P 🔺 R 🔺 D O X

4 to 32-Zone Expandable Security Systems





Description

Spectra SP control panels (SP4000, SP5500, SP6000, SP65, and SP7000) offer a combination of innovative features and an advanced communication bus for a uniquely expandable security system. Through its communication bus, all Spectra SP panels can be expanded via wireless and hardwired expansion modules and a variety of accessory modules. With their in-field firmware upgrade capability, the Spectra SP series allows installers to upgrade their system without hassle – quickly, easily, and on-site. To further facilitate installation, every Spectra SP panel can be configured using easy-to-follow, menu-driven programming.

Spectra SP also features multipath communication; this enables your system to communicate through multiple channels, including telephony with its built-in landline dialer, IP with the IP150 Internet Module, IP/GPRS/GSM with the PCS series module, and voice with the VDMP3 Plug-In Voice Module.

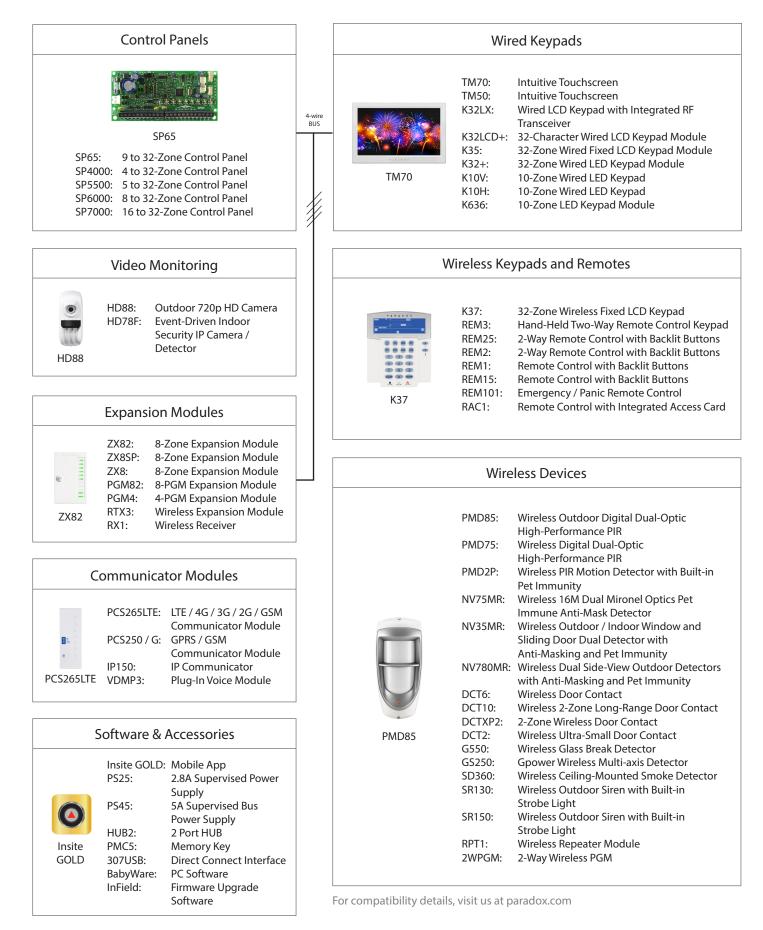
With its reliable communication technology, flexible expansion and user-friendly keypads, Spectra SP is the complete residential or commercial security solution.

Features

- Supports StayD mode
- 4-wire expansion bus
- Wireless expansion (via RTX3 / RX1)
- Expandable to 32 zones
- Expandable to 16 PGMs
- 2 partitions
- 32 user codes
- Supports PCS series modules
- Supports IP150 Internet Module
- Supports VDMP3 Plug-in Voice Module
- Supports REM3 Hand-held Remote Keypad
- Supports SR150 Wireless Siren
- Landline dialer (except SP65)
- In-field firmware upgradable



System Overview



Feature Details



Internet Communication (IP150)

The IP150 Internet Module allows you to control and monitor your security system remotely through any web browser. It allows for email notifications of important system events such as alarms, arm/disarm events, and troubles. For example, receive an email at work when your kids get back from school. Also, view the live status of your system and arm/disarm it. For instance, you have just left your office for the weekend but are unsure whether you armed the system. Simply check the status of your system from a laptop and arm it.



Wireless Communication (PCS Series)

The PCS series modules provide the Spectra SP control panels with wireless communication capabilities to report system events via IP, GPRS, and/or GSM. Whether it be uploading/ downloading via IP or GPRS, receiving system status and events by voice or text message, or reporting to the monitoring station via IP, GPRS, or GSM, the PCS series enhances the communication capabilities of any Spectra SP installation.



Voice Communication (VDMP3)

The VDMP3 is a plug-in, voice-assisted module that can be programmed to call up to five telephone numbers in the event of an alarm. For example, when an alarm occurs at your store during off-hours, every employee can receive notification via telephone. You can also call the VDMP3 from an outside line, enabling you to arm or disarm the system as well as activate PGMs. The VDMP3 essentially turns any outside telephone into a keypad. The VDMP3 is easy to install; plug it in directly onto the panel, set the phone numbers, and select the activation event.



StayD

StayD resolves all issues with common security systems and represents the only solution for secure living. The revolutionary StayD feature represents a completely reversed philosophy compared to all other security systems made today. Traditional systems share the same principle - in order to provide security, users must remember to arm the system; otherwise the system is disarmed and does not provide security. A StayD system is always armed, and needs only to be partly disarmed when an entry or exit is needed. With StayD, you can truly have peace of mind knowing, that you are always protected.



In-field Upgradable

Spectra SP is not only easy to install, but is also fully in-field upgradable, allowing for simple on-site updates. The process is effortless; connect the PC to the panel and you are a few clicks away from performing a complete system upgrade within minutes. No need to change panels or hardware; all the updates are performed using Paradox's InField Firmware Upgrade Software.



App-based System Control

The Insite GOLD app enables you to remotely access your Paradox security system and view your system cameras. Insite GOLD provides lots of functionality and information at one's fingertip. It has an intuitive user-interface which enables you to easily connect to your security system and edit settings. Now you can control your Paradox security system from any Android / iOS smartphone.

TM70 Overview



TM70: Intuitive Touchscreen

SpotOn Locator™

Upload photos, images, or schematics to eliminate the need for deciphering LED zone lights. These images display any door, window, or motion detector that are active. Since the images are uploaded by the user, they are truly customized, and can be unique to each installation. SpotOn Locator[™] is integrated in the original firmware, and when purchased, is unlocked with an authorization code.

■ OneScreen Monitoring[™]

Provides a real-time visual display of the system's status on one screen. It allows the user to choose which partitions will be displayed showing arming level, alarm, ready, and troubles. It also displays zone statuses; open, close, bypass, alarm, and tamper. OneScreen Monitoring[™] also features Solo Test[™] mode, which allows installers and users to easily test all system zone's via the TM70 Touch's screen. OneScreen Monitoring[™] is integrated in the original firmware, and when purchased, is unlocked with an authorization code.

Display	16-bit, color LCD; 8.6 x 15.4 cm (3.1 x 5.9 in.), 800 x 480 pixels
Input Voltage	9 to 15 Vdc
Current Consumption	250 mA at max brightness + 80 mA sounder
Keypad Zone Input	1 for a detector or external temperature sensor
Tamper	Built-in, cover and wall
Humidity	5 to 90%
Operating Temperature	-10 to 55 °C (14 to 131 °F)
Compatibility	Swan, EVO, Spectra, Magellan

Specifications

Note: All control panel outputs are rated to operate between 11.4 Vdc and 12.5 Vdc.

TSP-G2K rev.15 - Printed in Canada 04/2019

Spectra, Spectra SP, and StayD are trademarks or registered trademarks of Paradox Security Systems Ltd. or its affiliates in Canada, the United States and/or other countries. One or more of the following US patents may apply: 7046142, 6215399, 6111256, 6104319, 5920259, 5886632, 5721542, 5287111 and RE39406 and other pending patents may apply. Canadian and international patents may also apply. All rights reserved. Specifications may change without prior notice. © 2019 Paradox Security Systems Ltd.



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







Specifications PRXK10V-N3Q

The PRXK10V-N3Q is a 10-Zone Hardwired LED Keypad Module (Vertical).

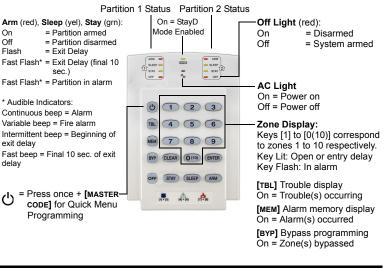
Features:

- Supports StayD Mode
- 10-zone LED display
- Separate Arm, Sleep, Stay and Off LEDs per partition
- Patented Key Light display (button lights up to indicate an open zone)
- 1 keypad zone input
- Independently set chime zones
- 7 one-touch action buttons
- 3 keypad-activated panic alarms
- Adjustable backlight
- Connects to 4-wire communication bus
- Compatible with MG5000, MG5050, MG5075, and Spectra SP series





KEYPAD OVERVIEW



ARMING AND DISARMING

TO ARM WHEN LEAVING...



TO ARM WHEN STAYING...



To Regular Arm:

- 1. Close all zones in the desired partition.
- 2. Press [ARM].
- 3. Enter your [ACCESS CODE]*.

To Stay Arm:

- 1. Press the [STAY] key.
- 2. Enter your [ACCESS CODE]*.

To Sleep Arm:

- 1. Press the [SLEEP] key.
- 2. Enter your [ACCESS CODE]*.

To Disarm: [OFF] + [ACCESS CODE]*

* If needed, press button(s) corresponding to desired partition(s). For two partitions, press the other key after the confirmation beep.



PANIC ALARMS

To send a silent or audible alarm to your Security Company, press and hold one of the button combinations listed for 3 seconds.

Panic Alarm Type	Button Combinations
Police	Press [1] & [3]
Medical	Press [4] & [6]
Fire	Press [7] & [9]

TROUBLE DISPLAY

When a trouble condition occurs, the **[TBL]** key will illuminate.

- Press the [TBL] key. The key will flash and number(s) corresponding to the trouble(s) will illuminate.
- 2. Read the corresponding explanation from the trouble list in the MG5000 User Guide.
- 3. Press the [CLEAR] key to exit.

BYPASS PROGRAMMING

Bypassed zones remained unarmed when the partition is armed.

- 1. Press the [BYP] key.
- 2. Enter your [Access cope]*.
- The corresponding key of all open zones will illuminate. Select the zone(s) you want to bypass by entering the one-digit zone number. The zone key will flash.
- 4. Press the **[ENTER]** key to save and exit.

ALARM MEMORY DISPLAY

To view the alarms that occurred during the last armed period:

- 1. Disarm the system.
- 2. Press the [MEM] key.
- 3. The corresponding zone numbers that were in alarm the last time the system was armed will illuminate.
- 4. Press the [CLEAR] key to exit.

KEYPAD SETTINGS

To mute the keypad:

Press and hold the [CLEAR] key for 6 seconds to enable or disable Keypad Muting.

To modify the backlight:

- 1. Press and hold the **[MEM]** key for 3 seconds.
- 2. The [MEM] key will illuminate.
- 3. Press the **[MEM]** key to set the desired backlight level.
- 4. Press [CLEAR] or [ENTER] to exit.

CHIME PROGRAMMING

A Chime Enabled zone will advise you every time it is opened by causing your keypad to beep.

 Press & hold the corresponding zone key for 3 seconds (Accept beep = Chime enabled, Fail beep = Chime disabled).

© Paradox Security Systems Ltd., 2005-2015. Magellan is a trademark or registered trademark of Paradox Security Systems (Bahamas) Ltd. and its affiliates in Canada, the United States and/or other countries. All rights reserved.

PARADOX.COM Printed in Canada 11/2015 X[™] K10VH-EQ04

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 tha 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)								

	<u>Approx 23mΩ</u> Discharge : -15 - 50°C (5 - 122°F)										
Charge	Charge : 0 - 40°C (32 - 104°F) Storage : -15 - 40°C (5 - 104°F)										
25±3°C	25±3°C (77±5°F]										
	0 0	ent less than 2.1A. Voltage °C (77°F) Temp.Coefficient -30mV/°I	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 O°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.

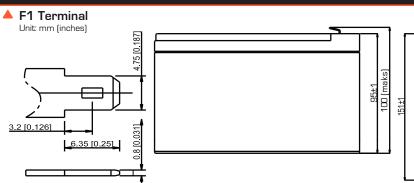


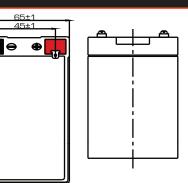
Applications

ZEA

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

Dimensions

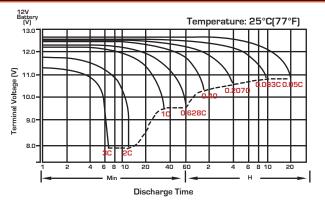




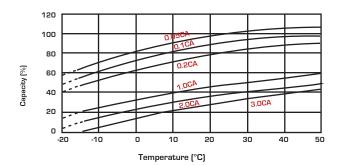
	Constant Current Discharge (Amperes) at 25°C (77°F)														
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	Зh	4h	5h	6h	8h	10h	20h
1.85V/cell	18.0	12.8	10.48	8.79	6.53	4.79	3.86	2.29	1.69	1.36	1.14	0.98	0.774	0.640	0.345
1.80V/cell	21.4	14.3	11.4	9.44	6.94	5.05	4.03	2.38	1.74	1.40	1.17	1.01	0.791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

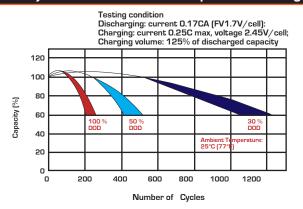
Discharge Characteristics



Temperature Effects in Relation to Battery Capacity



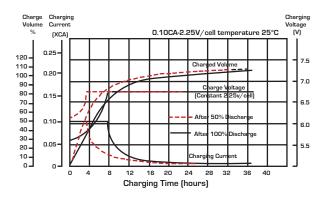
Cycle Life in Relation to Depth of Discharge



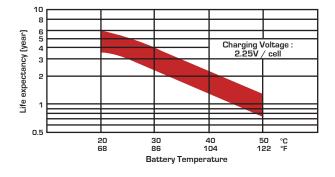
Charging System

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

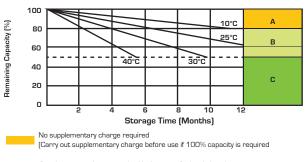
Float Charging Characteristics



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.

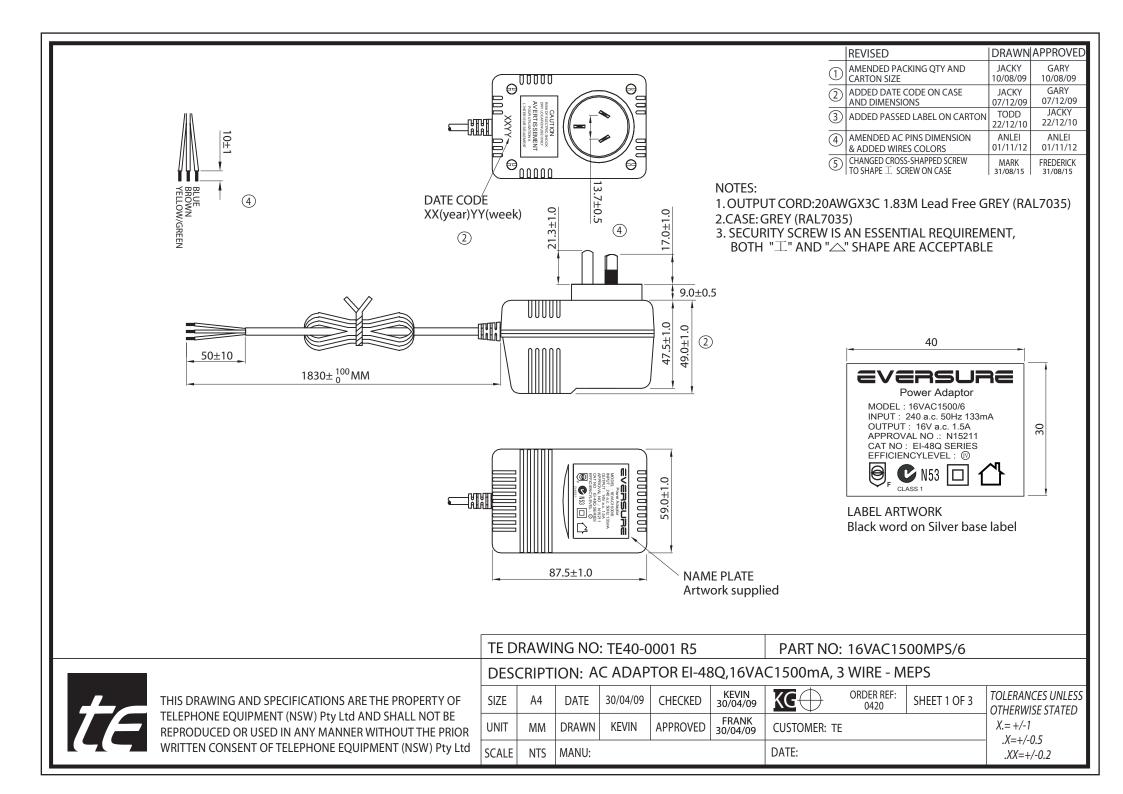
State of Charge (SOC)

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			SPECI	FICAT	ION					AMENDED PAC	KING QTY AND	JACKY 10/08/09	GARY 10/08/09
1. Primary rated input	ut voltage	AC240V 50Hz 133mA							$ \frac{1}{2}$	ADDED DATE C	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
voltage and curre	nt	V ±	5%	Α	T 15	00 mA					22/12/10	22/12/10	
3. Ripple voltage		*** mV (RMS) MAX. AT Rate	d Loa	ding					(4)	& ADDED WIRE	PINS DIMENSION	ANLEI 01/11/12	ANLEI 01/11/12
4. Insulation resista	nce	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 withsta	nd test	Primary - secondary: AC	3.64	KV 1	secon	ds							
6. Temperature rise		At rated loading 90℃ max. For	input	coil (B	y resis	tance m	ethod)						
		and 55°C max. on case surface	(By us	se of t	hermor	neter)							
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	NED										
	-	PRIMARY SEC	COND	ARY			_						
9. Test circuit													
							.OADING						
10. Case		SAA48 colour = GREY (RAL7035)											
									0.000				
						: TE40-0				16VAC15			
			DESC	CRIPTI	ON: A	C ADAP	TOR EI-48	3Q,16VA	C1500mA, 3	B WIRE - M	EPS		
THIS		ECIFICATIONS ARE THE PROPERTY OF T (NSW) Pty Ltd AND SHALL NOT BE	SIZE	A4	DATE	30/04/09	CHECKED	KEVIN 30/04/09	KG	ORDER REF: 0420	SHEET 2 OF 3		ICES UNLESS ISE STATED
		IN ANY MANNER WITHOUT THE PRIOR	UNIT	MM	DRAWN	KEVIN	APPROVED	FRANK 30/04/09	CUSTOMER: TE			X.= +/-1	
WRIT		FELEPHONE EQUIPMENT (NSW) Pty Ltd	SCALE	NTS	MANU:		I		DATE:			-/+=X. XX=+	

