

Digiplex EVO

High Security and Access System





Description

Digiplex EVO systems (EVO192) provide the highest level of protection for banks, government sites, luxurious residential homes and any place where maximum security is essential. The modular concept of these systems provide installers with labour-saving features that make expanding, installing and servicing these systems quick and convenient.

Expand your system by adding expansion modules anywhere, in any combination, on the 4-wire combus. Modules are connected to the combus at the most convenient location and their zone inputs are assigned to the desired zone and partition. Keyswitches, remote controls, and unused module inputs do not use zones. Once installed, all combus modules (including motion detectors) can be programmed remotely via a keypad, or the BabyWare PC software.

Digiplex EVO integrates access control solutions. Your alarm system user database can be used to manage the access for up to 32 doors, and the monitoring of these doors can be included in any partition. By merging security and access control, Digiplex EVO systems increase the level of protection offered by security systems to a whole new level.

Feature Comparison

Feature	EVO192				
Maximum Zones*	192				
On-board Zones	8 (16 with ATZ)				
Partitions	8				
User Codes	999				
Multibus	✓				
Stay Arming	✓				
Panel In-field Firmware Upgradable	✓				
Access Control (Doors)	32				
Access Levels / Schedules	16 / 32				
Events Buffered	3584				
PGMs	32 (5 on-board)				
PGM +/- Trigger	✓				
Virtual Zones**	32				
Expansion Modules*	254				
Supports IP / GPRS / GSM Communication (PCS Series)	√				
Supports VDMP3 Plug-in Voice Module	✓				
Supports IP150 Internet Module	√				
Software	NEware, BabyWare				
Listen-in Capabilities	✓				

^{*} Can be any combination of hardwire, wireless or addressable zones, or modules



^{**} Automate PGM activations without occupying security zones

System Overview

Control Panels





EVO192

EVOHD

Video Monitoring



HD88

HD88: Outdoor 720p HD Camera HD78F: Event-Driven Indoor

Security IP Camera /

Detector

Communicator Modules



PCS265LTE

PCS265LTE: LTE / 4G / 3G / 2G / GSM

Communicator Module

PCS250 / G: GPRS / GSM

Communicator Module

IP150: IP Communicator VDMP3: Plug-In Voice Module

Software & Accessories



Insite GOLD: Mobile App
PMC5: Memory Key
307USB: Direct Connect Interface

BabyWare: PC Software

Insite NEware: End-User Management

GOLD Software

InField: Firmware Upgrade

Software

Special Modules & Accessories



PGM82

PGM82: 8-PGM Expansion Module

PGM4: 4-Output Expansion

Module

PS25: 2.8A Supervised Power

Supply

PS45: 5A Supervised Bus Power

Supply

HUB2: 2-Port Hub

PRT3: Integration Module

Keypads



TM70

EVO BUS

TM70: Intuitive Touchscreen
TM50: Intuitive Touchscreen
K656: Touch Sense Keypad
K641+: 32-Character Blue LCD Keypad

K641LX: 32-Character Blue LCD Keypad with

Built-in Transceiver

K641R: 32-Character Blue LCD Keypad with

Integrated Card Reader

Digital Bus Detectors

NV75MX: 16M Dual Mironel Optics Pet Immune Anti-Mask Detector

NV780MX: Dual Side-View Outdoor Detector with

Anti-Mask and Pet Immunity

NV35MX: Wired Outdoor / Indoor Window and Sliding

Door Dual Detector

NVX80: High-End Motion Detector with Anti-Mask

and SeeTrue $^{\!\top\!\!M}$ Technology for Indoor /

Outdoor Use

NV75MX DM50: Dual Element Motion Detector Quad Element Motion Detector

DM70: Dual-Optic High-Performance PIR

360° Ceiling-Mounted PIR

DG85: Outdoor Dual-Optic High-Performance PIR DG457: GlassBreak Detector

Zone Expansion & Door Contact Modules

DG467:



ZX82

ZC1: Door Contact Module
ZX1: 1-Zone Expansion Module
ZX82: 8-Zone Expansion Module
ZX8: 8-Zone Expansion Module
RTX3: 2-Way Wireless Expansion Module

Access Control Modules



ACM12: 4-Wire Access Control Module R910*: 4-Wire Proximity Card Reader R915*: 4-Wire Proximity Card Reader / Keypad

ACM12 R915 *Various cards available

For compatibility details, visit us at paradox.com

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. You can also view the live status of your system and arm/disarm it. For example, you have just left your office for the weekend but are not sure you remembered to arm 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 Digiplex EVO 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 Digiplex EVO installation.



Voice Communication (VDMP3)

The VDMP3 is a plug-in, voice-assisted module that can be programmed to call up to 5 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; e.g., "Area 1 in alarm. Zone 3. Press 1 to disarm the system..." 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.



In-field Upgradable

Digiplex EVO is not only easy to install, but is also fully in-field upgradable 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 done using Paradox's InField Firmware Upgrade Software.



Access Control

Access control can be added to the Digiplex EVO system to provide additional control over who has access to your premises, even when your security system is not armed and you are not there to supervise. With added access control you can limit access to certain areas, disallow access to others, or control entire groups of people according to their schedule or privileges. Make your premises inadmissible to all except those with access cards, track anybody who enters your premises, print detailed reports of access control activities, and more.



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 its settings. Now you can control your Paradox security system from any Android / iOS smartphone.

TM70 Overview



17.7 cm

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. One Screen Monitoring™ is integrated in the original firmware, and when purchased, is unlocked with an authorization code.

Specifications

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

4.5 in

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



$Specifications\ PRX2780000033\text{-}P2C$

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).







EVO48 EVO192

User Guide











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

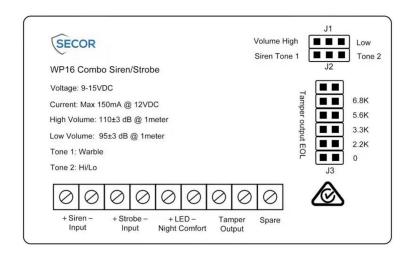
Siren current draw: 150mA

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]

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

7.00 AH/0.350A [20hr, 1.80V/cell, 25°C/77°F] 6.53 AH/0.653A [10hr, 1.80V/cell, 25°C/77°F] 6.00 AH/1.20A [5hr, 1.75V/cell, 25°C/77°F] 5.37 AH/1.79A [3hr, 1.75V/cell, 25°C/77°F] 4.55 AH/4.55A [1hr, 1.60V/cell, 25°C/77°F]

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%

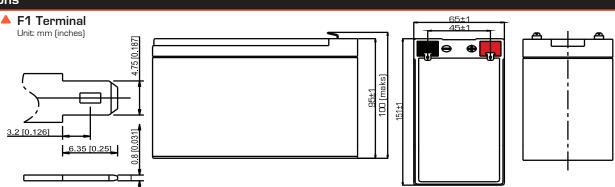
Sentry AGM series batteries may be stored for up to 6 months at 25° C (77° F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.



Applications

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

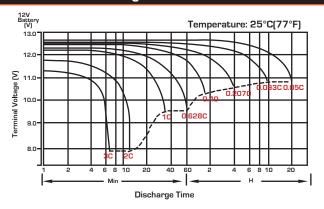
Dimensions



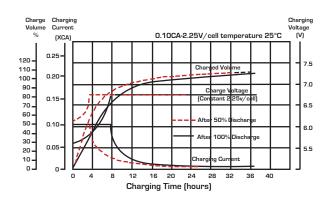
	Constant Current Discharge (Amperes) at 25°C (77°F)														
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	18.0	12.8	10.48	8.79	6.53	4.79	3.86	2.29	1.69	1.36	1.14	0.98	0.774	0.640	0.345
1.80V/cell	21.4	14.3	11.4	9.44	6.94	5.05	4.03	2.38	1.74	1.40	1.17	1.01	0.791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

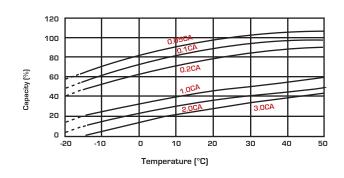
Discharge Characteristics



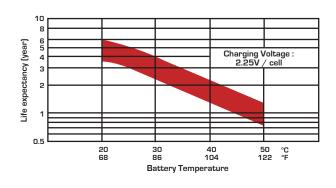
Float Charging Characteristics



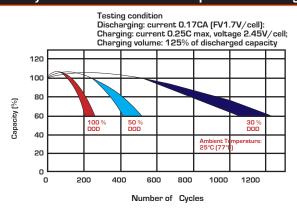
Temperature Effects in Relation to Battery Capacity



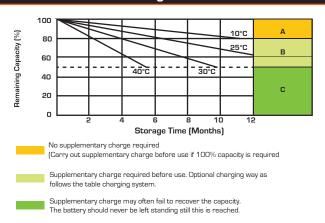
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



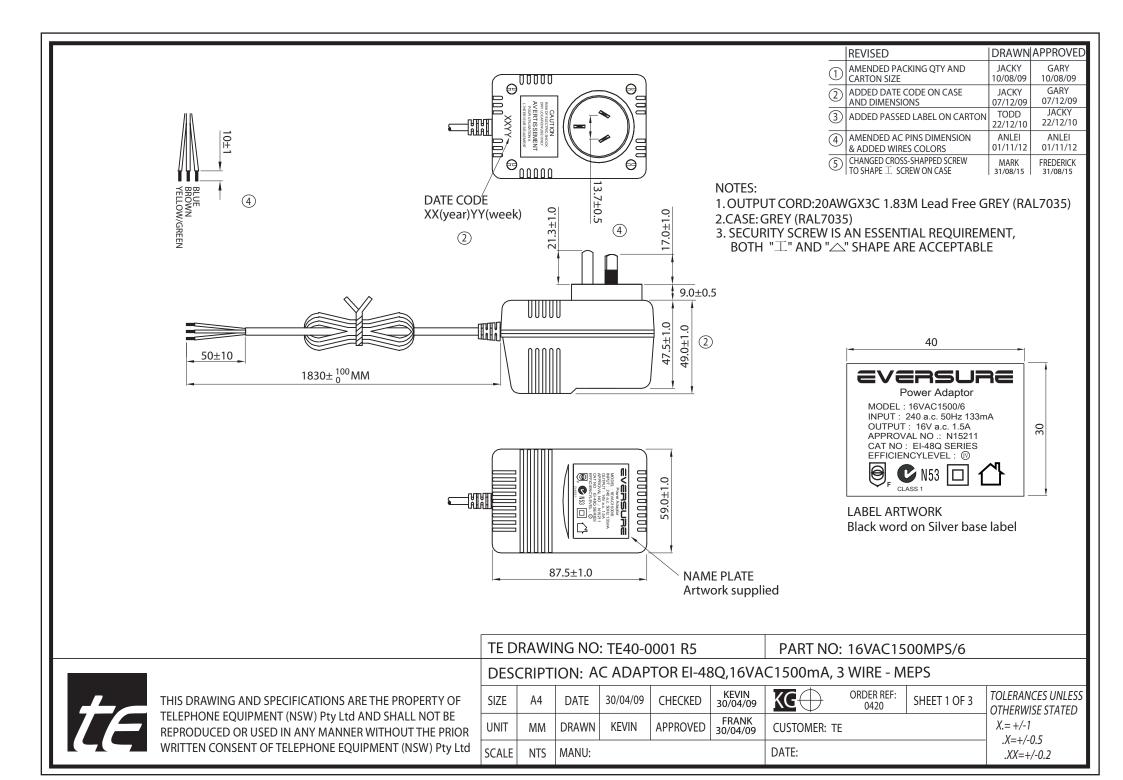
Charging System

DOD	Currency Limit (A)	Constant Voltage (V)	Fully Charged Time (h)
	0.15C₁₀	13.5-13.8 vpc (12V)	10
20	0.20C ₁₀	6.75-6.9 vpc (6V)	8
50	0.15C ₁₀ 13.5-13.8 vpc (12V	13.5-13.8 vpc (12V)	15
ວບ	0.20C ₁₀	6.75-6.9 vpc (6V)	12
	0.15C₁₀	13.5-13.8 vpc (12V)	16
80	0.20C ₁₀	6.75-6.9 vpc (6V)	14
100	0.15C₁₀	13.5-13.8 vpc (12V)	20
	0.20C ₁₀	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	\ a	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									
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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							
Frimary - 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 ℃ 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			mV (RMS) MAX. AT Rated Loading						
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 ≥ 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 PRIMARY SECONDARY 9. Test circuit	4. Insulation resist	ance	Primary - secondary: DC 500 V 100 M Ω Min						
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)						
7. EFFICIENCY ≥ 79% 8. Leadout Primary SAA PLUG IN TYPE Secondary PVC cable length: 1.8 Meter Colour : GREY (RAL7035) Wire size: AWG#20/3C Plug : STRIPPED AND TINNED PRIMARY SECONDARY THERMAL FUSE PRIMARY PRIMARY PRIMARY A THERMAL FUSE									
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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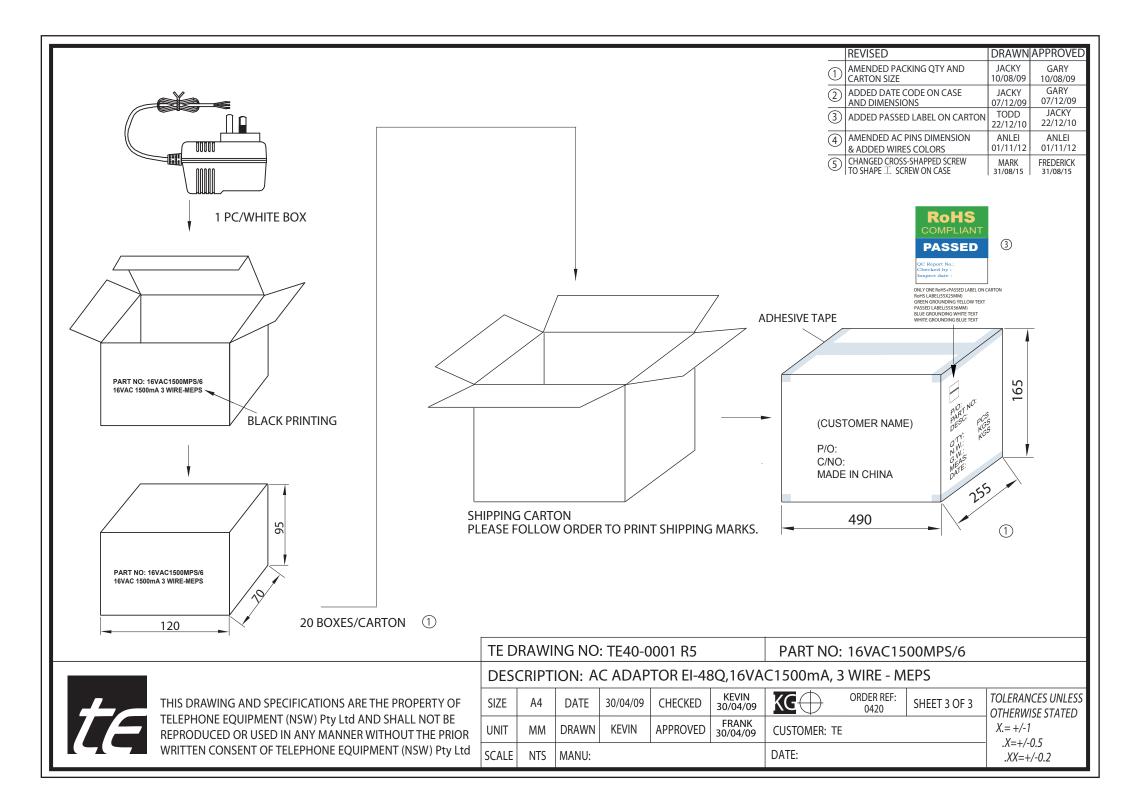
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TE DRAWING NO: TE40-0001 R5

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.

