

### Before Using Our Products

V1.0 April 2021

# Please read datasheet and application note thoroughly before using

### **Intended User Profile:**

Aged preference 18-70

### **Education:**

- vocational high school graduate or minimum of eight years of education.
- major in electrical or electronic.

### **Knowledge:**

- minimum
- understanding the definition of voltage, current and frequency.
- understanding the definition of Class I (basic insulation) and Class II(double in-sulation).
- could recognize the symbols of alternating current (AC), direct current(DC), protective earth (ground), earth (ground), Class II equipment, caution, operating instructions, "ON' (power) and "OFF" (power).

**Language Skills:** languages as specified in the marketing plan for power supply.

**Experience:** training under surveillance

#### **Use Scenarios**

### 01, Install power supply

Read installation instruction before install power supply



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### 02, Power on

Connect the input connector to AC Mains.

### 03, Power off

Disconnect the input connector from AC Mains

### 04, Connect to load side

Connect the output connected to DC load (medical device)

### 05, Cleaning of power supply

Using a cloth that has been soaked in non-specified detergent or alcohol and did not thoroughly wrung out.

# CINCON

### Caution

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### ! Warning

- Medical Adapter Model identifier: Please see Table I
- The Switch Power Adapter is intended used for medical electrical equipment. The equipment has not been evaluated applied parts that suitable for direct patient contact! It shall be evaluated for the end system configuration.
- Circuit diagrams, descriptions and component parts list will be made available only upon request when servicing is required. Please, contact the address below for related information.
  CINCON ELECTRONICS CO LTD. / 8-1 FU KUNG RD FU HSING PARK FU
  HSING HSIANG CHANGHUA HSIEN, 506 TAIWAN, TEL:04-7690261
- The equipment has not been evaluated according to IEC60601-1-2. The EMC assessment shall be conducted for the end system configuration.
- > "WARNING" Do not modify this equipment without authorization of the manufacturer.
- Any inspection and maintenance tasks must be carried out only by authorized by the manufacturer service personnel.
- Expected service life of the power supply: three years.
- ➤ WARNING: To avoid risk of electric shock, this equipment must only be connected to a supply mains with protective earth for Class I.
- ➤ Use AC power cord greater than or equal to H03VV-F or SVT/SPT for Class I and Class II.
- The requirements of IEC/EN 60601-1 shall be observed during the installation in the final system.

"Do not dispose this product in the household waste, please, follow the respective national law for proper disposal."



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- The socket-outlet shall be installed near the equipment and shall be easily accessible.
- The requirements of IEC/EN 60601-1 shall be observed during the installation in the final system.
- ➤ Be careful, strangulation resulting from baby or child entanglement in monitoring cables and the detachable plug avoid eating children.
- ➤ LED indicator in green for Power-On.

# The contents of the datasheet and application note may be revised without notice. Please refer to the latest version of the documents for the most updated specifications.

Table I:

Medical Adapter Model identifier			TR160MA	TR160MB
Input rating	Voltage Rating		100-240Vac	100-240Vac
	frequency		47-63Hz	47-63Hz
	Current		2.0-1.0A	2.0-1.0A
The output load shall not exceed the rating	Model/ Output Rated		TR160MA120	TR160MB120
			12Vdc/12.5A	12Vdc/12.5A
			TR160MA240	TR160MB240
			24Vdc/6.66A	24Vdc/6.66A
			TR160MA360	TR160MB360
			36Vdc/4.44A	36Vdc/4.44A
			TR160MA480	TR160MB480
			48Vdc/3.33A	48Vdc/3.33A
The equipment provided with two fuse on line conductor	<ol> <li>Fuse Condition:</li> <li>Intended for continuous operation.</li> <li>Not AP or APG type.</li> <li>Not intended for use in the presence of flammability an aesthetic mixture with air or with oxygen or nitrous oxide.</li> </ol>		T3.15AL, 250Vac(min) 8.35 x 4.3 x 7.7mm	T3.15AL, 250Vac(min) 8.35 x 4.3 x 7.7mm
Environmental Conditions	Operation	Temperature (°C)	-30°C to 40°C	-30°C to 40°C
		Relative Humidity (%)	5 to 93%RH	5 to 93%RH
		Atmospheric Pressure (kPa)	54 kpa to 106 kpa	54 kpa to 106 kpa
	Storage and Transportation	Temperature (°C)	-30 to +70°C	-30 to +70°C
		Relative Humidity (%)	5 to 93%RH (54 kpa to 106 kpa)	5 to 93%RH (54 kpa to 106 kpa)
The classification of the equipment is	Class I/Class II		Class I	Class II
IP rating			IP22	IP22



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Medical Adapter Model identifier			TR70MA	TR70MB	
Input rating	Voltage Rating		100-240Vac	100-240Vac	
	frequency		47-63Hz	47-63Hz	
	Current		1.5A	1.5A	
The output load shall not exceed the rating	Model/ Output Rated		TR70MA120 12Vdc/5.8A TR70MA150	TR70MB120 12Vdc/5.8A TR70MB150	
			15Vdc/4.65A TR70MA180 18Vdc/3.9A	15Vdc/4.65A TR70MB180 18Vdc/3.9A	
			TR70MA240 24Vdc/3.0A	TR70MB240 24Vdc/3.0A	
			TR70MA360 36Vdc/1.9A	TR70MB360 36Vdc/1.9A	
			TR70MA480 48Vdc/1.5A	TR70MB480 48Vdc/1.5A	
The equipment provided with two fuse on line conductor	Not AP or APG     Not intended to of flammability	ontinuous operation. i type. for use in the presence y an aesthetic mixture h oxygen or nitrous	T2.0AL, 250Vac(min) 8.35 x 4.3 x 7.7mm	T2.0AL, 250Vac(min) 8.35 x 4.3 x 7.7mm	
Environmental Conditions	Operation	Temperature (°C)	-20°C to 40°C	-20°C to 40°C	
		Relative Humidity (%)	5 to 93%RH	5 to 93%RH	
		Atmospheric Pressure (kPa)	54 kpa to 106 kpa	54 kpa to 106 kpa	
	Storage and Transportation	Temperature (°C)	-30 to +70°C	-30 to +70°C	
		Relative Humidity (%)	5 to 93%RH (54 kpa to 106 kpa)	5 to 93%RH (54 kpa to 106 kpa)	
The classification of the equipment is	Class I/Class II		Class I	Class II	
IP rating			X	IP21	



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Medical Adapter Model identifier			TR220MA	TR220MB	
Input rating	Voltage Rating		100-240Vac	100-240Vac	
	frequency		47-63Hz	47-63Hz	
	Current		2.5-1.2A	2.5-1.2A	
The output load shall not exceed the rating	Model/ Output Rated		TR220MA120 12Vdc/16.67A TR220MA240 24Vdc/9.17A TR220MA360 36Vdc/6.11A TR220MA480 48Vdc/4.58A TR220MA560	TR220MB120 12Vdc/16.67A TR220MB240 24Vdc/9.17A TR220MB360 36Vdc/6.11A TR220MB480 48Vdc/4.58A TR220MB560	
			56Vdc/3.93A	56Vdc/3.93A	
The equipment provided with two fuse on line conductor	<ol> <li>Fuse Condition:</li> <li>Intended for continuous operation.</li> <li>Not AP or APG type.</li> <li>Not intended for use in the presence of flammability an aesthetic mixture with air or with oxygen or nitrous oxide.</li> </ol>		T4AL, 250Vac(min) 7.6 x 8.3 x 4.1mm	T4AL, 250Vac(min) 7.6 x 8.3 x 4.1mm	
Environmental Conditions	Operation	Temperature (°C)	-30℃ to 40℃	-30°C to 40°C IEC/EN 60601-1 is -30°C to 40°C. IEC/EN 60601-1-11 Home Health Care is -30°C to 30°C.	
		Relative Humidity (%)	Max. 93%RH.	Max. 93%RH.	
		Atmospheric Pressure (kPa)	54 kpa to 106 kpa	54 kpa to 106 kpa	
	Storage and Transportation	Temperature (°C)	-40 to +85°C	-40 to +85°C	
		Relative Humidity (%)	Max. 93%RH. (54 kpa to 106 kpa)	Max. 93%RH. (54 kpa to 106 kpa)	
The classification of the equipment is	Class I/Class II		Class I	Class II	
IP rating			IP22	IP22	