

# **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.





# $Specifications\ PRX2780000033\text{-}P2C$

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** 



# **Description**

The Paradox PMD2P is an analog single-optic PIR motion detector with built-in pet immunity for use with Magellan wireless receivers/transceivers. The PMD2P is immune to animals weighing up to 18kg (40 pounds), and features automatic temperature compensation.

The PMD2P is battery-powered and features an innovative three minute energy save mode (after two detections within a five-minute period). Also, the ALIVE software in the PMD2P ensures that the alarm LED continues to display when it is in energy save mode without compromising battery life.

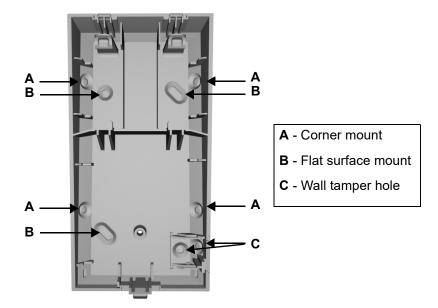




### Installation

At the installation height of 2.1m (7ft) ±10%, the PMD2P provides full coverage from 1.2m (3.9 ft) to 11m (36 ft). Mounting lower than recommended height will decrease the long range performance; higher will decrease short range performance. Do not obscure the detector, partially nor fully.

**IMPORTANT**: Do not touch the sensor as this could result in malfunction. Clean the sensor surface using a soft cloth with pure alcohol. Also, avoid bending, cutting, or altering the antenna or mounting the detector near metal as this may affect transmission.



# **Dual Tamper Mechanism - Wall and Cover**

The PMD2P is equipped with dual tamper protection; an alarm is generated if the front cover is removed or if the detector is removed from the wall. In order for the wall tamper removal feature to be functional, a screw needs to be inserted in the wall tamper hole (see PCB Overview at right).

# **Powering the Wireless Detector**

Verifying proper polarity, insert three "AAA" alkaline batteries into the motion detector's battery compartment. To replace the batteries, remove the old batteries, then press and release the tamper switch and wait 60 seconds in order to reinitialize the unit. After initialization is complete, insert batteries while verifying proper polarity (verify proper polarity on battery compartment connector as well). IMPORTANT: Make sure that when reinstalling the battery compartment that the batteries are facing the back-plate.

# **Power-up Sequence**

After inserting the batteries, a power-up sequence begins (lasting 10-20 seconds). During this time, the red LED flashes and the detector will not detect an open zone or tamper.

# **Signal Strength Test**

In order to verify proper signal reception, perform a signal strength test as described in the receiver's Reference and Installation Manual. Prior to performing the test, ensure the batteries have been installed. Also verify that the motion detector has been assigned to a zone according to the instructions in the receiver's Reference and Installation Manual. If the transmission is weak, relocating the transmitter by a few inches can greatly improve the reception.

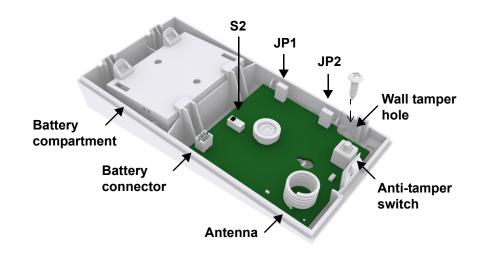
# **Detector Settings - Quick View**

Sensitivity							
S2 (Slider)	High = High sensitivity ( <b>default</b> )						
	Low = Low sensitivity						
Fast/Slow Mode							
JP1 (Jumper)	Off = Slow mode						
	On = Fast mode ( <b>default</b> )						
LED Feedback							
JP2 (Jumper)	Off = Disabled						
	On = Enabled ( <b>default</b> )						

# **Detector Settings - Details**

Sensitivity - S2 (S	lider)					
High Sensitivity  In high sensitivity mode, you should not be able to cross more than one complete zone (consisting of two beams - left and right sensor elements) in the coverage area with any kind of movement. Use this setting for the majority of installations.						
Low Sensitivity	In low sensitivity mode, the amount of movement required to generate an alarm is doubled. The use of low sensitivity mode is recommended in areas where the incidence of false alarms may be greater.					
Fast/Slow Mode -	JP1 (Jumper)					
Slow Mode	Recommended in areas where the incidence of false alarms may be greater.					
Fast Mode	Recommended for the majority of installations.					
LED Feedback - J	P2 (Jumper)					
Alarm	The red LED will illuminate for a period of 3 seconds whenever the motion detector detects any kind of movement.					
Low Battery	The PMD2P performs a battery test every 12 hours. If battery voltage drops below a certain level, the red LED flashes at 8 second intervals and the motion detector will send a low battery signal to the receiver. A trouble is generated and then transmitted to the central monitoring station.					
Signal Transmission	The red LED blinks fast when transmitting.					

# **PCB Overview**





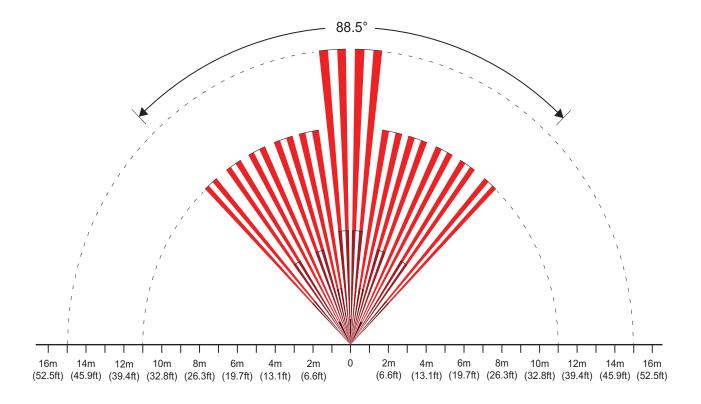
# **Alive Software**

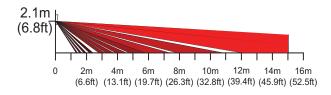
To conserve the motion detector's battery life, if the motion detector transmits two open zone signals (LED on for 3s) within a five-minute period, the detector will fall into Energy Save Mode for approximately three minutes and will not transmit any alarm signals. The red LED will continue to flash to indicate a detection. If the detector's cover is removed and then replaced while in Energy Save Mode, the first detection will trigger an alarm signal.

# Walk-testing

To activate Walk-test Mode for three minutes, power up the detector or open and close the detector's cover. With sensitivity set to High (S2 = High), at 20°C, crossing more than one complete zone (consisting of two beams left and right sensor detecting elements) with slow/fast walking or running should initiate an alarm. With sensitivity set to Low (S2= Low), the amount of movement required to generate an alarm is doubled.

# **Beam Pattern**





# **Specifications**

Specifications						
Sensor Type	Dual rectangular element					
Coverage	88.5° - 11m (36ft) x 11m (36ft); Center beams: 15m (49ft)					
Pet Immunity	18kg (40lbs)					
RF Frequency	433 or 868 MHz with Magellan only					
Lens	2nd generation Fresnel lens, LODIFF® segments					
Walk Speed	0.2m to 3.5m/s (0.6ft to 11.5ft/s)					
Battery Type & Life	3 x 1.5vDC "AAA" alkaline batteries; 2 years*					
Current Rating	31uA standby / 15mA alarm					
Transmitter Range	35m (115ft) with MG6130 / MG6160 70m (230ft) with MG5000 / MG5050 / RTX3; in a typical residential environment					
Operating Temp. & Humidity	0°C to 50°C (32°F to 122°F) / 5 to 90% max.					
Functional Temp. & Humidity	0°C to 35°C (32°F to 95°F) recommended / 5 to 90% max.					
Dimensions & Weight	6.5 x 12.5 x 5.2cm (2.5 x 4.9 x 2.0 in) / 105 g (3.7 oz) with batteries					
RF Immunity	EN 50130-4: 10V/m 80MHz to 2.7GHz					
Compatibility	See paradox.com for compatibility details					
Certification	EN 50131 Grade 2 Class II; Certification body Intertek					
* Battery life expectancy will vary according to the amount of traffic (movement) detected. Higher traffic levels will lower battery life.						

Warranty
For complete warranty information on this product, please refer to the Limited Warranty Statement which can be found on our website: paradox.com/terms or contact your local distributor. Specifications may change without prior notice.

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







# **Specifications DFMWP16**

The DFMWP16 is combo siren and strobe (slim design).

- New design
- Siren tone selectable for different applications
- Sound volume adjustable: low dB for testing and high dB for normal operation
- Bright: new LED strobe design
- Independent siren and strobe operation
- High quality UV treated case
- Weatherproof
- Front and back tampers
- EOLRs built in, suitable for most major alarm panels

Operating voltage: 9-15VDC

SPL @ 1meter: 110dB

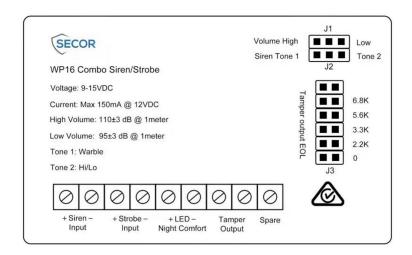
Siren current draw: 150mA

Strobe current draw: 50mA

Siren tone selectable: Tone 1: warble; Tone 2: Hi/Lo

Dimension: 200 x 110 x 40mm









# **Specifications DFMWP08**

The DFMWP08 is indoor top hat piezo.

Input voltage: 12VDC

SPL @ 1meter: 105dB

Current draw: 90mA





# VRLA 12V7AH

# **SA12V7**

# **Specifications**

Nominal Voltage Nominal Capacity 20HR

Dimensions

Approx Weight

Terminal

Container Material

Lead Material

Sulfurid Acid

Separator

Rated Capacity

Max. Discharge Current

Internal Resistance

Operating Temp.Range

Nominal Operating Temp.Range

Cycle Use

Standby Use

Capacity affected by Temperature

Self Discharge

12 V

7.0 AH

 Length
 151±1mm [5.94 inches]

 Width
 65±1mm [2.56 inches]

 Container Height
 95±1mm [3.74 inches]

 Total Height (with terminal)
 100±1mm [3.94 inches]

Approx 2.10 kg (4.63 lbs)

F1

**ABS Plastic** 

Purity Lead 99.995%

Distilled Sulfurid Acid (Zero metal content)

AGM

105A (5s)

Approx  $23m\Omega$ 

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]

Initial Charging Current less than 2.1A. Voltage

14.4V - 14.7V at 25°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 (77°F) 100% 0°C (32°F) 86%

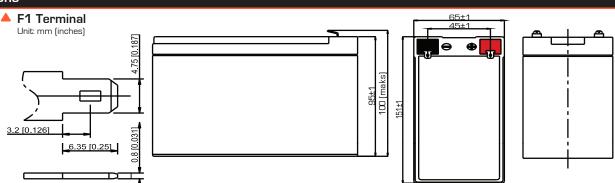
Sentry AGM series batteries may be stored for up to 6 months at  $25^{\circ}$ C ( $77^{\circ}$ F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.



# **Applications**

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

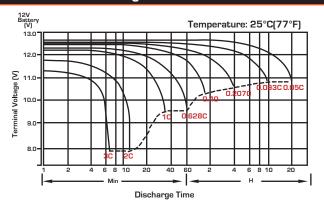
# **Dimensions**



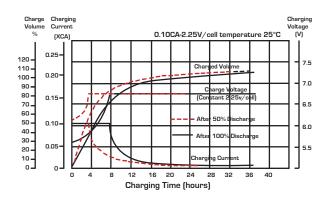
	Constant Current Discharge (Amperes) at 25°C (77°F)														
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	18.0	12.8	10.48	8.79	6.53	4.79	3.86	2.29	1.69	1.36	1.14	0.98	0.774	0.640	0.345
1.80V/cell	21.4	14.3	11.4	9.44	6.94	5.05	4.03	2.38	1.74	1.40	1.17	1.01	0.791	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	3h	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

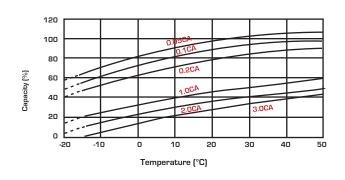
# **Discharge Characteristics**



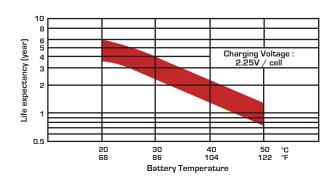
# Float Charging Characteristics



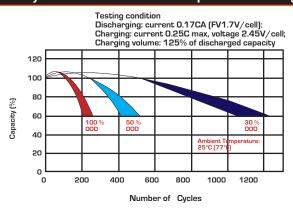
# Temperature Effects in Relation to Battery Capacity



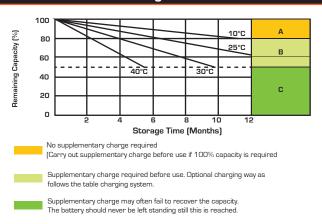
# Effect of Temperature on Long Term Float Life



# Cycle Life in Relation to Depth of Discharge



# Self Discharge Characteristics



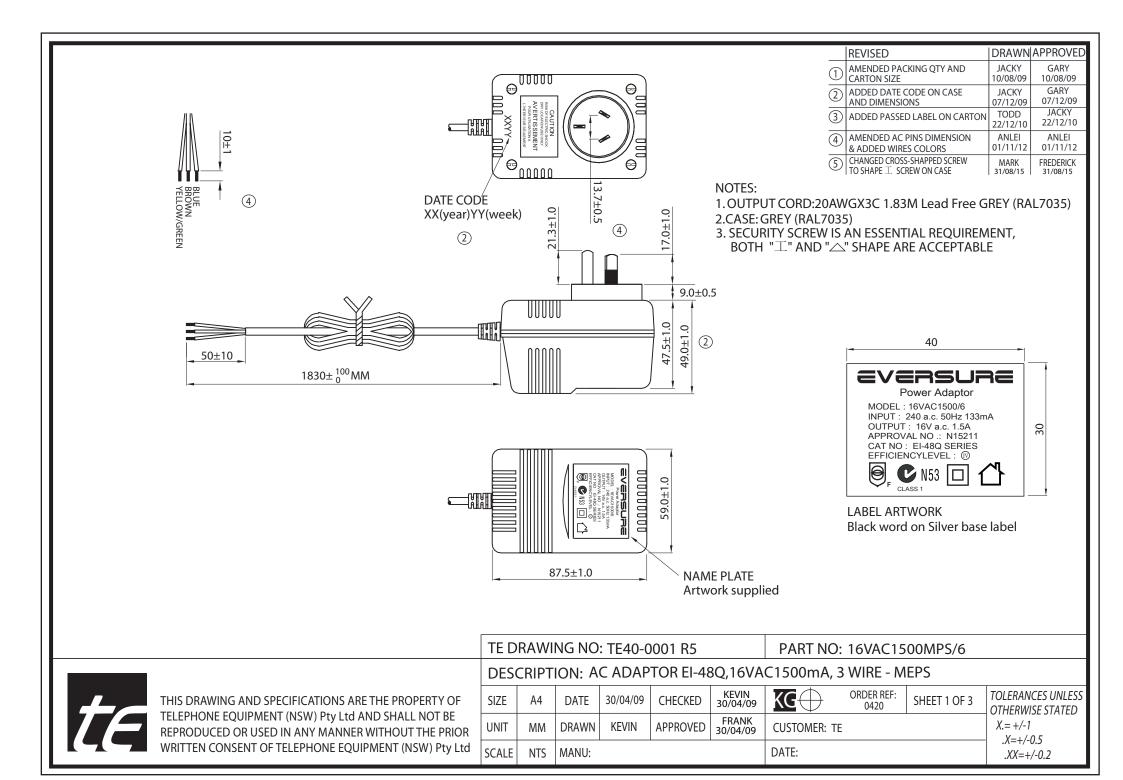
# **Charging System**

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

# 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





TEM	ITE	\ <b>a</b>	CRECIFICATION						
2. Secondary rated output voltage and current   Loaded Voltage : AC   18   V ± 5%   AT   1500 mA									
voltage and current 3. Ripple voltage 4. Insulation resistance Primary - secondary: DC 500 V 100 M Ω Min  5. Dielectric withstand test Primary - secondary: AC 3.64 KV 1 seconds 6. Temperature rise At rated loading 90°C max. For input coil (By resistance method) and 55°C max. on case surface (By use of thermometer)  7. EFFICIENCY  Primary SAA PLUG IN TYPE  8. Leadout  Primary Secondary PVC cable length: 1.8 Meter Colour : GREY (RAL7035) Wire size AWG#20/3C Plug : STRIPPED AND TINNED  PRIMARY SECONDARY  9. Test circuit									
3. Ripple voltage 4. Insulation resistance Primary - secondary: DC 500 V 100 MΩ Min  5. Dielectric withstand test Primary - secondary: AC 3.64 KV 1 seconds  6. Temperature rise At rated loading 90°C max. For input coil (By resistance method) and 55°C max. on case surface (By use of thermometer)  7. EFFICIENCY  Primary SAA PLUG IN TYPE  8. Leadout  PVC cable length: 1.8 Meter Colour: GREY (RAL7035) Wire size: AWG#20/3C Plug: STRIPPED AND TINNED  PRIMARY SECONDARY  9. Test circuit			1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2						
4. Insulation resistance Primary - secondary: DC 500 V 100 M Ω Min  5. Dielectric withstand test Primary - secondary: AC 3.64 KV 1 seconds  6. Temperature rise At rated loading 90 ℃ max. For 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  PVC cable length: 1.8 Meter Colour: GREY (RAL7035) Wire size: AWG#20/3C Plug: STRIPPED AND TINNED  PRIMARY SECONDARY  9. Test circuit		ent							
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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 Meter Colour : GREY (RAL7035) Wire size: AWG#20/3C Plug : STRIPPED AND TINNED  PRIMARY SECONDARY  THERMAL FUSE  9. Test circuit	5. Dielectric withst	and test	Primary - secondary: AC 3.64 KV 1 seconds						
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 Meter Colour : GREY (RAL7035) Wire size: AWG#20/3C Plug : STRIPPED AND TINNED  PRIMARY SECONDARY  THERMAL FUSE  9. Test circuit	6. Temperature rise	e	At rated loading 90℃ max. For input coil (By resistance method)						
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8. Leadout  Secondary PVC cable length: 1.8 Meter Colour : GREY (RAL7035) Wire size: AWG#20/3C Plug : STRIPPED AND TINNED  PRIMARY SECONDARY THERMAL FUSE  9. Test circuit	7. EFFICIENCY								
Secondary  PVC cable length: 1.8 Meter Colour GREY (RAL7035) Wire size: AWG#20/3C Plug : STRIPPED AND TINNED  PRIMARY SECONDARY THERMAL FUSE  9. Test circuit		Primary	SAA PLUG IN TYPE						
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9. Test circuit  Wire size: AWG#20/3C Plug: STRIPPED AND TINNED  PRIMARY SECONDARY THERMAL FUSE  PRIMARY SECONDARY THERMAL FUSE		Secondary	PVC cable length: 1.8 Meter						
9. Test circuit  Plug : STRIPPED AND TINNED  PRIMARY SECONDARY  THERMAL FUSE			Colour GREY (RAL7035)						
9. Test circuit			Wire size: AWG#20/3C						
9. Test circuit			Plug : STRIPPED AND TINNED						
9. Test circuit			PRIMARY SECONDARY						
LOADING	9. Test circuit		THERMAL MILE AND A THERMAL						
			LOADING						
10. Case SAA48 colour = GREY (RAL7035)	10. Case		SAA48 colour = GREY (RAL7035)						

	REVISED	DRAWN	APPROVED
1	AMENDED PACKING QTY AND CARTON SIZE	JACKY 10/08/09	GARY 10/08/09
2	ADDED DATE CODE ON CASE AND DIMENSIONS	JACKY 07/12/09	GARY 07/12/09
3	ADDED PASSED LABEL ON CARTON	TODD 22/12/10	JACKY 22/12/10
4	AMENDED AC PINS DIMENSION & ADDED WIRES COLORS	ANLEI 01/11/12	ANLEI 01/11/12
(5)	CHANGED CROSS-SHAPPED SCREW TO SHAPE   SCREW ON CASE	MARK 31/08/15	FREDERICK 31/08/15

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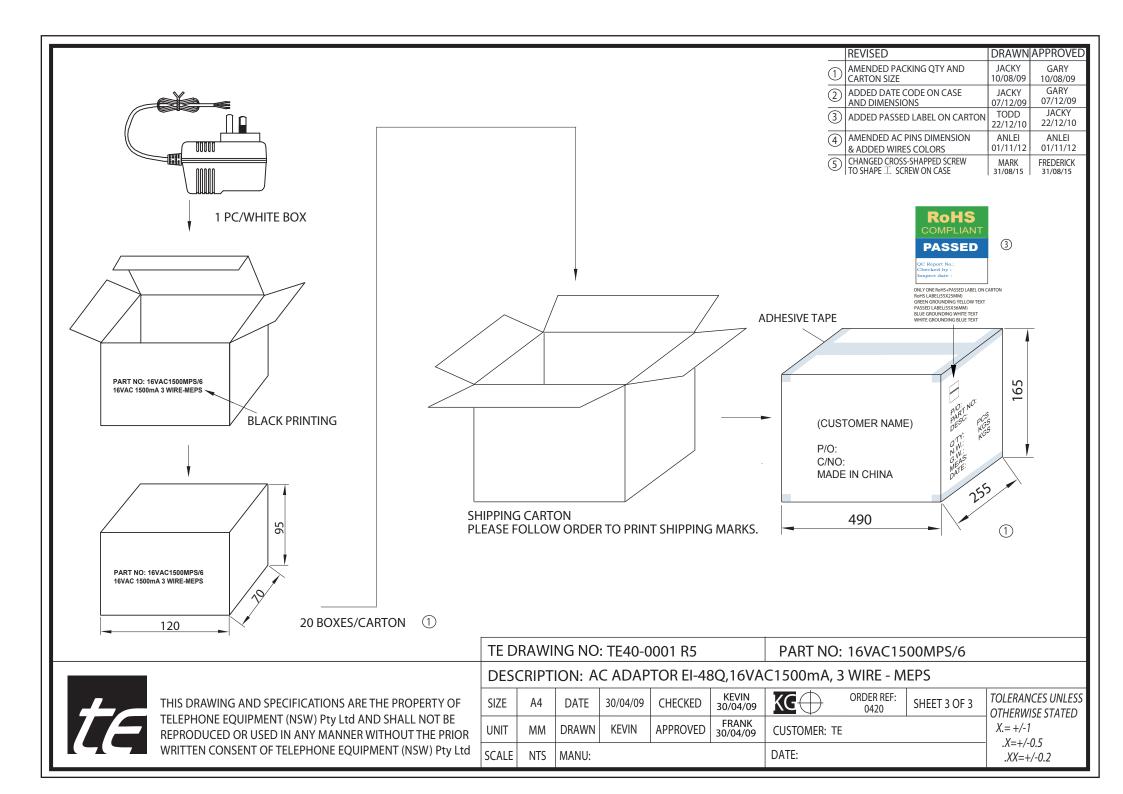
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TE DRAWING NO: TE40-0001 R5

DESCRIPTION: AC ADAPTOR EI-48Q,16VAC1500mA, 3 WIRE - MEPS

SIZE	A4	DATE	30/04/09	CHECKED	KEVIN 30/04/09	KG	ORDER REF: 0420	SHEET 2 OF 3	TOLERANCES UNLESS OTHERWISE STATED			
UNIT	MM	DRAWN	KEVIN	APPROVED	FRANK 30/04/09	CUSTOMER: TE			X.= +/-1 - X=+/-0.5			
SCALE	NTS	MANU:				DATE:	.XX=+/-0.2					

PART NO: 16VAC1500MPS/6





# **Specifications TELLC0280**

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

Colour: Ivory.

