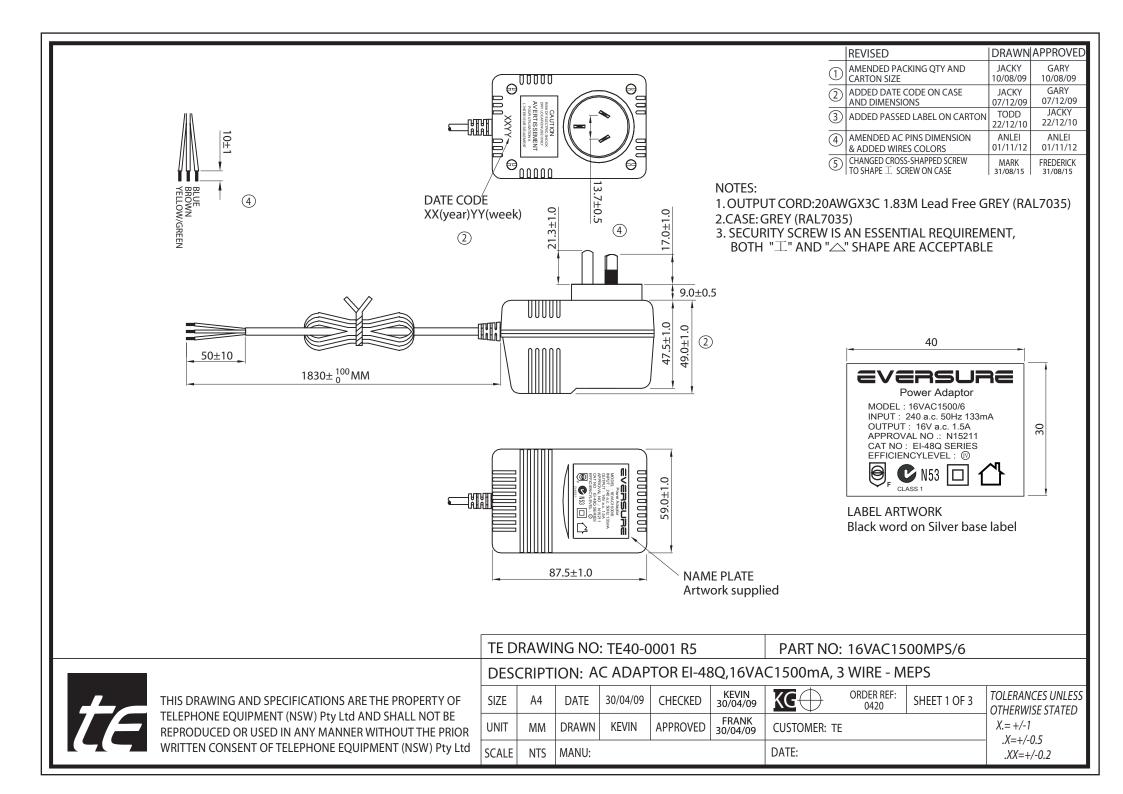
### State of Charge (SOC)

Open Circuit Voltage (V/cell)	Open Circuit Voltage (12V/cell)	Open Circuit Voltage (6V/cell)	State of Charge (% of full charge capacity)
2.14-2.15	12.84-12.90	6.42-6.46	100
2.12-2.13	12.72-12.78	6.36-6.39	90
2.11	12.66	6.33	80
2.09	12.54	6.27	70
2.07	12.42	6.21	60
2.05	12.30	6.15	50

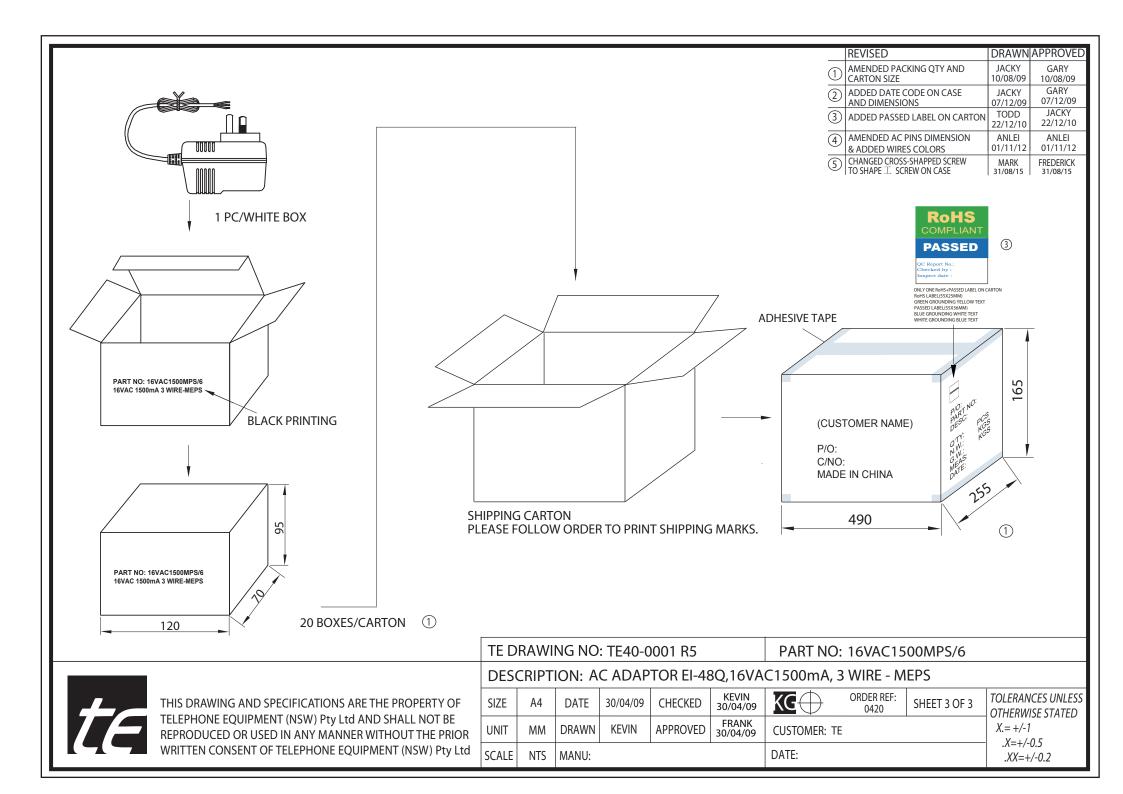


Sealed Performance Batteries

Domestic Sales | Ph: +61 (0)7 3386 1102 | Fax: +61 (0)7 3102 9913 sales@spb.net.au | **www.sealedperformance.com.au** National Warehouse | 1 Ant Road | Yatala, Brisbane QLD 4207 Melbourne Office | 2/9 Compark Circuit | Mulgrave, Melburne VIC 3170



										REVISED		DRAWN	APPROVED
ITEM	ITEM SPECIFICATION									AMENDED PAC	KING QTY AND	JACKY 10/08/09	GARY 10/08/09
1. Primary rated input voltage AC240V 50Hz 133mA											CODE ON CASE	JACKY	GARY
2. Secondary rated of	output	Unloaded voltage: AC 18	V±	5%							ONS D LABEL ON CARTON	07/12/09 TODD	07/12/09 JACKY
				5%	Α	T 15	00 mA					22/12/10	22/12/10
3. Ripple voltage *** mV (RMS) MAX. AT Rated L									(4)	& ADDED WIRE	PINS DIMENSION	ANLEI 01/11/12	ANLEI 01/11/12
4. Insulation resistance Primary - secondary: DC 500			V 100	ΜΩΝ	<i>l</i> lin				5	CHANGED CROSS TO SHAPE I SCR	S-SHAPPED SCREW REW ON CASE	MARK 31/08/15	FREDERICK 31/08/15
5. Dielectric withstand test Primary - secondary: AC				KV 1	secon	ds							
6. Temperature rise At rated loading 90℃ ma			or input coil (By resistance method)										
		and 55℃ max. on case surface (By use of thermometer)											
7. EFFICIENCY ≥ 79%													
	Primary	SAA PLUG IN TYPE											
8. Leadout													
	Secondary	PVC cable length: 1.8 M	eter										
		Colour GREY (RAL7035)											
		Wire size: AWG#20/3C											
		Plug : STRIPPED AND TINK											
	-	PRIMARY SEC		ARY			_						
Т		THERMAL FUSE											
LOADING													
10. Case		SAA48 colour = GREY (RAL7035)											
									0.000				
									16VAC15				
			DESCRIPTION: AC ADAPTOR EI-48Q,16VAC1						C1500mA, 3	B WIRE - M	EPS		
THIS DRAWING AND SPECIFICATIONS ARE THE PROPERTY OF TELEPHONE EQUIPMENT (NSW) Pty Ltd AND SHALL NOT BE REPRODUCED OR USED IN ANY MANNER WITHOUT THE PRIOR		SIZE	A4	DATE	30/04/09	CHECKED	KEVIN 30/04/09	KG	ORDER REF: 0420	SHEET 2 OF 3		ICES UNLESS ISE STATED	
		UNIT	MM	DRAWN	KEVIN	APPROVED	FRANK 30/04/09	CUSTOMER: TE			X.= +/-1		
WRITTEN CONSENT OF TELEPHONE EQUIPMENT (NSW) Pty Ltd			SCALE	CALE NTS MANU:					DATE:			-/+=X. XX=+	





# **Specifications TELLC0280**

The TELLC0280 is the telephone lead with 606 Socket and 2 Meter length of Telephone Cord.

Colour: Ivory.

