

Model:GT-91087

May 11, 2025

## PoE Powered Device (PD) Dc/DC converter providing 5-48Vdc meeting IEEE802.3af

### Information

|              |                                                                                                                                                                                                                                                                                                                                         |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model Number | GT-91087                                                                                                                                                                                                                                                                                                                                |
| Description  | GT-91087, POE PD Module DC/DC, PCB Mounted/DIP, Power Over Ethernet Powered Device Converter (IEEE802.3af PoE PD) Power Supply AC Adaptor, , Input Rating: 36-60 VDC, Pin 1: N/C, Pin 2,3:-V, Pin 4,5: +V, Output Rating: 15.4 Watts, Power rating with convection cooling (W) , 5-24V in 0.1V increments, Approvals: RoHS; China RoHS; |

### Model Picture



### Agency Documents

|                               |                                                                                                                                           |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| CE EC-Declaration             | <a href="https://www.globtek.com/pdf/ec_declaration/a0O30000007P7YrEAK">https://www.globtek.com/pdf/ec_declaration/a0O30000007P7YrEAK</a> |
| RoHS/RoHS2 Declaration        | <a href="https://www.globtek.com/pdf/rohs_cert/a0O30000007P7YrEAK">https://www.globtek.com/pdf/rohs_cert/a0O30000007P7YrEAK</a>           |
| REACH Declaration             | <a href="https://www.globtek.com/pdf/iso_certificates/REACH.pdf">https://www.globtek.com/pdf/iso_certificates/REACH.pdf</a>               |
| Conflict Minerals Declaration | <a href="https://www.globtek.com/pdf/conflict-minerals.pdf">https://www.globtek.com/pdf/conflict-minerals.pdf</a>                         |

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**MODEL PARAMETERS**

|                    |                                                                                           |
|--------------------|-------------------------------------------------------------------------------------------|
| Type               | PCB Mounted/DIP                                                                           |
| Technology         | Power Over Ethernet Powered Device Converter (IEEE802.3af PoE PD) Power Supply AC Adaptor |
| Category           | POE PD Module DC/DC                                                                       |
| Input Voltage      | 36-60 VDC                                                                                 |
| I/P Amps (A)       | 0.5A                                                                                      |
| Wattage (W)        | 15.4                                                                                      |
| Vout Range (V)     | 5-24                                                                                      |
| Efficiency Level   |                                                                                           |
| Ingress Protection |                                                                                           |
| Size (mm)          | 65*18*14                                                                                  |

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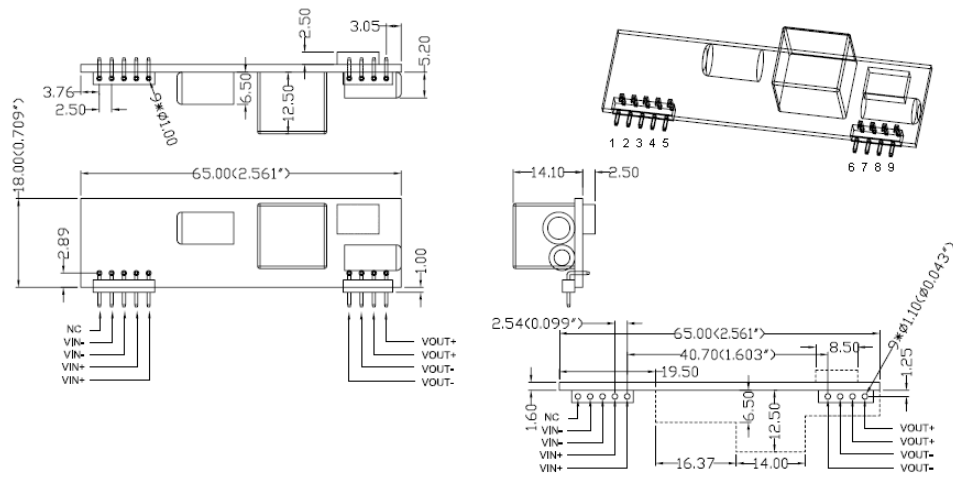
<https://www.globtek.com/ds/7ompti8iVxw/Qgup9PMmXLR.html#datasheet>

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## ENCLOSURE



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## RATING TABLE

| Model Number  | Voltage | Amps(A) | Watts(W) | RFQ                 |
|---------------|---------|---------|----------|---------------------|
| GT-91087-1205 | 5 V     | 2.4     | 12.00    | <a href="#">RFQ</a> |
| GT-91087-1512 | 12 V    | 1.28    | 15.36    | <a href="#">RFQ</a> |
| GT-91087-1513 | 13 V    | 1.18    | 15.34    | <a href="#">RFQ</a> |
| GT-91087-1514 | 14 V    | 1.1     | 15.40    | <a href="#">RFQ</a> |
| GT-91087-1515 | 15 V    | 1.02    | 15.30    | <a href="#">RFQ</a> |
| GT-91087-1516 | 16 V    | 0.96    | 15.36    | <a href="#">RFQ</a> |
| GT-91087-1517 | 17 V    | 0.91    | 15.47    | <a href="#">RFQ</a> |
| GT-91087-1518 | 18 V    | 0.83    | 14.94    | <a href="#">RFQ</a> |
| GT-91087-1519 | 19 V    | 0.81    | 15.39    | <a href="#">RFQ</a> |
| GT-91087-1520 | 20 V    | 0.77    | 15.40    | <a href="#">RFQ</a> |
| GT-91087-1521 | 21 V    | 0.73    | 15.33    | <a href="#">RFQ</a> |
| GT-91087-1522 | 22 V    | 0.7     | 15.40    | <a href="#">RFQ</a> |
| GT-91087-1523 | 23 V    | 0.67    | 15.41    | <a href="#">RFQ</a> |
| GT-91087-1524 | 24 V    | 0.64    | 15.36    | <a href="#">RFQ</a> |

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## SPECIFICATIONS

### A) ELECTRICAL SPECIFICATIONS:

01. DC Input Voltage: 36 – 60V
02. Output Regulation: +/- 5% measured at the output connector
03. Line Voltage Regulation: +/- 0.2% typical measured at the output connector
04. Output Ripple (Vp-p): 1% or 100mV max, measured at 20 MHz bandwidth with 0.1 uf ceramic capacitor in parallel with a low impedance 47 uf electrolytic capacitor connected at the output
05. Switching Frequency: 100 KHz typical
06. Efficiency : 80% typ

### B) PROTECTION

01. Under Voltage Lockout: 30Vdc
02. Short Circuit: Protected unit will auto recover upon removal of fault
03. Current Limiting: 110% to 175% of output rating
04. Thermal: Internally protected against over-temperature conditions

### C) SAFETY & EMC

01. Isolation Voltage : 1000Vdc
02. Isolation Resistance :100M ohms (min)
03. Designed to UL/EN/IEC 60950-1
04. Meet FCC Class B standard
05. Meet EN55022 Class B standard

### D) OTHER:

01. MTBF: 200,000 Hours @ 25°C ambient temperature
02. Operating Temperature: -15°C to 65°C ambient temperature
03. Humidity: 0% to 90% relative humidity
04. Storage Temperature: -40°C to 85°C
05. Cooling: Free air cooling
06. Interoperability: Complies with IEEE 802.3 AF, tested by UNH-iOL
07. Input Set Classification Resistance : 24.9K ohms

### E) ENCLOSURE

01. SIZE : 68\*14\*19 (L\*W\*H)m/m
02. Markings: Label and/or Pad Printed and/or Molded in the case

### F) OPTIONS

01. Tighter output voltage regulation, +/- 2% or +/-3%
02. Reduced Vp-p Output Ripple
03. Custom Output Voltage, in 0.1V increment

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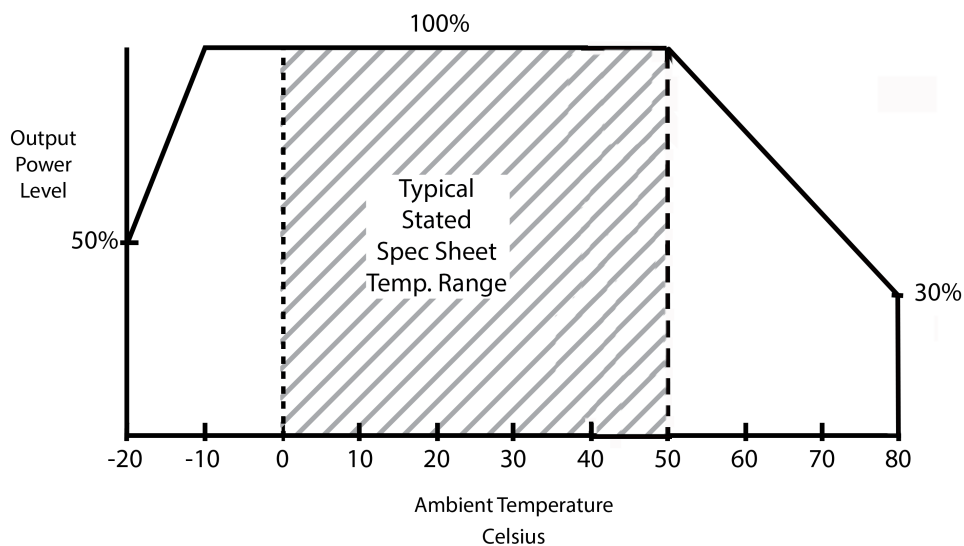
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## DERATING CURVE



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**INPUT CONFIGURATION**

| Description | Pin 1: N/C, Pin 2,3:-V, Pin 4,5: +V |
|-------------|-------------------------------------|
|-------------|-------------------------------------|

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## Approvals

| Logo                                                                              | Description                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | CHINA SJ/T 11364-2014, China RoHS Chart:<br><a href="http://www.globtek.com/pdf/F-GT-DJD-8.4.1-006%20China%20RoHS%20Declaration%205-20-22.pdf">http://www.globtek.com/pdf/F-GT-DJD-8.4.1-006%20China%20RoHS%20Declaration%205-20-22.pdf</a> |
| RoHS                                                                              | Specifications of directive 2011/65/EU Annex VI (ROHS-2) with amendment 2015/863-EU (ROHS-3)<br><a href="http://www.ce-mark.com/Rohs%20final.pdf">http://www.ce-mark.com/Rohs%20final.pdf</a>                                               |