

## Model Name

STI-PA-120W-48V2.5A

ST: Saga Telecom

I: Industrial grade

PA: Power adapter

120W: Total power budget

48V2.5A: Output Voltage and Ampere

It is advised to read specific product description for more information.



## Introduction

STI-PA-120W-48V2.5A is a single-phase PSU providing efficient and adjustable DC output. It could operate in wide temperature range and for industrial automation&control systems etc.

## Key Features

- Universal AC Input 90-264V or 127 ~370VDC Input by connecting AC/L(+), AC/N(-)
- DC O/P Voltage Adjustable 48V~55V
- Protection: Short Circuit/Overload/Over Voltage/Over Temperature
- Free Air Convection Design
- Installation: DIN Rail TS-35/7.5 & 15
- With Built-in Active PFC Function
- With DC OK Indicator
- CE/RoHS/UKCA/UL Compliant
- 3 years warranty

## Specification

Product Name	120W Din Rail Industrial Power Adapter
<b>Input</b>	
Voltage Range	90-264VAC, 127 ~370VDC
Frequency Range	47~63Hz
Efficiency(Typ.)	89%
AC Current(Typ.)	2.25A/115VAC 1.3A/230VAC
Inrush Current(Typ.)	47.8A/115VAC 92.5A/230VAC
Leakage Current	<1mA/240VAC
<b>Output</b>	
Power	150W max.
Output Voltage	48V
Output Current	2.5A
Ripple&Noise(max.)	150mVp-p
Voltage Tolerance	±2.0%
Line Regulation	±0.5%
Load Regulation	±1.0%
Setup, Rise Time	1200ms, 60ms/230VAC at full load 2500ms, 60ms/115VAC at full load
Hold Up Time(Typ.)	16ms/230VAC at full load 10ms/115VAC at full load
<b>Protection</b>	
Over Load	105~130% rated output power Protection type: Constant current limiting, recovers automatically after fault condition is removed
Over Voltage	56~65V, Shut down o/p voltage, re-power on to recover
Over Temperature	Shut down o/p voltage, recovers automatically after temperature goes down

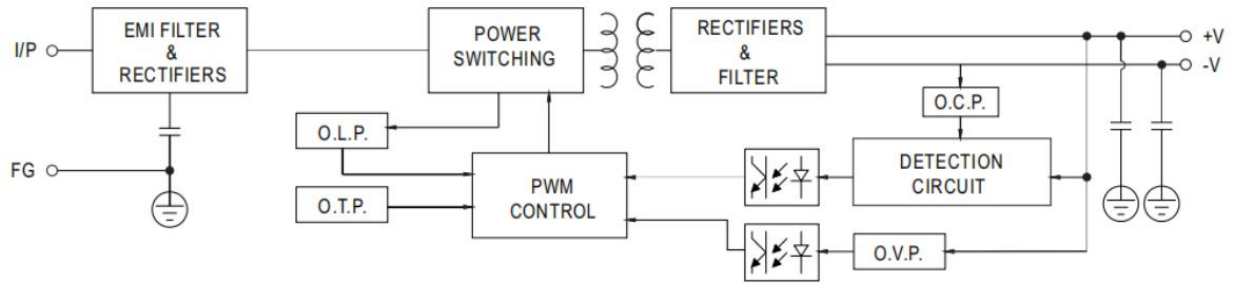
<b>Environment</b>	
Working Temp.	-20°C ~ +70°C (Refer to "Derating Curve")
Working Humidity	20~95% RH non-condensing
Storage Temp.	-40°C ~ +85°C, 10~95% RH
Storage Humidity	10~95% RH
MTBF	2241.28K hrs min. Telcordia SR-332(Bellcore)

Note

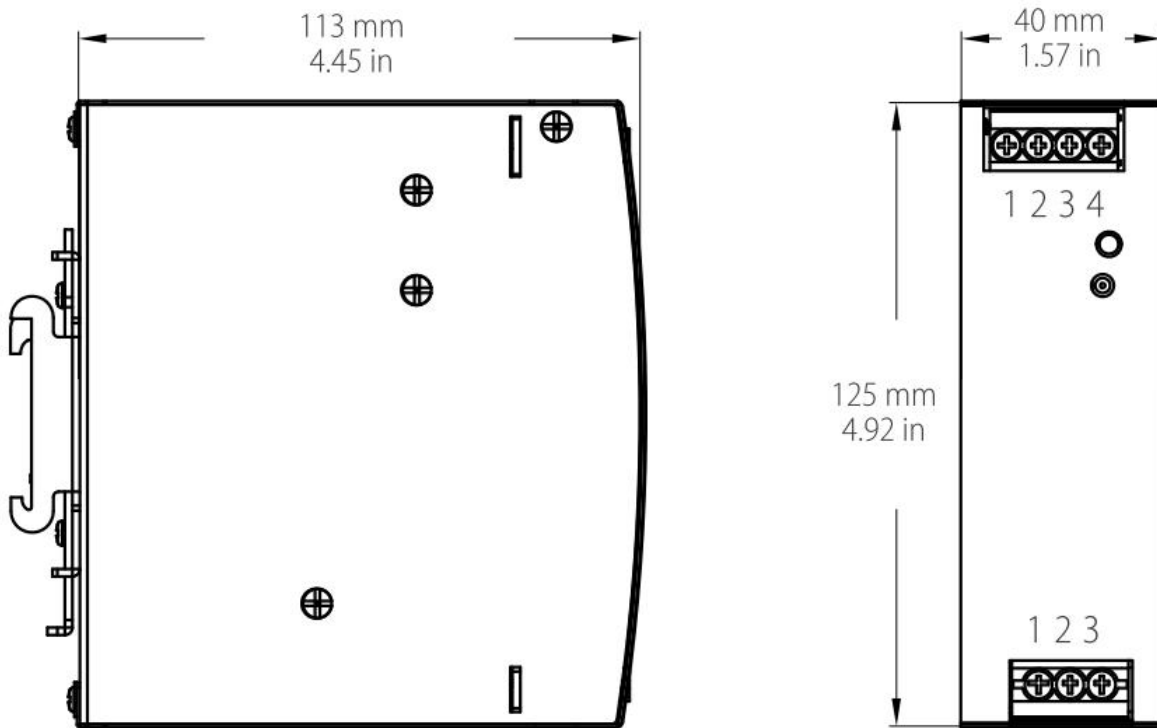
1. All parameters NOT specially mentioned at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple&noise are measured from peak to peak with band width limit of 20MHZ(0.1uF and 47uF/50V parallel capacitor under DC output full load,AC nominal input 25°C ambient temperature).
3. Installation clearances: top with 40mm, bottom with 20mm, left and right with 5mm. Increase the space to 10-15mm when the adjacent device is heat source.
4. Derating may be needed under low input voltage. Please check the derating curve for more details.
5. Efficiency test after 30 minutes of burn-in.
6. The ambient temperature derating of 3.5°C/1000m for operating altitude higher than 2000m(6500ft).

<b>Safety&amp;EMC</b>	
Safety Standards	UL508, BS/EN62368-1
Withstand Voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:>100M Ohms /500VDC/25°C/70% RH
EMC Emission	Compliance to BS EN/EN55032, BS EN/EN61000-3-2, -3
EMC Immunity	Compliance to BS EN/EN61000-4-2, 3, 4, 5, 6, 8, 11 BS EN/EN55035, BS EN/EN61000-6-2(BS EN/EN50082-2)
<b>Dimension&amp;Weight</b>	
Width	40mm/1.57in
Height	125mm/4.92in
Depth	113mm/4.45in
Weight	0.6KG
<b>Packing</b>	
Carton Size	31.5*30*30cm 12.4*11.8*11.8in
Master Carton Quantities	20pcs/Carton

**Functional Diagram**



**Dimension**



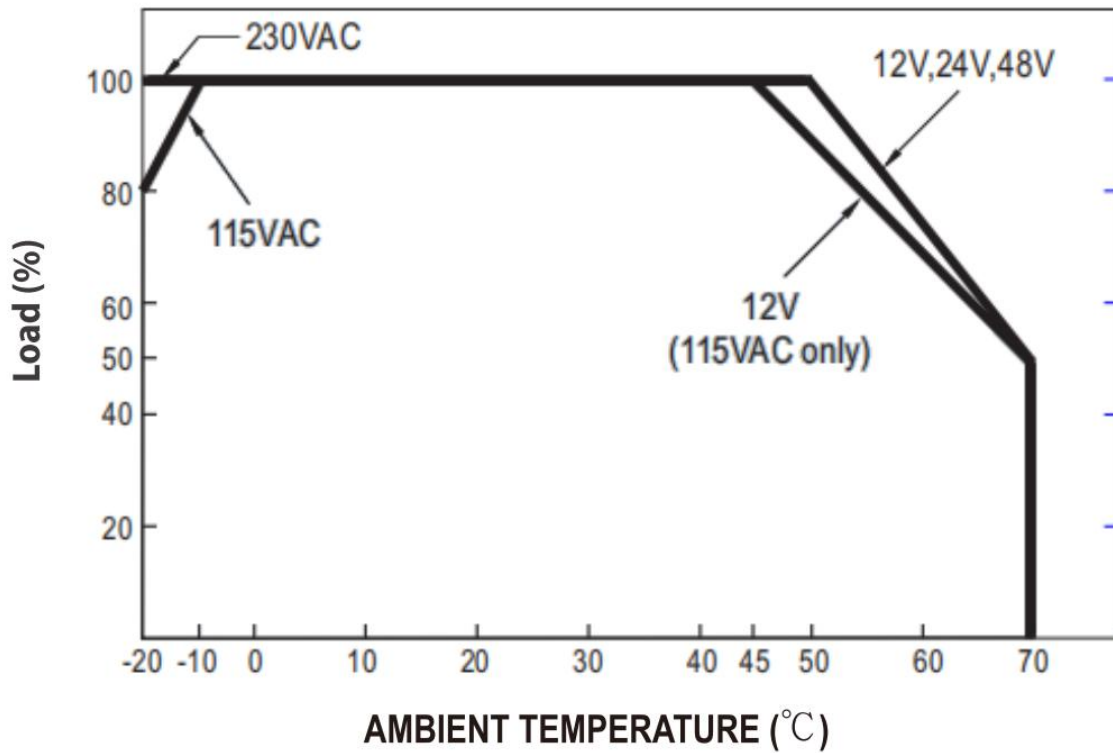
**Input**

No.	Description
1	FG ⊕
2	AC/N
3	AC/L

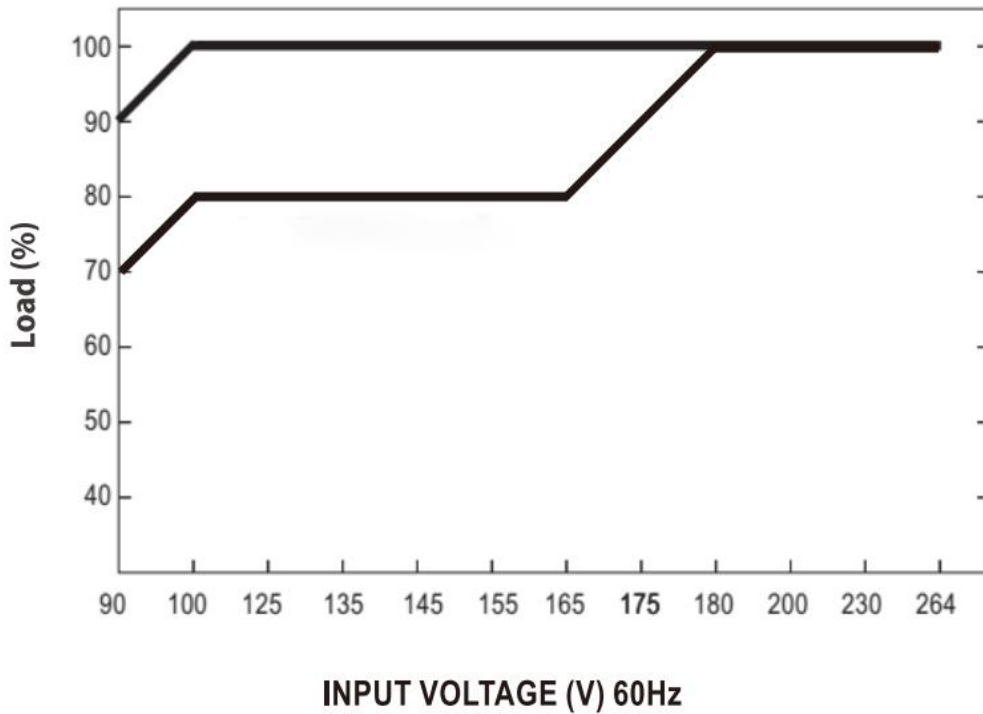
**Output**

No.	Description
1,2	DC OUTPUT -V
3,4	DC OUTPUT +V

### Deduction Curve and Temperature



### Minus Output and Input Voltage Curve



## Ordering Information

<b>Din Rail Industrial Power Adapter Series(90-264VAC Input, Din Mounted)</b>		
STI-PA-15W-5V3A	5VDC Output, 3A, 15W, Plastic Case	<b>20W Series</b>
STI-PA-20W-12V1.67A	12VDC Output, 1.67A, 20W, Plastic Case	
STI-PA-20W-15V1.34A	15VDC Output, 1.34A, 20W, Plastic Case	
STI-PA-20W-24V0.83A	24VDC Output, 0.83A, 20W, Plastic Case	
STI-PA-24W-12V2A	12VDC Output, 2A, 24W, Plastic Case	
STI-PA-24W-24V1A	24VDC Output, 1A, 24W, Plastic Case	
STI-PA-75W-12V6.3A	12VDC Output, 6.3A, 75W, Metal Case	<b>75W Series</b>
STI-PA-75W-24V3.2A	24VDC Output, 3.2A, 75W, Metal Case	
STI-PA-75W-48V1.56A	48VDC Output, 1.56A, 75W, Metal Case	
STI-PA-120W-12V10A	12VDC Output, 10A, 120W, Metal Case	<b>120W Series</b>
STI-PA-120W-24V5A	24VDC Output, 5A, 120W, Metal Case	
STI-PA-120W-48V2.5A	48VDC Output, 2.5A, 120W, Metal Case	
STI-PA-150W-24V6.25A	24VDC Output, 6.25A, 150W, Metal Case	
STI-PA-240W-24V10A	24VDC Output, 10A, 240W, Metal Case	<b>240W Series</b>
STI-PA-240W-48V5A	48VDC Output, 5A, 240W, Metal Case	
STI-PA-480W-24V20A	24VDC Output, 20A, 480W, Metal Case	<b>480W Series</b>
STI-PA-480W-48V10A	48VDC Output, 10A, 480W, Metal Case	

### Note

1. All the supplied items are neutral (WITHOUT LOGO and MODEL NAME) unless there is a customization requirement.
2. Support customization and this service involves extra cost.  
It is usually about putting customer's logo and model name on the front PVC mask.  
It is suggested to test neutral devices and discuss customization when testing result turns out suitable.
3. SKD service is available.

## FAQ

### ● Leadtime

1. Production time is usually 5~7 working days for standard(non-customized) models (no more than 50pcs).
2. Shipping time is usually 4~7 days by air
3. In total, it takes 10~15 days for a client to receive the order.

### ● Shipment

1. We will send the goods by air(DHL, UPS or FEDEX) or by sea(for bulk order)
2. It is fine to ship purchased items via customer's shipping account or forwarder.

### ● MOQ

1. 1 Pc/Pair(It is NOT free, Saga Telecom do NOT do FREE SAMPLES)
2. It is fine to have sample testing before bulk order, but 1 Pc/Pair is ONLY about sample testing.
3. When testing proves fine, MOQ is 20pcs(discussion is required if it is about smaller quantity).

### ● Warranty

1. 1 year for commercial models(STC series) and 3 years for industrial models(STI series)
2. Please kindly refer to the "Warranty Policy" for more information.
3. Technical assistance is always available

### ● Payment

1. T/T transfer and PayPal, FULL AMOUNT BEFORE SHIPMENT.
2. It is fine to pay 50% first and another 50% before shipment for bulk order.
3. It is fine to be paid via customer's forwarder(this is usually about RMB payment).

### ● Transaction cost

1. It is standard charge 25usd for EACH T/T transfer whatever the invoice value is.
2. It is 5usd for every 100usd to PayPal a/c, this ratio is standard charge by PayPal

### ● RMA

1. Please contact us ASAP once there is any problem(package or usage)with the supplied products.
2. For every 100pcs, there will be 2 extra free units(2% RMA) against immediate warranty coverage.
3. This rule stands for all Saga Telecom models and even there is not an after-sales issue.

(1) If it is about missing/faulty parts in the packing box.

Please simply use the extra units for the replacement and let us know this problem(we will improve).

(2) If it is about usage problem.

Saga Telecom will provide technical support and send new units when necessary.

### ● OEM

1. Supported, but discussion is required if it is about complex requirements.
2. Below are usual OEM services available.
  - (1) Show client's logo/model on the device/label/management interface...
  - (2) Use client's packing box
  - (3) Design client's product PVC sticker
  - (4) Customize some parts of a model like rear panel/power input terminal block...

Please know that there might be extra cost for OEM services.

## After-sales support

Warranty comes in effect from the date of delivery.

If something is wrong with the package or usage, please let us know asap.

### Case 1, package problem

Any faulty/missing parts in the packing box, Saga Telecom will help do the replacement or refund.

### Case 2, usage problem

The standard and most effective procedures(get a feedback form from us) are as below

1, describe what happened, examples as below

- When this problem occurred
- What you did to adjust it like restart the device or change new accessories
- How you use this device like outdoor use for connecting some IP cameras

With this information, Saga Telecom could quickly know what is going on and do trouble-shooting

2, provide as many actual photos/video as possible

Wrong connection or improper use may occur.

In this case, photos and videos are helpful and efficient.

3, prepare necessary and relevant accessories such as SFP module/network cable/patch-cord...

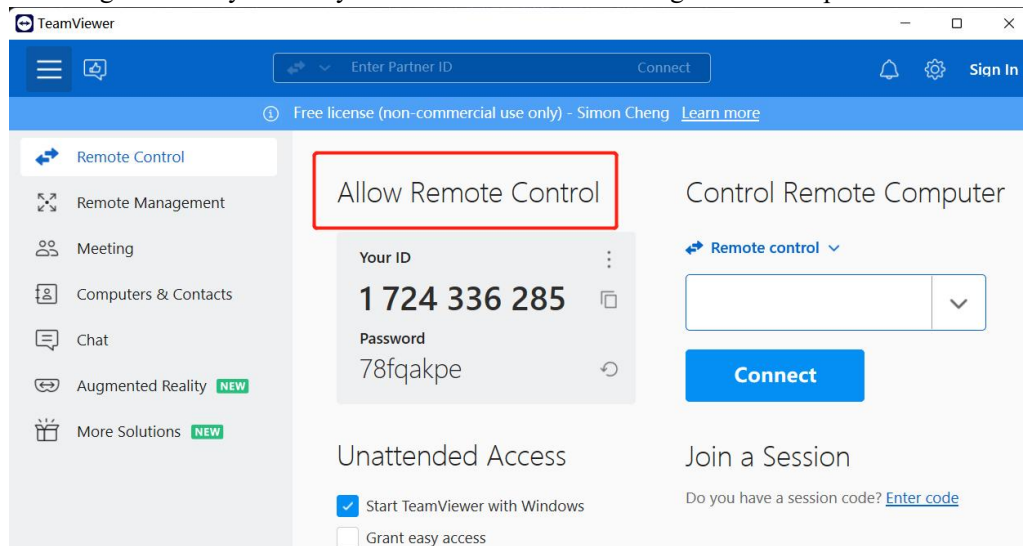
An example is, in a linear network connection, if one SFP module fails, the whole system might have a transmission problem.

The solution would be as simple as replacing a new workable SFP module.

With in-hand accessories, sometimes it is easy to fix the problem.

4, get ready for online meeting

Saga Telecom might remotely control your PC to do trouble-shooting with the help of Teamviewer.



For more information, please talk with us or visit [www.sagatelecom.com.cn](http://www.sagatelecom.com.cn)