

FOSHAN GREAT POWER SUPPLY CO.,LTD

SPECIFICATION FOR APPROVAL

CUSTOMER: _____

DESCRIPTION: PASSIVE POE INJECTOR

OUR MODEL NO: GRT-480625A

SPECIFICATION NO: _____

PRODUCT NO: _____

DATE: 2017-7-28

| APPROVED SIGNATURE | | |
|---------------------------|--------------|--------------|
| DATE: | DATE: | DATE: |

PLEASE RETURN TO US ONE COPY OF “SPECIFICATION FOR APPROVAL”WITH YOUR APPROVED SIGNATURE

ADD : 3/F, 16th, FENGXIANG RD #13, FENGXIANG INDUSTRY PARK DALIANG SHUNDE FOSHAN
GUANGDONG

TEL: (+86)-757-22287982

FAX: (+86) -757-22287919

E-MAIL: FSGREAT@FSGREAT.COM

WEBSITE: WWW.FSGREAT.COM

| | | | | | | |
|-------------|---------------------------|---------|--------------------|------|---------|---|
| CUSTOMER | | PART NO | <u>GRT-480625A</u> | | | |
| MANUFACTURE | FOSHAN GREAT POWER CO LTD | | PAGE | 20F8 | EDITION | A |

Single Port POE Injector Specifications

Table of contents

| | |
|----------------------------------------|-----|
| 1. SCOPE..... | 2 |
| 2. INPUT CHARACTERISTICS..... | 2 |
| 3. OUTPUT CHARACTERISTICS..... | 2-3 |
| 4. PROTECTION REQUIREMENT..... | 4 |
| 5. ENVIRONMENTAL REQUIREMET..... | 4-5 |
| 6. EMC SAFETY AND EMI REQUIREMENT..... | 5 |
| 7. MECHANICAL REQUIREMENT..... | 5-7 |
| 8. LABEL..... | 7 |
| 9. PACKING | 7 |
| 10. INSTALLTION AND NOTICS | 8 |

| | | | | | | |
|-------------|---------------------------|---------|--------------------|------|---------|---|
| CUSTOMER | | PART NO | <u>GRT-480625A</u> | | | |
| MANUFACTURE | FOSHAN GREAT POWER CO LTD | | PAGE | 3OF8 | EDITION | A |

1、SCOPE:

The purpose of the document is to specify the functional requirements of a 48Vdc 0.625A 30Watt Passive Power Over Ethernet power supply, support 10/100/1000Mbps Gigabit Ethernet.

2、INPUT CHARACTERISTICS:

2.1 Input Voltage:

Nominal Voltage: 100-240Vac

Variation Range: 90-264Vac

2.2 Input Frequency:

Nominal Frequency: 50-60Hz

Variation Frequency: 47-63Hz

2.3 Input Current:

2.0Arms max At any input voltage and rated, DC output rated load.

2.4 Inrush Current:

30Amps Max. Cold start at 240Vac input, with rated load and 25°C ambient.

2.5 AC Leakage Current:

3.5mA Max At 240Vac input.

3、OUTPUT CHARACTERISTICS:

3.1 Power Output:

| <u>Voltage</u> | <u>Min. Load</u> | <u>Max. Load</u> | <u>Peak</u> | <u>Output Power</u> |
|----------------|------------------|------------------|-------------|---------------------|
| +48Vdc | 0A | 0.625A | 0.65~0.72A | 32W |

3.2 Combined Load/Line Regulation:

| <u>Voltage</u> | <u>Min. Voltage</u> | <u>Max. Voltage</u> | <u>Line Regulation</u> | <u>Load Regulation</u> |
|----------------|---------------------|---------------------|------------------------|------------------------|
| +48Vdc | 45.60Vdc | 50.6Vdc | ±3% | ±5% |

3.3 Ripple And Noise:

The ripple and noise are as follows when measure with Max. Bandwidth of 20MHz and Parallel 4.7uF/0.1uF, crossed connected at testing point.

| <u>Voltage</u> | <u>Ripple And Noise(Max.)</u> |
|----------------|-------------------------------|
| +48Vdc | 200mVp-p |

| | | | | | | |
|-------------|---------------------------|---------|--------------------|------|---------|---|
| CUSTOMER | | PART NO | <u>GRT-480625A</u> | | | |
| MANUFACTURE | FOSHAN GREAT POWER CO LTD | | PAGE | 4OF8 | EDITION | A |

3.4 Turn On Delay Time:

5 second Max. At 115Vac input and output Max. Load.

3.5 Rise Time:

40mS Max. At 115Vac input and output Max. Load.

3.6 Hold Up Time:

5mS Min. At 115Vac input and output Max. Load.

3.7 Efficiency:

80%Min. At 100Vac input and output Max. Load.

84%Min. At 240Vac input and output Max. Load.

3.8 Overshoot:

15%Max. When power supply at turn on or turn off.

3.9 MTBF: Mean Time Between Failure

30000 operating hours confidence-level when 80% max output load at 25°C

4、 PROTECTION REQUIREMENT:

4.1 Short Circuit Protection:

The power supply will be auto recovered when short circuit faults remove.

4.2 Over current Protection:

The power supply will be auto recovered when over current faults remove.

4.3 Over Voltage Protection

The power supply will not be auto recovered when faults remove.

5、 ENVIRONMENTAL REQUIREMET:

5.1 Operating Temperature:

-10°C to 40°C, Full load Normal operation

5.2 Storage Temperature: -20°C to 85°C (With package).

5.3 Relative Humidity:

5%(0°C) ~ 90%(40°C) RH, 72Hrs, Full load Normal operating.

| | | | | | | |
|-----------------|---------------------------|---------|--------------------|------|---------|---|
| CUSTOMER | | PART NO | GRT-480065A | | | |
| MANUFACTUR E | FOSHAN GREAT POWER CO LTD | | PAGE | 50F8 | EDITION | A |

5.4 Vibration:

1、 Operating: IEC 721-3-3 3M3

5~9Hz, A=1.5mm (9~200Hz, Acceleration 5m/s²)

2、 Transportation: IEC 721-3-2 2M2 5-9Hz, A=3.5mm

9~200Hz, Acceleration=5m/S² 200~500HZ, Acceleration=15m/S²

3、 Axes, 10 cycles per axis

No permanent damage may occur during testing.

The product has to restore its original situation after power off/on.)

5.5 Dropping(Packed): 1 corner, 3 edges, and 6 surfaces, Height: 76cm

6、 SAFETY AND EMC REQUIREMENT AND STANDARD:

6.1 Safety standard:

EN60950 standards / EMC/LVD / FCC Part 15 Class B/ EN55022 Class B/ EN55024
UL/CB/ROHS

6.2 DIELECTRIC STRENGTH):

(Primary to secondary): 1800Vac/5mA/1s.

6.3 Network standard: IEEE802.3af

7、 MECHANICAL REQUIREMENT:

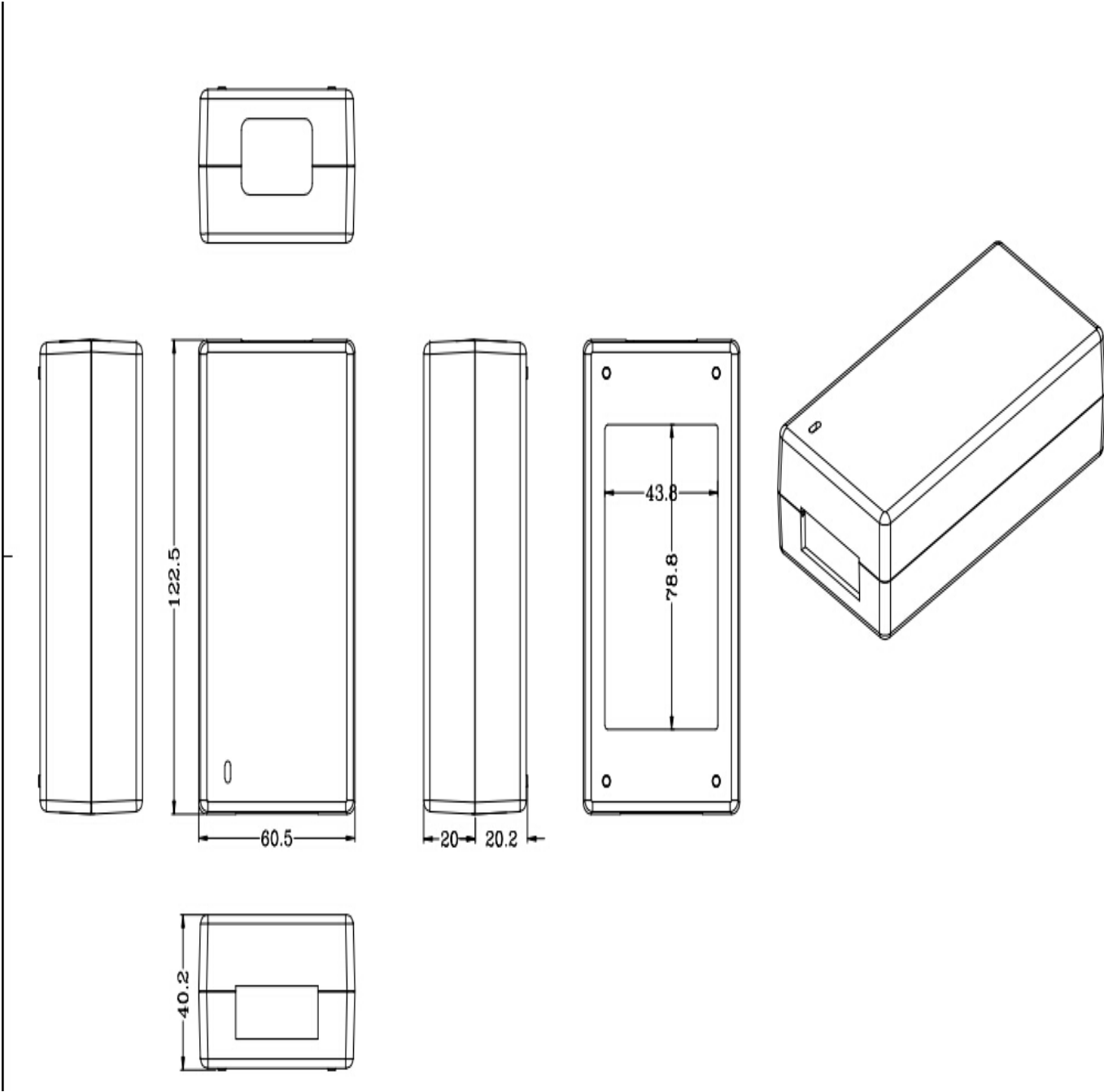
7.1 Enclosure:-----Plastic case

Size: 123 x 61 x 40 mm (L x W x H)



| | | | | | | |
|-------------|---------------------------|---------|--------------------|------|---------|---|
| CUSTOMER | | PART NO | <u>GRT-480625A</u> | | | |
| MANUFACTURE | FOSHAN GREAT POWER CO LTD | | PAGE | 6OF8 | EDITION | A |

7.2 Mechanical drawing



| | | | | | | |
|-------------|---------------------------|---------|--------------------|------|---------|---|
| CUSTOMER | | PART NO | <u>GRT-480065A</u> | | | |
| MANUFACTURE | FOSHAN GREAT POWER CO LTD | | PAGE | 7OF8 | EDITION | A |

7.3 Input & Output Connector:

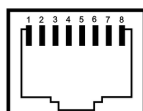
Input AC connector: IEC60320-1/C14 ,3 pins socket

Output connector: 1*RJ45 for POE +1*RJ45 for LAN

*. RJ45 wiring diagram: 10/100/1000Mbps Gigabit Ethernet

Pin assignment: 12/36 & 45/78, 4pairs, 8 lines

| PIN | DATA | DATA&POWER |
|-----|------|--------------|
| 1 | data | Negative out |
| 2 | data | Negative out |
| 3 | data | positive out |
| 4 | data | positive out |
| 5 | data | positive out |
| 6 | data | positive out |
| 7 | data | Negative out |
| 8 | data | Negative out |



8: Label:

Two Label for choice: **Silkscreen label and Laser printing**

Details for Silkscreen label as below:

Black words with white background

Material: PET

Endure heat >110°C

Thickness: 0.12mm; 3*RI±0.1mm; Angle 2.5mm

(Attention please: laser printing is set to default if without special requirements)

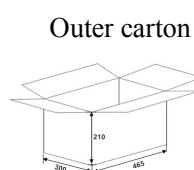
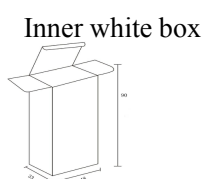
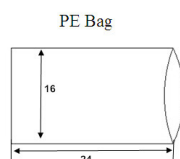
10. Packing Information

Standard: PE bag + inner white box + outer carton

Outer Carton size: 465*300*190mm (L*W*H)

Qty per carton: 50pcs (Estimated 12kgs G.W)

(Above packing information is only valid for adapter body, excluding any cable)



DESIGN:**CHECK:****APPROVAL:**

| | | | | | | |
|--------------|---------------------------|---------|--------------------|------|---------|---|
| CUSTOMER | | PART NO | <u>GRT-480065A</u> | | | |
| MANUFACTURER | FOSHAN GREAT POWER CO LTD | | PAGE | 8OF8 | EDITION | A |

Installation and Test

- ✧ Package Inspection
- ✧ Installation
- ✧ Power test

1 Package Inspection

1. Open the carton to check if all accessories complete
2. Check the Body if any damage, shape, or rust
(If accessories / quantities not as described or any damage during transportation, Please inform us so as to advise the solutions)

2 Installation

- (1) Connect the AC power cable into input socket
- (2) Tighten all cables when connecting, to avoid poor connect and loose

Notes:

- ☐
 1. Remote installing area must be far away the source like as Heat and Electromagnetic interferences,
 2. No corrosive gas and metallic dust
- ☐ 3. Smoothly place when installation, to avoid strenuous vibration)
- ☐ (Check AC input voltage range if within 100-240VAC)
(Avoid friction between POE and others equipments and cause any local damage)

3 Power Test

- (1)
(Check the Input AC input and no Short-circuit by multitmeter; LED indicator turns green if works normally; If power off after several second, there will be short circuit and limited current)
- (2) The LED is on when connect power