Drawing Title: GTM91110P24012-FA-S, Medical Power Supply, Efficiency Level: , Case Color/Style: PCB, Open Frame/Internal, Regulated Switchmode AC-DC Power Supply AC Adaptor, Input Rating: 100-240V~, 50-60 Hz, PCB Pins, Output Rating: 240W, 12V@20A, Output Configuration: N/A mm, N/A/6 Cond, , MOLEX 6-PIN FRICTION LOCK HEADER P/N 26-60-4060 MATES WITH PN: 09-50-3061, Ferrite: None, N/A, GT Cord # C1196, Pin Out: Pins 1,2,3: V+, Pins 4,5,6: Common, Blades/Input Cord: Not Applicable, Approvals: WEEE VCCI Ukraine FCC China RoHS RoHS EAC Class I ETL cETLus cETLus SIQ SIQ CE

Model No. GTM91110P24012-FA-S

Part No./Ordering No. GTM91110P24012FSIM(R

Rev C

## REVISION HISTORY

REV	DESCRIPTION	SUB	DATE	APPROVED
С	Update to SF format, update approvals on the label	QA	08/15/2018	QA

In Addition to GlobTek Inc.'s renewed ISO9001:2008 - Quality Management System Certification, GlobTek Inc. is now certified to:

ISO13485:2003 - Medical Devices Quality Management System Certification

ISO14001:2004 - Environmental Management System Certification

ISO Certificates are available online at http://www.globtek.com/iso-certificates/

# Customer Approval of Specification:

Please approve, sign and send back to GlobTek so we can complete order processing.

A delay in receipt of this form will delay delivery schedule.

Company Name:

Customer P/N:

Quote Number:

Date:

Authorized Representative Name:

Authorized Representative Signature:

The acceptance of this specification and use of the product described in this document indicates the acceptance and binding of the customer to Globtek terms and conditions, which supersede all other agreements, terms, and conditions (http://en.globtek.com/terms-and-conditions/).

# Footnote:

GlobTek Inc. will not be liable for the safety and performance of these power supplies if unauthorized access and repair occurs. End user should consult applicable UL, CSA or EN standards for proper installation instruction.

## Limitation of Use:

GlobTek product are not authorized for use as mission critical components in life support hazardous environment, nuclear or aircraft applications without prior written approval from the CEO of GlobTek Inc.

Contents of this document are subject to change without prior notice.

GTM91110P24012-FA-S, 240W, 12V@20A, Open Frame/Internal, Regulated Switchmode AC-DC Power Supply AC Adaptor

Drawing Title: GTM91110P24012-FA-S, Medical Power Supply, Efficiency Level: , Case Color/Style: PCB, Open Frame/Internal, Regulated Switchmode AC-DC Power Supply AC Adaptor, Input Rating: 100-240V~, 50-60 Hz, PCB Pins, Output Rating: 240W, 12V@20A, Output Configuration: N/A mm, N/A/6 Cond, , MOLEX 6-PIN FRICTION LOCK HEADER P/N 26-60-4060 MATES WITH PN: 09-50-3061, Ferrite: None, N/A, GT Cord # C1196, Pin Out: Pins 1,2,3: V+, Pins 4,5,6: Common, Blades/Input Cord: Not Applicable, Approvals: WEEE VCCI Ukraine FCC China RoHS RoHS EAC Class I ETL cETLus cETLus SIQ SIQ CE

Model No. GTM91110P24012-FA-S

Part No./Ordering No. GTM91110P24012FSIM(R

Rev C

### POWER SUPPLY INFORMATION

TYPE: Open Frame/Internal

TECHNOLOGY: Regulated Switchmode AC-DC Power Supply AC Adaptor

CASE COLOR:

NAMEPLATE RATED

100-240V~, 50-60 Hz, 4.0 INPUT:

INPUT CONFIG: **PCB Pins** WATTS: 240.0 VOLTS OUT: 12 CURRENT OUT (Amps): 20 BLADE/CORD INCLUDED: N/A: BLADE/CORD INSTALLED: N/A:

**GROUNDING** (E1) Earthed output CONFIGURATION

EFFICIENCY LEVEL:

**OUTPUT** N/A mm, N/A/6 Cond, , MOLEX 6-PIN FRICTION LOCK HEADER P/N 26-60-4060 MATES WITH PN: 09-50-3061,

CONFIGURATION Ferrite: None, N/A, GT Cord # C1196 CONNECTOR PIN OUT: Pins 1,2,3: V+, Pins 4,5,6: Common

LABEL SPECS: Standard GT,L-1186

PACK SPEC: Standard OF, Individually Box

Notes/Modifications/Customizations (notes in this section supersede the values shown in the standard spec):

DIMENSIONS ARE IN MM UNLESS SPECIFIED OTHERWISE.

Drawing Title: GTM91110P24012-FA-S, Medical Power Supply, Efficiency Level: , Case Color/Style: PCB, Open Frame/Internal, Regulated Switchmode AC-DC Power Supply AC Adaptor, Input Rating: 100-240V~, 50-60 Hz, PCB Pins, Output Rating: 240W, 12V@20A, Output Configuration: N/A mm, N/A/6 Cond, , MOLEX 6-PIN FRICTION LOCK HEADER P/N 26-60-4060 MATES WITH PN: 09-50-3061, Ferrite: None, N/A, GT Cord # C1196, Pin Out: Pins 1,2,3: V+, Pins 4,5,6: Common, Blades/Input Cord: Not Applicable, Approvals: WEEE VCCI Ukraine FCC China RoHS RoHS EAC Class I ETL cETLus cETLus SIQ SIQ CE

Model No. GTM91110P24012-FA-S

Part No./Ordering No. GTM91110P24012FSIM(R

Rev C

### **ELECTRICAL SPECIFICATIONS**

### A) ELECTRICAL SPECIFICATIONS:

- 01. Input Voltage: Specified 90-264 Vac, Nameplate rated 100-240 Vac
- 02. Input Frequency: Specified 47-63 Hz, Nameplate rated 50/60 Hz
- 03. Inrush current: Cold start @ 25°C, 40A @ 115Vac, 80A @ 230Vac
- 04. Efficiency: 85% to 90% typical at full load, 120-240Vac input
- 05. Power factor: 0.98 typical at full load, 230Vac input
- 06. Turn on delay: 5 Seconds maximum, (3 seconds max option)
- 07. Load regulation: ± 1% Measured at the connector side
- 08. Line regulation: ± 0.2% Measured at the connector side
- 09. Output Ripple protection (Peak to Peak): +/-1% maximum of nominal output voltage measured at 20 MHz bandwidth with 0.1µf ceramic capacitor in parallel with a low impedance 47 µf electrolytic capacitor located 200mm from the end of the output connector
- 10. Turn on/off overshoot: 5% Maximum, 1mS recovery time
- 11. Hold up time: 8 mS @ 300W load, 10mS@200W load, 16mS@150W load at 115Vac input
- 12. Transient response: 2% Maximum deviation, returns to initial condition in 3 ms max for 25% load step, from 10% to 100% of rated load
- Remote sense (optional): compensates for up to 0.5V voltage drop in output wiring.

Power supply will operate correctly, with or without remote sense pins hooked up.

- 14. Auxillary Output: For forced air fan 12V @ 250mA, if convection cooled 12V @ 150mA. Other output voltages and current ratings from 5V to 24V available, contact factory for availability.
- 15. Indicator: Green LED for output presence

### B) PROTECTION

- 01. Input Protection: Input line fusing and 300Vac MOV
- 02. Short circuit: Protected. Unit will autorecover upon removal of short
- 03. Overload protection: Autorecover upon removal of overload

150W, 175% - 210% of nominal power rating

200W, 130% - 160% of nominal power rating

240W, 110% - 130% of nominal power rating

300W, 110% - 130% of nominal power rating

- 04. Over voltage: Protected at 110- 140% of nominal output voltage, latched type. AC cycling required to restore output. Autorecovery type OVP is an option, contact factory for availability.
- 05. Fan output protection: 3 Pin Linear Regulator, short circuit proof

01. Dielectric Withstand Voltage: 4000Vac or 5656Vdc from input to output,

On Class I models, 2500Vac or 3535Vdc from input to earth

02. Earth Leakage Current:

Class I Input Models: Does not exceed 500uA

Class II Input Models: Does not apply

- 03. Touch Current: Does not exceed 100uA, output terminations to earth
- 04. Output terminations rated as SELV, and Means of Operator Protection

## D) OTHER:

- 01. MTBF: 200,000 Hours @ 25°C ambient temperature
- 02. Operating Temperature Range:
  - -10°C to 50°C @ 100% output power rating
  - -10°C to 70°C @ 50% output power derating
- 03. Cooling:

Open Frame 150W Series: Convection

Open Frame 240W and 300W Series: 20 CFM Forced Air Cooling

Perforated Plastic Housing 200W Series: 20 CFM Forced Air Cooling,

with convection cooling 50% derated (100W) output capability.

- 04. Relative Humidity: operating 0% to 90% Non-condensing
- 05. Storage Temperature: -30°C to 85°C

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Drawing Title: GTM91110P24012-FA-S, Medical Power Supply, Efficiency Level: , Case Color/Style: PCB, Open Frame/Internal, Regulated Switchmode AC-DC Power Supply AC Adaptor, Input Rating: 100-240V~, 50-60 Hz, PCB Pins, Output Rating: 240W, 12V@20A, Output Configuration: N/A mm, N/A/6 Cond, , MOLEX 6-PIN FRICTION LOCK HEADER P/N 26-60-4060 MATES WITH PN: 09-50-3061, Ferrite: None, N/A, GT Cord # C1196, Pin Out: Pins 1,2,3: V+, Pins 4,5,6: Common, Blades/Input Cord: Not Applicable, Approvals: WEEE VCCI Ukraine FCC China RoHS RoHS EAC Class I ETL cETLus cETLus SIQ SIQ CE

Model No. GTM91110P24012-FA-S

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Rev C

06. Altitude: up to 2000 meter

07. Random vibration/transient drop: MIL-STD 810E

E) MECHANICAL FORMAT:

150W, 240W and 300W Open Frame version

Size: 127\*76.2\*43 mm Weight: 470 grams

200W Perforated Plastic Enclosure version

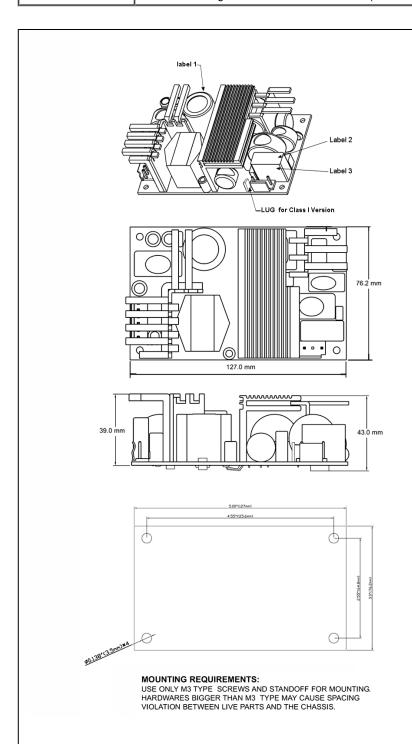
Size: 140\*87.6\*51.9 mm Weight: 620 grams

Drawing Title: GTM91110P24012-FA-S, Medical Power Supply, Efficiency Level: , Case Color/Style: PCB, Open Frame/Internal, Regulated Switchmode AC-DC Power Supply AC Adaptor, Input Rating: 100-240V~, 50-60 Hz, PCB Pins, Output Rating: 240W, 12V@20A, Output Configuration: N/A mm, N/A/6 Cond, , MOLEX 6-PIN FRICTION LOCK HEADER P/N 26-60-4060 MATES WITH PN: 09-50-3061, Ferrite: None, N/A, GT Cord # C1196, Pin Out: Pins 1,2,3: V+, Pins 4,5,6: Common, Blades/Input Cord: Not Applicable, Approvals: WEEE VCCI Ukraine FCC China RoHS RoHS EAC Class I ETL cETLus cETLus SIQ SIQ CE

Model No. GTM91110P24012-FA-S

Part No./Ordering No. GTM91110P24012FSIM(R

Rev C



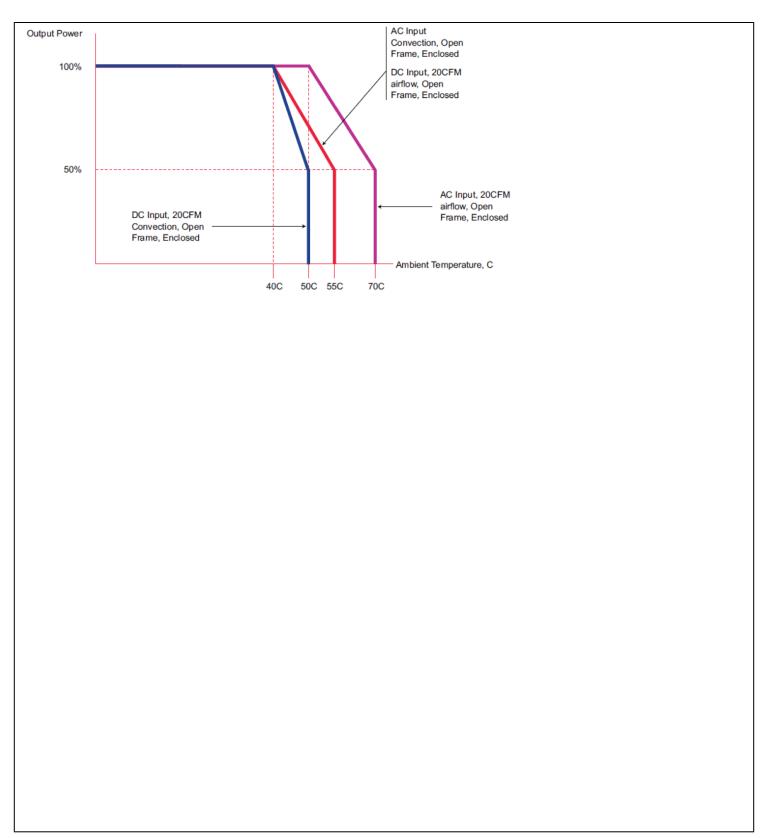
## **DERATING CURVE**

Drawing Title: GTM91110P24012-FA-S, Medical Power Supply, Efficiency Level: , Case Color/Style: PCB, Open Frame/Internal, Regulated Switchmode AC-DC Power Supply AC Adaptor, Input Rating: 100-240V~, 50-60 Hz, PCB Pins, Output Rating: 240W, 12V@20A, Output Configuration: N/A mm, N/A/6 Cond, , MOLEX 6-PIN FRICTION LOCK HEADER P/N 26-60-4060 MATES WITH PN: 09-50-3061, Ferrite: None, N/A, GT Cord # C1196, Pin Out: Pins 1,2,3: V+, Pins 4,5,6: Common, Blades/Input Cord: Not Applicable, Approvals: WEEE VCCI Ukraine FCC China RoHS RoHS EAC Class I ETL cETLus cETLus SIQ SIQ CE

Model No. GTM91110P24012-FA-S

Part No./Ordering No. GTM91110P24012FSIM(R

Rev C



Drawing Title: GTM91110P24012-FA-S, Medical Power Supply, Efficiency Level: , Case Color/Style: PCB, Open Frame/Internal, Regulated Switchmode AC-DC Power Supply AC Adaptor, Input Rating: 100-240V~, 50-60 Hz, PCB Pins, Output Rating: 240W, 12V@20A, Output Configuration: N/A mm, N/A/6 Cond, , MOLEX 6-PIN FRICTION LOCK HEADER P/N 26-60-4060 MATES WITH PN: 09-50-3061, Ferrite: None, N/A, GT Cord # C1196, Pin Out: Pins 1,2,3: V+, Pins 4,5,6: Common, Blades/Input Cord: Not Applicable, Approvals: WEEE VCCI Ukraine FCC China RoHS RoHS EAC Class I ETL cETLus cETLus SIQ SIQ CE

Model No. GTM91110P24012-FA-S

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# INPUT CONFIGURATION

Grounding Configuration: Blades/Cord Included: N/A:

Blades/Cord Installed: N/A:

Molex 26-60-4050 5 Position Header Pin 1: Gnd, Pin 2: Removed, PIN 3: Neutral, Pin 4: removed, Pin 5: Line



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Model No. GTM91110P24012-FA-S

Part No./Ordering No. GTM91110P24012FSIM(R

Rev C

**OUTPUT CORD AND CONNECTOR:** MOLF/C1196

ACTUAL CONNECTORS, OVERMOLDS, FERRITES MAY VARY SLIGHTLY FROM THE PICTURE BELOW

CABLE TYPE

CABLE LENGTH (mm) N/A CABLE TOLERANCE (mm) N/A WIRE GAUGE (AWG) N/A **CONDUCTORS** 6 HANK DIMENSION (mm) N/A CABLE / CONNECTOR OVERMOLD COLOR N/A FERRITE TYPE / DIMENSION None FERRITE # OF TURNS (Definition) N/A FERRITE DIMENSION FROM STRAIN RELIEF N/A FERRITE DIMENSION FROM PLUG

**PLUG TYPE** MOLEX 6-PIN FRICTION LOCK HEADER P/N 26-60-4060 MATES WITH PN: 09-50-3061

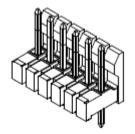
**OVER MOLD ORIENTATION** 

CONNECTOR PIN OUT: Pins 1,2,3: V+, Pins 4,5,6: Common

ADDITIONAL REQUIREMENTS

Drawing: http://www.molex.com/pdm\_docs/sd/022280040\_sd.pdf

Datasheet: http://www.molex.com/molex/products/datasheet.jsp?part=active/0022280040\_PCB\_HEADERS.xml



## Mates With Part(s):

KK® Crimp Housing 2695, 6471, 7880, KK® PC Board Connector 4455

ADDITIONAL OUTPUT PLUG OPTIONS ARE AVAILABLE AT http://www.globtek.com/connectors/ STANDARD PLUGS AND CONNECTORS CAN BE SEEN ONLINE AT http://www.globtek.com/connectors/

Drawing Title: GTM91110P24012-FA-S, Medical Power Supply, Efficiency Level: , Case Color/Style: PCB, Open Frame/Internal, Regulated Switchmode AC-DC Power Supply AC Adaptor, Input Rating: 100-240V~, 50-60 Hz, PCB Pins, Output Rating: 240W, 12V@20A, Output Configuration: N/A mm, N/A/6 Cond, , MOLEX 6-PIN FRICTION LOCK HEADER P/N 26-60-4060 MATES WITH PN: 09-50-3061, Ferrite: None, N/A, GT Cord # C1196, Pin Out: Pins 1,2,3: V+, Pins 4,5,6: Common, Blades/Input Cord: Not Applicable, Approvals: WEEE VCCI Ukraine FCC China RoHS RoHS EAC Class I ETL cETLus cETLus SIQ SIQ CE

Model No. GTM91110P24012-FA-S

Part No./Ordering No. GTM91110P24012FSIM(R

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### LABEL:L-1186

Standard GT LABEL P/N:

MATERIAL: Flat Thermal Transfer, Imprintable, Polyester Label and/or Pad Printed and/or Molded, and/or Laser Engraved in the case

**BACKGROUND** 

Black if housing is Black, White or Silver if housing is White or Gray. COLOR:

TEXT COLOR:

White or Silver if label is Black Background for Black housing. Black if label is White or Silver background and Housing is

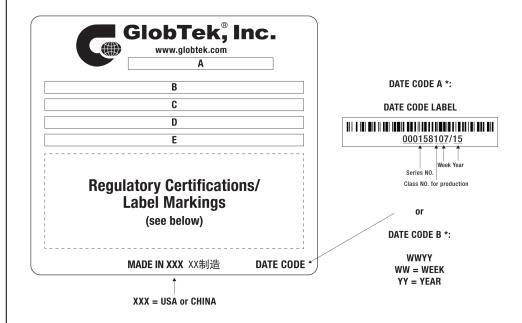
White or Gray

LABEL WIDTH (mm): 30.0 LABEL HEIGHT (mm): 20.0

Below is the minimum information which will appear on the label. NOTE: in the logo area additional/actual positioning of symbols and text is subjected to change as per agency updates/requirements or additional model approvals become available.

Regulatory certifications/label markings may be in logo area on the label or molded into the case housing outside the label area.

Information will be shown via label and/or pad printed and/or molded and/or laser engraved in the case. \* Date code markings at GlobTek option.



A=Medical Power Supply

B=P/N: (料号) GTM91110P24012FSIM(R C=Model (型号) GTM91110P24012-FA-S D=Input (输入) 100-240V~, 50-60 Hz, 4.0 E=Output (输出)12 V === 20 A ,240.0W

http://www.globtek.info/certs/GTM91110P/ AGENCY ONLINE DOCUMENTS

CE EC-Declaration for Medical http://www.globtek.com/pdf/ec\_declaration/a0Oa000000Bz790EAB

CE EC-Declaration for Industrial/Commercial/ITE Contact GlobTek for more information

RoHS/RoHS2 Declaration http://www.globtek.com/pdf/rohs\_cert/01t30000002p7QKAAY http://www.globtek.com/pdf/iso\_certificates/REACH.pdf **REACH Declaration** 

Drawing Title: GTM91110P24012-FA-S, Medical Power Supply, Efficiency Level: , Case Color/Style: PCB, Open Frame/Internal, Regulated Switchmode AC-DC Power Supply AC Adaptor, Input Rating: 100-240V~, 50-60 Hz, PCB Pins , Output Rating: 240W, 12V@20A, Output Configuration: N/A mm, N/A/6 Cond, , MOLEX 6-PIN FRICTION LOCK HEADER P/N 26-60-4060 MATES WITH PN: 09-50-3061, Ferrite: None, N/A, GT Cord # C1196, Pin Out: Pins 1,2,3: V+, Pins 4,5,6: Common, Blades/Input Cord: Not Applicable, Approvals: WEEE VCCI Ukraine FCC China RoHS RoHS EAC Class I ETL cETLus cETLus SIQ SIQ CE

Model No. GTM91110P24012-FA-S

Part No./Ordering No. GTM91110P24012FSIM(R

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**Conflict Minerals Declaration** 

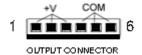
http://www.globtek.com/pdf/conflict-minerals.pdf

IPXY rating is based on 3rd party testing and customers should check suitability and test system level IPXY rating before ordering.

# Regulatory Certifications/Label Markings

LATEST PRODUCT/MODEL CERTIFICATIONS: http://en.globtek.com/datasheet/id/a0Oa000000Bz790

AGENCY ONLINE DOCUMENTS: <a href="http://www.globtek.info/certs/GTM91110P/">http://www.globtek.info/certs/GTM91110P/</a>



Pins 1,2,3: V+, Pins 4,5,6: Common

Drawing Title: GTM91110P24012-FA-S, Medical Power Supply, Efficiency Level: , Case Color/Style: PCB, Open Frame/Internal, Regulated Switchmode AC-DC Power Supply AC Adaptor, Input Rating: 100-240V~, 50-60 Hz, PCB Pins , Output Rating: 240W, 12V@20A, Output Configuration: N/A mm, N/A/6 Cond, , MOLEX 6-PIN FRICTION LOCK HEADER P/N 26-60-4060 MATES WITH PN: 09-50-3061, Ferrite: None, N/A, GT Cord # C1196, Pin Out: Pins 1,2,3: V+, Pins 4,5,6: Common, Blades/Input Cord: Not Applicable, Approvals: WEEE VCCI Ukraine FCC China RoHS RoHS EAC Class I ETL cETLus cETLus SIQ SIQ CE

Model No. GTM91110P24012-FA-S

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## **PACKAGING**

Packing Spec P/N: Standard OF, Individually

Box

Box Qty: 60

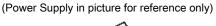
Gift Box Size (mm): 135 x 85 x 60

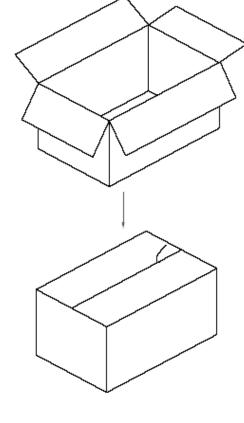
Gift Box Color: White

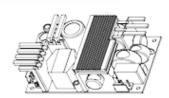
Master Carton Size (mm):

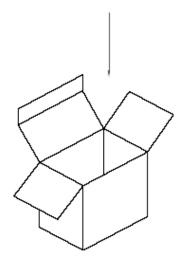
Master GW (Kg): kg
BLADES INCLUDED: N/A:
BLADE/CORD INSTALLED: N/A:

If specific packaging is required, this section must specify all requirements and note "no exceptions". If this section does not specify packaging, it is subject to change without notice at GlobTek's discretion









Drawing Title: GTM91110P24012-FA-S, Medical Power Supply, Efficiency Level: , Case Color/Style: PCB, Open Frame/Internal, Regulated Switchmode AC-DC Power Supply AC Adaptor, Input Rating: 100-240V~, 50-60 Hz, PCB Pins , Output Rating: 240W, 12V@20A, Output Configuration: N/A mm, N/A/6 Cond, , MOLEX 6-PIN FRICTION LOCK HEADER P/N 26-60-4060 MATES WITH PN: 09-50-3061, Ferrite: None, N/A, GT Cord # C1196, Pin Out: Pins 1,2,3: V+, Pins 4,5,6: Common, Blades/Input Cord: Not Applicable, Approvals: WEEE VCCI Ukraine FCC China RoHS RoHS EAC Class I ETL cETLus CETLus SIQ SIQ CE

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INSTRUCTION SHEET					