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# BMP
# BOARD MOUNTED POWER SUPPLY

(CATALOG VOL.22)

*SUPLET*® | SHENZHEN SUPLET CO.,LTD

# COMPANY PROFILE

Shenzhen Suplet Co., Ltd. (Suplet for short) is a high-tech company which focuses on developing high-reliability power supplies. Suplet began with developing and manufacturing power supplies in telecommunications. Over 20 years, Suplet has expanded such many fields as telecommunication, intelligent control, data center, electric power, railway, vehicle, new energy and industrial control, benefiting from the great industrial-supporting capacity of  The China Great Bay Area, aggressive abroad markets as well as sufficient talents in technology. Suplet is an excellent supplier of several well-known enterprises and establishes a long-term relation of cooperation.


Taking the market and technology as guide, Suplet has invested significant R&D resources in product development, which is committed to provide highly reliable power solutions and products for customers. Over the years' development, we own:

Facility area of 21,000m$^2$

* 550 employees with about 135 R&D engineers, some technical backbones are from world-famous power enterprises and, in R&D practice, cultivate many engineers at various levels.

* Waveform, SMT production lines, SIP/DIP/SMD package, EMC laboratory and harsh environmental laboratories like high temp/low temp /humidity /drop / vibration

* More than 87 patents with over 30 invention patents

For customization requirements, our substantial basic accumulation is able to swiftly meet unconventional demands. Suplet has developed various power supplies, as follow:

* Rectifier for Telecommunication and Electric Power
* Monitoring and Controller Unit
* Power system with a single cabinet up to 300A
* Server Power Supply
* Board Mounted Power Supply
* Industrial Power Supply
* High Density Power Supply for LED Display
* POE Injector
* Vehicle Power Supply
* Open Frame Power Supply
* Closed and Special Power Supply against Bad Environments
* Solar &Hybrid Power system

and all kinds of customized power supplies across AC/DC, DC/DC and DC/AC, ranging from SIP/DIP/SMD package at chip level to industrial standard cabinet power systems. Together with strong technical reserves and R&D human resources, the fast feedback system provides mechanism guarantees for developing customized power supplies.

# CERTIFICATION

Suplet works strictly in accordance with ISO9001 international quality management system, ISO14001 international environmental management system, ISO45001 occupational health and safety management system and TL9000-H quality system. The products have been certified by 3C/CE/TUV/UL, etc.

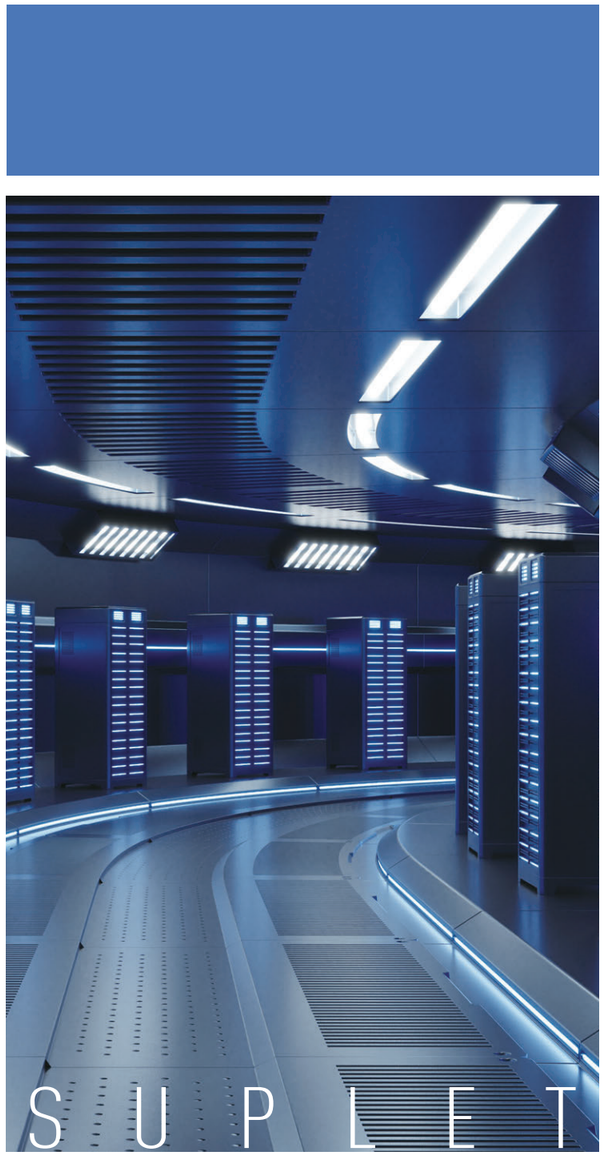


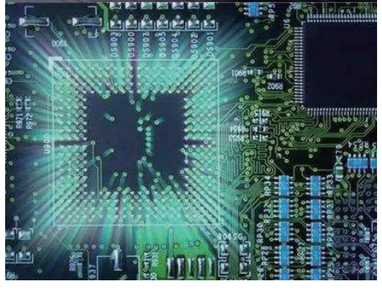




# APPLICATIONS

Facing to telecom, electric power, broadcast&TV, railway, instrument, security and new power energy, Suplet offers power modules and power systems.



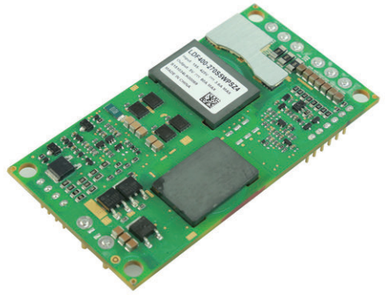
# PRODUCTS AND SERVICE

Suplet Production Lines include power module and embedded power systems. Suplet offers various solutions for global engineers, which promotes faster and more flexible design, and makes the product development easier to be completed.

CONTENTS

## Features

- Industry standard “Full-Brick” footprint
- Up to 80A output current
- High efficiency up to 90%
- Low output ripple and noise
- Excellent thermal performance
- Adjustable output voltage(-20%~+10%Vo)
- IUVP, OVP, OTP,OCP, SCP
- Compliance with RoHS10 EU
- Directive 2011/65/EU & (EU)2015/863



## General Specifications

Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 155-425Vdc |
| Remote Control Note② | Negative (P) |

Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Output over voltage protection | Hiccup mode<br>Automatic recovery |
| Over current protection | Hiccup mode<br>Automatic recovery |
| Short circuit protection | Hiccup mode<br>Automatic recovery |
| Over temperature protection | Hiccup mode<br>Automatic recovery |

Output Characteristic

| Parameter | Specifications |
|---|---|
| Output power Note① | 400W |
| Output voltage Note① | 5Vdc |
| Output voltage precision | ±1% |
| Output voltage trim logic Note② | Positive(S), Negative(Blank) |
| Output voltage adjustment range | -20%~+10%Vo |
| Line regulation | ±0.1% |
| Load regulation | ±0.1% |
| Dynamic response | ±4.0%Vo/150us<br>@50%-75%-50% Io(max.)<br>di/dt=2.5A/μs |
| Ripple and noise | 100mV |

General Characteristic

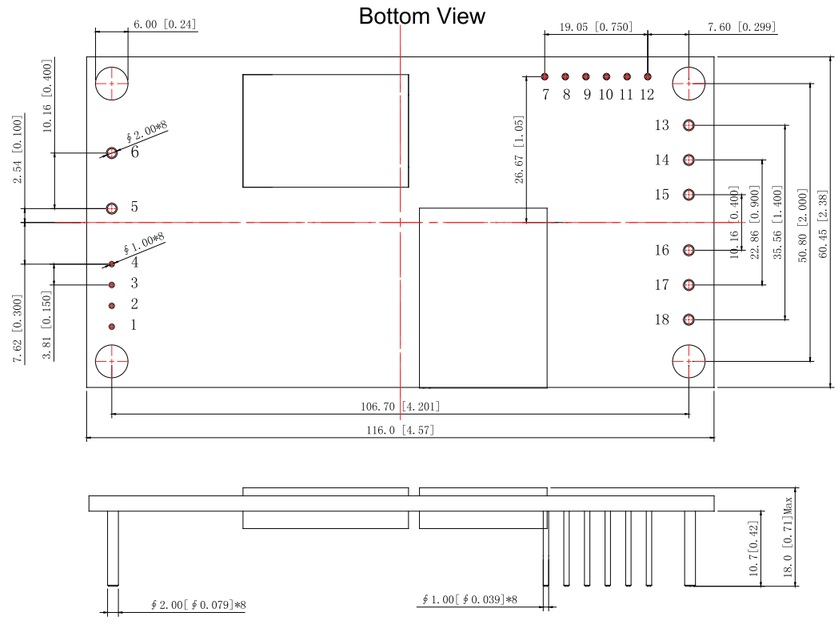
| Parameter | Specifications |
|---|---|
| Efficiency | 90% |
| Operating ambient temperature | -55℃-+100℃ |
| Storage temperature | -65℃-+135℃ |
| Switching Frequency | 250-350kHz |
| Temperature coefficient | 200PPM |
| Isolation voltage | 4250Vdc |
| Isolation resistance | 100MΩ (min.) |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 3.2Mhours Telcordia SR-332 Issue4, 2016, 40℃ |
| Packaging | Through-Hole |

Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules





## Outline Diagram (Unit:mm[inch])




## Pin Designations

| Pin No. | Symbol | Function | Pin No. | Symbol | Function |
|---|---|---|---|---|---|
| 1 | SyncIn | Synchronized input | 10 | Trim | Output voltage trim |
| 2 | SyncOut | Synchronized output | 11 | +S | Positive remote compensate |
| 3 | +REM | Positive remote control | 12 | -S | Negative remote compensate |
| 4 | -REM | Negative remote control | 13 | Vout(-) | Negative output voltage |
| 5 | Vin(+) | Positive input voltage | 14 | Vout(-) | Negative output voltage |
| 6 | Vin(-) | Negative input voltage | 15 | Vout(-) | Negative output voltage |
| 7 | AUX | Auxiliary power supply | 16 | Vout(+) | Positive output voltage |
| 8 | Start Sync | Start synchronization | 17 | Vout(+) | Positive output voltage |
| 9 | Share | Current share | 18 | Vout(+) | Positive output voltage |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| LDF400-270S5WPSZ4 | 155-425Vdc | 5Vdc | 80A | 400W | 90% | Full-Brick |

Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.

## Features

- Industry standard “Full-brick” footprint
- Up to 20A output current
- High efficiency up to 94.5%
- Low output ripple and noise
- Excellent thermal performance
- Adjustable output voltage(-50%~+15%Vo)
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863


## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 36-75Vdc |
| Remote Control Note② | Current control |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Input under voltage protection | Hiccup mode Automatic recovery |
| Over current protection | Hiccup mode Automatic recovery |
| Short circuit protection | Hiccup mode Automatic recovery |
| Over temperature protection | Hiccup mode Automatic recovery |

### Output Characteristic

| Parameter | Specifications |
|---|---|
| IOutput power Note① | 1000W |
| Output voltage Note① | 50Vdc |
| Output voltage precision | ±2% |
| Output voltage trim logic Note② | Positive(S), Negative(Blank) |
| Output voltage adjustment range | -50%~+15%Vo |
| Line regulation | ±0.5% |
| Load regulation | ±0.2% |
| Dynamic response | ±0.75%Vo/150us @25%-50%-25% Io(nom),50%-75%-50% Io(nom),di/dt=2.5A/μs |
| Ripple and noise | 150mV |

### General Characteristic

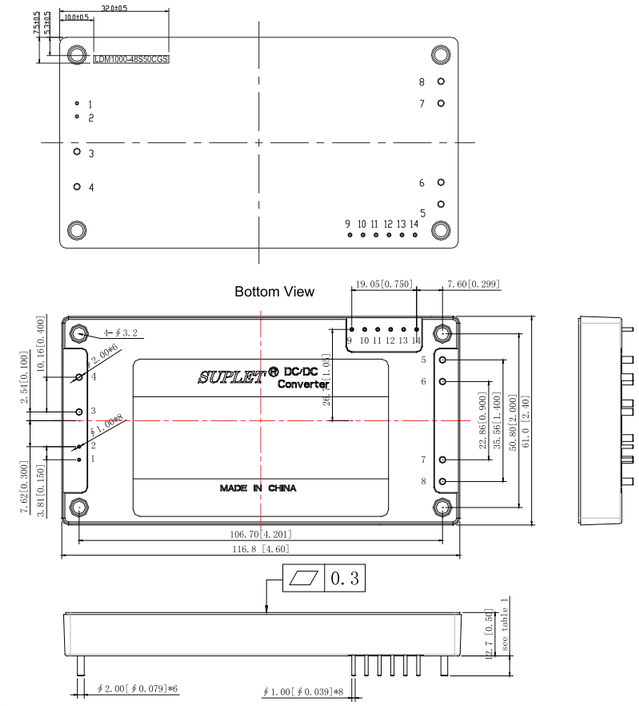
| Parameter | Specifications |
|---|---|
| Efficiency | 94.5% |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching Frequency | 200-280kHz |
| Temperature coefficient | 200PPM |
| Isolation voltage | 1500Vdc |
| Isolation resistance | 10MΩ (min.) |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 3.2Mhours Telcordia SR-332 Issue4, 2016, 40℃ |
| Packaging | Through-Hole |

Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules





## Outline Diagram (Unit:mm[inch])




## Pin Designations

| Pin No. | Symbol | Function | Pin No. | Symbol | Function |
|---|---|---|---|---|---|
| 1 | +REM | Positive remote control | 8 | Vo1 | Positive output voltage |
| 2 | -REM | Negative remote control | 9 | AUX | Auxiliary |
| 3 | +Vin | Positive input voltage | 10 | IOG | Inverter operation good signal |
| 4 | -Vin | Negative input voltage | 11 | NC | No connection |
| 5 | GND | Negative output voltage | 12 | TRIM | Output voltage trim |
| 6 | GND | Negative output voltage | 13 | +S | Positive remote compensation |
| 7 | Vo1 | Positive output voltage | 14 | -S | Negative remote compensation |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| LDM800-48S28CGS | 36-75Vdc | 28Vdc | 28.6A | 800.8W | 94% | Full brick |
| LDM1000-48S50CGS | 36-75Vdc | 50Vdc | 20A | 1000W | 94.5% | Full brick |

Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.

## Features

- Industry standard “Full-Brick” footprint
- Up to 71.5A output current
- High efficiency up to 96%
- Paralleled current sharing
- Excellent thermal performance
- Adjustable output voltage(-20%~+10%Vo)
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863


## General Specifications

Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 400-800Vdc |
| Remote Control | Positive |

Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Output over voltage protection | Hiccup mode<br>Automatic recovery |
| Over current protection | Hiccup mode<br>Automatic recovery |
| Short circuit protection | Hiccup mode<br>Automatic recovery |
| Over temperature protection | Hiccup mode<br>Automatic recovery |

Output Characteristic

| Parameter | Specifications |
|---|---|
| Output power Note① | 2000W |
| Output voltage Note① | 28Vdc |
| Output voltage precision | ±2% |
| Output voltage trim logic | Positive |
| Output voltage adjustment range | -20%~+10%Vo |
| Line regulation | ±0.3% |
| Load regulation | ±0.6% |
| Dynamic response | 800mV/500us<br>@25%-50%-25%, 50%-75%-50%<br>Io(max.) di/dt=0.1A/μs |
| Ripple and noise | 280mV |

General Characteristic

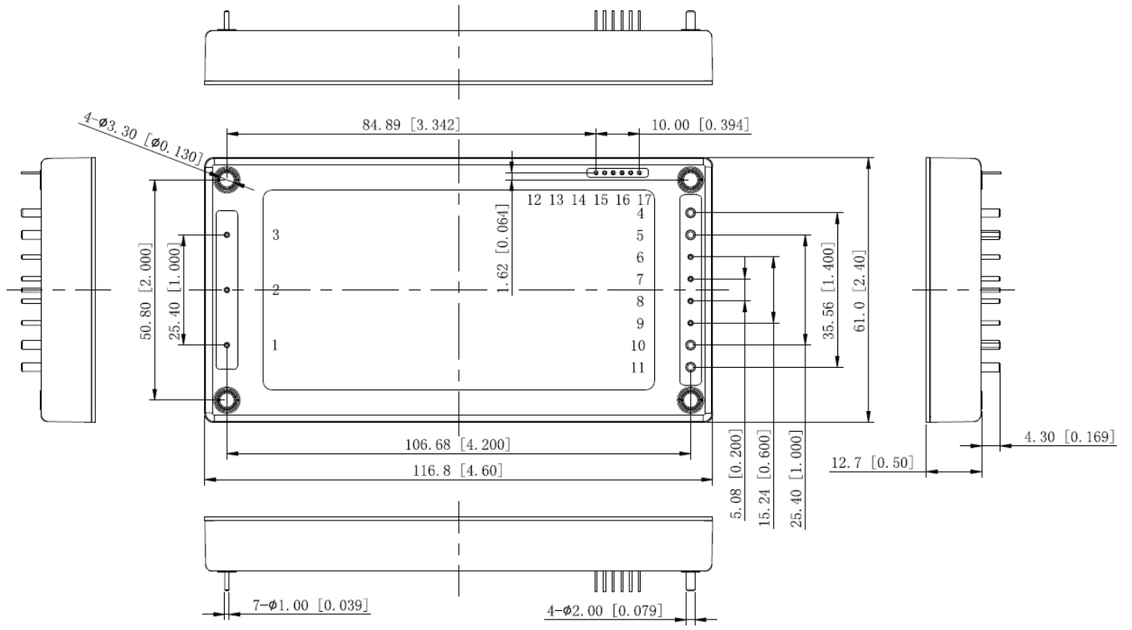
| Parameter | Specifications |
|---|---|
| Efficiency | 96% |
| Operating ambient temperature | -55℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching Frequency | 105kHz |
| Temperature coefficient | 200PPM |
| Isolation voltage | 2250Vdc |
| Isolation resistance | 20MΩ (min.) |
| Safety | Meets IEC60950-1<br>&IEC/UL/EN62368-1 |
| MTBF | 0.5MHours MIL-HDBK-217（80℃） |
| Packaging | Through-Hole |

Note① Refer to order-information list in the following page for specific values of input and output





## Outline Diagram (Unit:mm[inch])




## Pin Designations

| Pin No. | Symbol | Function | Pin No. | Symbol | Function |
|---|---|---|---|---|---|
| 1 | +Vin | Positive input voltage | 10 | +Vo | Positive output voltage |
| 2 | REM | Remote control | 11 | +Vo | Positive output voltage |
| 3 | -Vin | Negative input voltage | 12 | CTRLI | PMBus On/Off |
| 4 | -Vo | Negative output voltage | 13 | ALERT | PMBus Warning |
| 5 | -Vo | Negative output voltage | 14 | ADDR | PMBus Address |
| 6 | -S | Negative remote compensate | 15 | CLK | PMBus Clock |
| 7 | CS/SS | Synchronized Output Startup &Current share | 16 | DATA | PMBus Date |
| 8 | TRIM | Output voltage trim | 17 | GND | PMBus Signal Ground |
| 9 | +S | Positive remote compensate | | | |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| LDK2000-540S28CPS | 400-800 Vdc | 28 Vdc | 71.5A | 2000W | 96% | Full-Brick |

Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.

# AC/DC Industrial Brick Series

**Output: 300W, 500W**

## Features

- Industrial Brick, metal case box Type package
- Output power is 300W, 500W
- Output voltage options: 12V, 24V, 28V, 48V
- Universal AC input, full range
- Built-in active PFC function
- High efficiency up to 92%
- 4242VDC and reinforce isolation
- Digital communication interface with PMBus
- Meet IEC 60950-1&IEC/UL/EN 62368-1
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863

## General Specifications

| Parameter | Specifications |
|---|---|
| Input voltage Range | 85-288VAC |
| Input Frequency | 45-66Hz |
| PF | >0.95 |
| Hold-up Time | >20ms |
| Protections | IUVP, IOVP, OVP, OCP, OTP, Short Circuit |

| Parameter | | Specifications |
|---|---|---|
| MTBF | | >1,000,000 hrs as per Telcordia SR-332, Issue 4 |
| Operating Temperature | | Refer to the order-information list |
| Isolation Voltage | | I/P-O/P: 4242VDC |
| EMC | CE | EN55032 Class B |
| | RE | |
| Surge | | IEC61000-4-5 |

## Order Information

| Model Number | Input Voltage | Output Voltage/ Output Current | Output Power | Efficiency | Physical Dimensions (L x W x H) | Baseplate Temperature |
|---|---|---|---|---|---|---|
| LAK300-220S12W | 85-288VAC | 12Vdc/25A | 300W | 92% | 110.8x50.8x13.7mm | -40℃~+100℃ |
| LAK500-220S12W | 85-288VAC | 12Vdc/42A | 500W | 92% | 110.8x50.8x13.7mm | -40℃~+100℃ |
| LAK500-220S12W-S | 85-288VAC | 12Vdc/42A | 500W | 92% | 110.8x50.8x13.7mm | -40℃~+100℃ |
| LAK500-220S24W-S | 85-288VAC | 24Vdc/20.83A | 500W | 92% | 110.8x50.8x13.7mm | -40℃~+100℃ |
| LAK500-220S28W-S | 85-288VAC | 28Vdc/17.86A | 500W | 92% | 110.8x50.8x13.7mm | -40℃~+100℃ |
| LAK500-220S48W-S | 85-288VAC | 48Vdc/10.42A | 500W | 92% | 110.8x50.8x13.7mm | -40℃~+100℃ |

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# AC/DC Full Brick Series

**Output: 750W, 800W, 1000W**

## Features

- Full brick, metal case box Type package
- Output power is 750W, 800W, 1000W
- Output voltage options: 12V, 24V, 28V, 30V, 48V, 56V
- Universal AC input voltage range
- Built-in active PFC function
- High efficiency up to 92.5%
- 4242Vdc and reinforce isolation
- Digital communication interface with PMBus
- Meet IEC 60950-1&IEC/UL/EN 62368-1
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863

## General Specifications

| Parameter | Specifications |
|---|---|
| Input voltage Range | 85-288VAC |
| Input Frequency | 45-66Hz |
| PF | >0.95 |
| Hold-up Time | >20ms |
| Protections | IUVP, OVP, OCP, OTP, Short Circuit |

| Parameter | | Specifications |
|---|---|---|
| MTBF | | >1,200,000 hrs as per Telcordia SR-332, Issue 4 |
| Operating Temperature | | Refer to the order-information list |
| Isolation Voltage | | I/P-O/P: 4242VDC |
| EMC | CE | EN55032 Class B |
| | RE | |
| Surge | | IEC61000-4-5 |

## Order Information

| Model Number | Input Voltage | Output Voltage/ Output Current | Output Power | Efficiency | Physical Dimensions (L x W x H) | Baseplate Temperature |
|---|---|---|---|---|---|---|
| LAK750-220S12W | 85-288VAC | 12Vdc/62.5A | 750W | 91.5% | 116.8x61.0x13.3mm | -40℃~+100℃ |
| LAK800-220S24W | 85-288VAC | 24Vdc/33.3A | 800W | 92% | 116.8x61.0x13.3mm | -40℃~+100℃ |
| LAK800-220S28W | 85-288VAC | 28Vdc/28.57A | 800W | 92% | 116.8x61.0x13.3mm | -40℃~+100℃ |
| LAK800-220S30W | 85-288VAC | 30Vdc/26.7A | 800W | 92% | 116.8x61.0x13.3mm | -40℃~+100℃ |
| LAK800-220S48W | 85-288VAC | 48Vdc/16.7A | 800W | 92% | 116.8x61.0x13.3mm | -40℃~+100℃ |
| LAK800-220S56W | 85-288VAC | 56Vdc/14.3A | 800W | 92% | 116.8x61.0x13.3mm | -40℃~+100℃ |
| LAK1000-220S12W | 85-285VAC | 12Vdc/83.3A | 1000W | 92% | 116.8x61.0x13.3mm | -40℃~+100℃ |
| LAK1000-220S24W | 85-285VAC | 24Vdc/41.7 | 1000W | 92.5% | 116.8x61.0x13.3mm | -40℃~+100℃ |
| LAK1000-220S28W | 85-285VAC | 28Vdc/35.7A | 1000W | 92.5% | 116.8x61.0x13.3mm | -40℃~+100℃ |
| LAK1000-220S48W | 85-285VAC | 48Vdc/20.85A | 1000W | 92.5% | 116.8x61.0x13.3mm | -40℃~+100℃ |

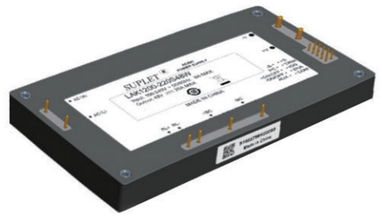
Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.

# AC/DC Great Full Brick Series

**Output: 1200W**

## Features

- Full brick, metal case box Type package
- Output power is 1200W
- Output voltage options: 24V, 48V
- Universal AC input
- Built-in active PFC function
- High efficiency up to 94%
- 4242Vdc and reinforce isolation
- Digital communication interface with PMBus
- Meet IEC 60950-1&IEC/UL/EN 62368-1
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863



## General Specifications

| Parameter | Specifications |
|---|---|
| Input voltage Range | 85-285VAC |
| Input Frequency | 45-66Hz |
| PF | >0.95 |
| Hold-up Time | >20ms |
| Protections | IUVP, OVP, OCP, OTP, Short Circuit |

| Parameter | | Specifications |
|---|---|---|
| MTBF | | >1,200,000 hrs as per Telcordia SR-332, Issue 4 |
| Operating Temperature | | Refer to the order-information list |
| Isolation Voltage | | I/P-O/P: 4242VDC |
| EMC | CE | EN55032 Class B |
| | RE | |
| Surge | | IEC61000-4-5 |

## Order Information

| Model Number | Input Voltage | Output Voltage/ Output Current | Output Power | Efficiency | Physical Dimensions (L x W x H) | Baseplate Temperature |
|---|---|---|---|---|---|---|
| LAK1200-220S24W | 85-285VAC | 24Vdc/50A | 1200W | 94% | 122.0x70.0x13.3mm | -40℃~+100℃ |
| LAK1200-220S48W | 85-285VAC | 48Vdc/25A | 1200W | 94% | 122.0x70.0x13.3mm | -40℃~+100℃ |

Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.

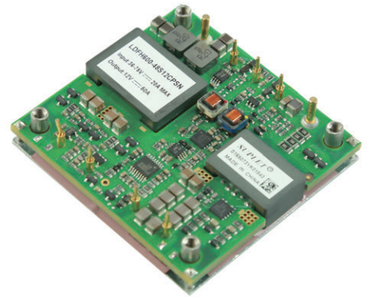


# LDFH Series

**DC-DC Half-Brick Converter**

## Features

- Industry standard “Half-Brick” footprint
- Up to 67A output current
- High efficiency up to 95.5%
- Low output ripple and noise
- Excellent thermal performance
- Adjustable output voltage (-50%~+15%Vo)
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863



## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 16-36Vdc |
| | 18-36Vdc |
| | 36-75Vdc |
| | 16-40Vdc |
| | 155-425Vdc |
| | 200-400Vdc |
| | 230-400Vdc |
| | 240-280Vdc |
| Remote Control Note② | Positive (Blank), Negative (P) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Output over voltage protection | Hiccup mode Automatic recover |
| Over current protection | Hiccup mode Automatic recovery |
| Short circuit protection | Hiccup mode Automatic recovery |
| Over temperature protection | Hiccup mode Automatic recovery |
| Input under voltage protection | Yes |
| Output over voltage protection | Hiccup mode Automatic recovery |

### Output Characteristic

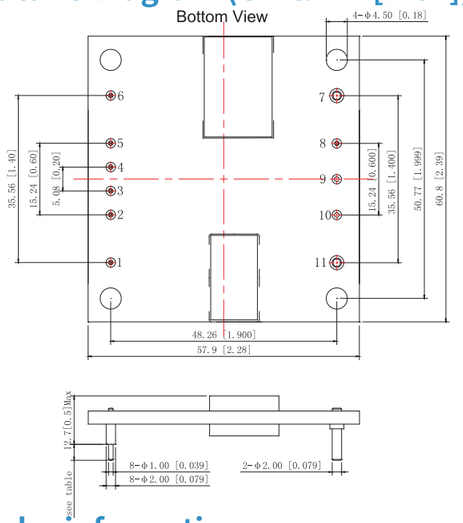
| Parameter | Specifications |
|---|---|
| Output power Note① | 75-1500W |
| Output voltage Note① | 3.3/5//9/10/12/24/28/31/48/50Vdc |
| Output voltage precision | ±3% |
| Output voltage trim logic Note② | Positive (S), Negative ( Blank ) |
| Output voltage adjustment range | -50%~+15%Vo |
| Line regulation | ±0.2% |
| Load regulation | ±0.5% |
| Dynamic response | ±5.0%Vo/250us@25%-50%-75% Io(max.) di/dt=2.5A/μs |
| Ripple and noise | 150mV(typ.) |

### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 95.5%(max.) |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching Frequency | 150-400kHz |
| Temperature coefficient | 200PPM |
| Isolation voltage | 1500Vdc |
| Isolation resistance | 30MΩ (min.) |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 4Mhours Telcordia SR-332 Issue4,2016,40℃ |

Note① Refer to order-information list in the following page for specific values of input and output Note② Refer to the production name rules.

## Outline Diagram (Unit:mm[inch])




## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1 | +Vin | Positive input voltage |
| 2 | REM | Remote control |
| 3 | NP | No pin |
| 4 | Share+ | Positive current share |
| 5 | Share- | Negative current share |
| 6 | -Vin | Negative input voltage |
| 7 | GND | Negative output voltage |
| 8 | -SENSE | Negative remote compensate |
| 9 | TRIM | Output voltage trim |
| 10 | +SENSE | Positive remote compensate |
| 11 | Vo1 | Positive output voltage |

## Order information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| LDFH75-48S5S | 36-75Vdc | 5Vdc | 15A | 75W | 92% | Half-Brick |
| LDFH125-48S3V3SN | 36-75Vdc | 3.3Vdc | 25A | 82.5W | 91% | Half-Brick |
| LDFH300-270S28WPSZ4 | 155-425Vdc | 28Vdc | 10.7A | 300W | 90% | Half-Brick |
| LDFH300-28S5Z4 | 16-36Vdc | 5Vdc | 60A | 300W | 90% | Half-Brick |
| LDFH300-300S5PSZ4 | 200-400Vdc | 5Vdc | 60A | 300W | 89.5% | Half-Brick |
| LDFH300-48S12PSZ4 | 36-75Vdc | 12Vdc | 25A | 300W | 93% | Half-Brick |
| LDFH400-270S10PSZ4 | 240-280Vdc | 10Vdc | 40A | 400W | 93% | Half-Brick |
| LDFH450-48S28CGSZ3 | 36-75Vdc | 28Vdc | 16A | 448W | 94% | Half-Brick |
| LDFH500-24S24WPSZ4 | 16-40Vdc | 24Vdc | 20.8A | 499.2W | 93.5% | Half-Brick |
| LDFH500-24S12PSZ4 | 18-36Vdc | 12Vdc | 42A | 504W | 93.5% | Half-Brick |
| LDFH500-24S28PSZ4 | 18-36Vdc | 28Vdc | 18A | 504W | 94% | Half-Brick |
| LDFH500-48S12PSZ4 | 36-75Vdc | 12Vdc | 42A | 504W | 93.5% | Half-Brick |
| LDFH600-48S12CPSN | 36-75Vdc | 12Vdc | 50A | 600W | 94.5% | Half-Brick |
| LDFH600-48S9PSN | 36-75Vdc | 9Vdc | 67A | 600W | 94% | Half-Brick |
| LDFH1000-270S31PNZ4 | 230-400Vdc | 31Vdc | 32.5A | 1000W | 95.5% | Half-Brick |
| LDFH700-48S28CGSZ3 | 36-75Vdc | 28Vdc | 25A | 700W | 96% | Half-Brick |
| LDFH700-48S50CGSZ3 | 36-75Vdc | 50Vdc | 14A | 700W | 95% | Half-Brick |
| LDFH1000-48S28CGSZ3 | 36-75Vdc | 28Vdc | 36A | 1000W | 96% | Half-Brick |
| LDFH1000-48S50CGSZ3 | 36-75Vdc | 50Vdc | 20A | 1000W | 96% | Half-Brick |
| LDFH1500-48S28CGSZ3 | 36-75Vdc | 28Vdc | 53.5A | 1500W | 96% | Half-Brick |
| LDFH1500-48S50CGSZ3 | 36-75Vdc | 50Vdc | 30A | 1500W | 96% | Half-Brick |

Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- Industry standard “Half-Brick” footprint
- Up to 30A output current
- High efficiency up to 94.5%
- Low output ripple and noise
- Excellent thermal performance
- Adjustable output voltage(-50%~+15%Vo)
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863


## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 18-36Vdc |
| | 36-72Vdc |
| | 36-75Vdc |
| | 66-154Vdc |
| Remote Control Note② | Positive (Blank), Negative (P) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Output over voltage protection | Hiccup mode Automatic recovery |
| Over current protection | Hiccup mode Automatic recovery |
| Short circuit protection | Hiccup mode Automatic recovery |
| Over temperature protection | Hiccup mode Automatic recovery |

### Output Characteristic

| Parameter | Specifications |
|---|---|
| Output power Note① | 75-700W |
| Output voltage Note① | 5/12/15/24/28/48/50Vdc |
| Output voltage precision | ±3% |
| Output voltage trim logic Note② | Positive(S), Negative(Blank) |
| Output voltage adjustment range | -50%~+15%Vo |
| Line regulation | ±0.2% |
| Load regulation | ±0.5% |
| Dynamic response | ±3.0%Vo/250us@25%-50%-75% Io(max.) di/dt=2.5A/μs |
| Ripple and noise | 120mV(typ.) |

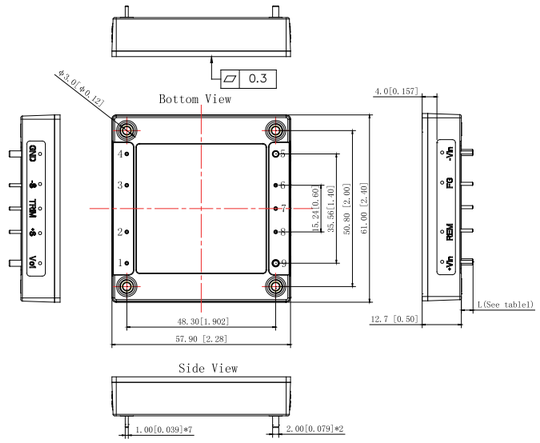
### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 94.5%(max.) |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching Frequency | 200-450kHz |
| Temperature coefficient | 200PPM |
| Isolation voltage | 1500Vdc |
| Isolation resistance | 30MΩ (min.) |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 4Mhours Telcordia SR-332 Issue4,2016,40℃ |
| Packaging | Through-Hole |

Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Outline Diagram (Unit:mm[inch])

LDM500-48S50CGS




## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1 | +Vin | Positive input voltage |
| 2 | RE | Remote control |
| 3 | FG | Case |
| 4 | -Vin | Negative input voltage |
| 5 | GND | Negative output voltage |
| 6 | -SENSE | Negative remote compensate |
| 7 | TRIM | Output voltage trim |
| 8 | +SENSE | Positive remote compensate |
| 9 | Vo1 | Positive output voltage |

## Order information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| LDG75-24S48-107H | 18-36Vdc | 48Vdc | 1.5A | 75W | 89% | Half-Brick |
| LDG100-24S15 | 18-36Vdc | 15Vdc | 6.7A | 100W | 90% | Half-Brick |
| LDG100-24S48 | 18-36Vdc | 48Vdc | 2.1A | 100W | 89% | Half-Brick |
| LDG100-48S12-107H | 36-72Vdc | 12Vdc | 8.3A | 100W | 90% | Half-Brick |
| LDG150-110S24-A | 66-154Vdc | 24Vdc | 6.25A | 150W | 85% | Half-Brick |
| LDG150-48S12 | 36-72Vdc | 12Vdc | 12.5A | 150W | 87% | Half-Brick |
| LDG150-48S15S | 36-72Vdc | 15Vdc | 10A | 150W | 91% | Half-Brick |
| LDM150-48S5 | 36-72Vdc | 5Vdc | 30A | 150W | 88% | Half-Brick |
| LDGH300-48S24PS | 36-72Vdc | 24Vdc | 12.5A | 300W | 87% | Half-Brick |
| LDGH380-24S48S | 18-36Vdc | 48Vdc | 8A | 384W | 91% | Half-Brick |
| LDGH450-48S28GPSZ3 | 36-75Vdc | 28Vdc | 16A | 448W | 94.5% | Half-Brick |
| LDGH450-48S48CGPS | 36-75Vdc | 48Vdc | 9.4A | 450W | 94% | Half-Brick |
| LDM500-48S50CGS | 36-75Vdc | 50Vdc | 10A | 500W | 94.5% | Half-Brick |
| LDM500-48S50GPS | 36-75Vdc | 50Vdc | 10A | 500W | 94.5% | Half-Brick |
| LDM500-48S24CGS | 36-75Vdc | 24Vdc | 21A | 504W | 94.5% | Half-Brick |
| LDGH700-48S28CGSZ3 | 36-75Vdc | 28Vdc | 25A | 700W | 94% | Half-Brick |
| LDGH700-48S28GPSZ3 | 36-75Vdc | 28Vdc | 25A | 700W | 94% | Half-Brick |
| LDGH700-48S50CGSZ3 | 36-75Vdc | 50Vdc | 14A | 700W | 94% | Half-Brick |
| LDGH700-48S50GPSZ3 | 36-75Vdc | 50Vdc | 14A | 700W | 94% | Half-Brick |

Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- Industry standard “Quarter-Brick” Series
- Up to 74A output current
- High efficiency up to 96.8%
- Low output ripple and noise
- Excellent thermal performance
- Adjustable output voltage(-20%~+10%Vo)
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863

## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 18-36Vdc |
| | 16-40Vdc |
| | 18-75Vdc |
| | 36-72Vdc |
| | 36-75Vdc |
| | 40-60Vdc |
| | 48-60Vdc |
| | 49-54Vdc |
| Remote Control Note② | Positive(Blank),Negative(P) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Output over voltage protection | Hiccup mode<br>Automatic recovery |
| Over current protection | Hiccup mode<br>Automatic recovery |
| Short circuit protection | Hiccup mode<br>Automatic recovery |
| Over temperature protection | Hiccup mode<br>Automatic recovery |

### Output Characteristic

| Parameter | Specifications |
|---|---|
| Output power Note① | 45-1000W |
| Output voltage Note① | 1.2/1.5/1.8/3.3/5/10.8/12/24/28/50Vdc |
| Output voltage precision | ±2% |
| Output voltage trim logic Note② | Positive (S), Negative (Blank) |
| Output voltage adjustment range | -20%~+10%Vo |
| Line regulation | ±0.2% |
| Load regulation | ±0.5% |
| Dynamic response | ±3.0%Vo/250us@25%-50%-75% Io(max.) di/dt=2.5A/μs |
| Ripple and noise | 150mV(typ.) |

### General Characteristic

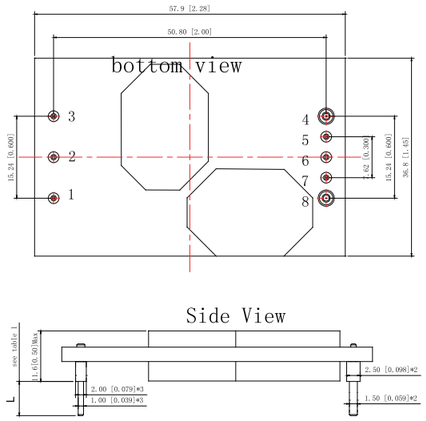
| Parameter | Specifications |
|---|---|
| Efficiency | 96.8%(max.) |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching Frequency | 105-400kHz |
| Temperature coefficient | 200PPM |
| Isolation voltage | 1500Vdc |
| Isolation resistance | 30MΩ (min.) |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 8Mhours Telcordia SR-332 Issue4, 2016, 40℃ |
| Packaging | Through-Hole |

Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Order information (without baseplate)

| MPN | Input voltage | Output Voltage | Output current | Output Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| LDFQ45-48D3V3-1V2PS | 36-75Vdc | 3.3Vdc | 8A | 45W | 83% | Quarter-Brick |
| | | 1.2Vdc | 13A | | | |
| LDFQ45-48D3V3-1V5PS | 36-75Vdc | 3.3Vdc | 8A | 45W | 83% | Quarter-Brick |
| | | 1.5Vdc | 12A | | | |
| LDFQ45-48D3V3-1V8PS | 36-75Vdc | 3.3Vdc | 8A | 45W | 85% | Quarter-Brick |
| | | 1.8Vdc | 10A | | | |
| LDFQ50-24S5 | 18-36Vdc | 5Vdc | 10A | 50W | 90% | Quarter-Brick |
| LDFQ50-24S5C | 18-36Vdc | 5Vdc | 10A | 50W | 90% | Quarter-Brick |
| LDFQ50-24S5PSZ4 | 18-36Vdc | 5Vdc | 10A | 50W | 90% | Quarter-Brick |
| LDFQ50-24S5Z4 | 18-36Vdc | 5Vdc | 10A | 50W | 90% | Quarter-Brick |
| LDFQ65-48D12P | 36-75Vdc | ±12Vdc | 2.7A | 65W | 87% | Quarter-Brick |
| LDFQ100-48S3V3PS | 36-75Vdc | 3.3Vdc | 20A | 66W | 92% | Quarter-Brick |
| LDFQ75-24S5Z4 | 18-36Vdc | 5Vdc | 15A | 75W | 91% | Quarter-Brick |
| LDFQ150-48S3V3 | 36-75Vdc | 3.3Vdc | 30A | 99W | 91% | Quarter-Brick |
| LDFQ100-48S5S | 36-72Vdc | 5Vdc | 20A | 100W | 91% | Quarter-Brick |
| LDFQ175-48S3V3PS | 36-75Vdc | 3.3Vdc | 35A | 115.5W | 91% | Quarter-Brick |
| LDFQ120-28S24PSZ4 | 16-40Vdc | 24Vdc | 5A | 120W | 90% | Quarter-Brick |
| LDFQ200-48S3V3PSN | 36-75Vdc | 3.3Vdc | 40A | 132W | 92.7% | Quarter-Brick |
| LDFQ150-24S15PSZ4 | 18-36Vdc | 15Vdc | 10A | 150W | 91% | Quarter-Brick |
| LDFQ150-24S5PSZ4 | 18-40Vdc | 5Vdc | 30A | 150W | 92% | Quarter-Brick |
| LDFQ150-48S12GPS | 36-75Vdc | 12Vdc | 12.5A | 150W | 94.5% | Quarter-Brick |
| LDFQ250-48S3V3PSN | 36-75Vdc | 3.3Vdc | 50A | 165W | 91.2% | Quarter-Brick |
| LDFQ200-48S12WPS | 18-75Vdc | 12Vdc | 17A | 204W | 94% | Quarter-Brick |
| LDFQ230-48S12WPS | 18-75Vdc | 12Vdc | 19.5A | 230W | 94% | Quarter-Brick |
| LDFQ300-48S12GPNZ2 | 36-75Vdc | 12Vdc | 25A | 300W | 94.5% | Quarter-Brick |
| LDFQ300-48S12GPS | 36-75Vdc | 12Vdc | 25A | 300W | 94.5% | Quarter-Brick |
| LDFQ300-48S12GPSZ1 | 36-75Vdc | 12Vdc | 25A | 300W | 94% | Quarter-Brick |

Outline diagram(without baseplate)




Unit:mm[inch]

## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1 | +Vin | Positive input voltage |
| 2 | REM | Remote control |
| 3 | -Vin | Negative input voltage |
| 4 | GND | Negative output voltage |
| 5 | -SENSE | Negative remote compensation |
| 6 | TRIM | Output voltage trim |
| 7 | +SENSE | Positive remote compensation |
| 8 | Vo1 | Positive output voltage |

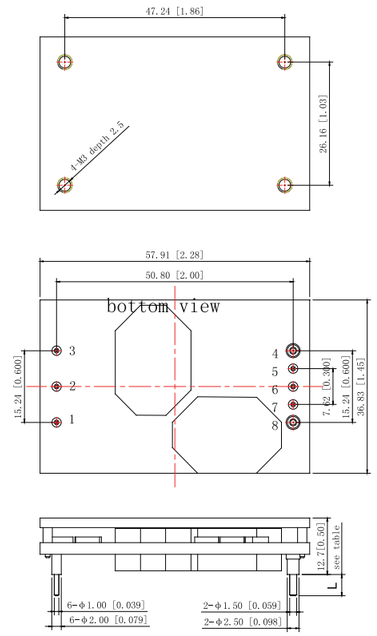




## Order information(with baseplate)

| MPN | Input voltage | Output Voltage | Output current | Output Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| LDFQ75-48S5CPS | 36-75Vdc | 5Vdc | 15A | 75W | 92% | Quarter-Brick |
| LDFQ150-48S3V3WCPS | 18-75Vdc | 3.3Vdc | 30A | 99W | 90% | Quarter-Brick |
| LDFQ100-24S12CS | 18-36Vdc | 12Vdc | 8.33A | 100W | 93% | Quarter-Brick |
| LDFQ100-24S5CPS | 18-36Vdc | 5Vdc | 20A | 100W | 90% | Quarter-Brick |
| LDFQ100-48S5CPS | 36-75Vdc | 5Vdc | 20A | 100W | 91% | Quarter-Brick |
| LDFQ100-24S5CS | 18-36Vdc | 5Vdc | 20A | 100W | 90% | Quarter-Brick |
| LDFQ150-24S5CPS | 18-40Vdc | 5Vdc | 30A | 150W | 92% | Quarter-Brick |
| LDFQ150-48S12CGPS | 36-75Vdc | 12Vdc | 12.5A | 150W | 94.5% | Quarter-Brick |
| LDFQ150-48S12CGS | 36-75Vdc | 12Vdc | 12.5A | 150W | 94.5% | Quarter-Brick |
| LDFQ150-48S5CPS | 36-75Vdc | 5Vdc | 30A | 150W | 91% | Quarter-Brick |
| LDFQ200-48S12CPS | 36-75Vdc | 12Vdc | 17A | 200W | 93% | Quarter-Brick |
| LDFQ200-48S12CPSZ2 | 36-75Vdc | 12Vdc | 17A | 200W | 93% | Quarter-Brick |
| LDFQ200-48S12WCPS | 18-75Vdc | 12Vdc | 17A | 204W | 94% | Quarter-Brick |
| LDFQ210-48S42CPS | 49-54Vdc | 20-42Vdc | 5A | 210W | 94% | Quarter-Brick |
| | | 5-5.5Vdc | 0.2A | | | |
| LDFQ230-48S12WCS | 18-75Vdc | 12Vdc | 19.5A | 230W | 94% | Quarter-Brick |
| LDFQ250-48S5CGS | 36-75Vdc | 5Vdc | 50A | 250W | 94% | Quarter-Brick |
| LDFQ300-48S5CGPSZ2 | 36-75Vdc | 5Vdc | 60A | 300W | 93.5% | Quarter-Brick |
| LDFQ300-48S5CGS | 36-75Vdc | 5Vdc | 60A | 300W | 93.5% | Quarter-Brick |
| LDFQ420-48S12CS | 36-75Vdc | 12Vdc | 35A | 420W | 95% | Quarter-Brick |
| LDFQ500-48S12CS | 36-75Vdc | 12Vdc | 42A | 500W | 95.8% | Quarter-Brick |
| LDFQ500-48S50CS | 36-75Vdc | 50Vdc | 10A | 500W | 94.5% | Quarter-Brick |
| LDFQ500-48S28CPS | 36-75Vdc | 28Vdc | 18A | 504W | 95% | Quarter-Brick |
| LDFQ500-48S28CS | 36-75Vdc | 28Vdc | 18A | 504W | 95% | Quarter-Brick |
| LDFQ600-48S12CPSN | 36-75Vdc | 12Vdc | 50A | 600W | 95.5% | Quarter-Brick |
| LDFQ600-48S12CS | 36-75Vdc | 12Vdc | 50A | 600W | 96.3% | Quarter-Brick |
| LDFQ700-48S28CS | 36-75Vdc | 28Vdc | 25A | 700W | 96% | Quarter-Brick |
| LDFQ800-48S12CPX1 | 48-60Vdc | 10.8Vdc | 74A | 800W | 96.8% | Quarter-Brick |
| LDFQ800-48S12CPX1Z2 | 48-60Vdc | 10.8Vdc | 74A | 800W | 96.8% | Quarter-Brick |
| LDFQ800-48S12CPX2 | 48-60Vdc | 10.8Vdc | 74A | 800W | 96.8% | Quarter-Brick |

Outline diagram(without baseplate)




Unit:mm[inch]

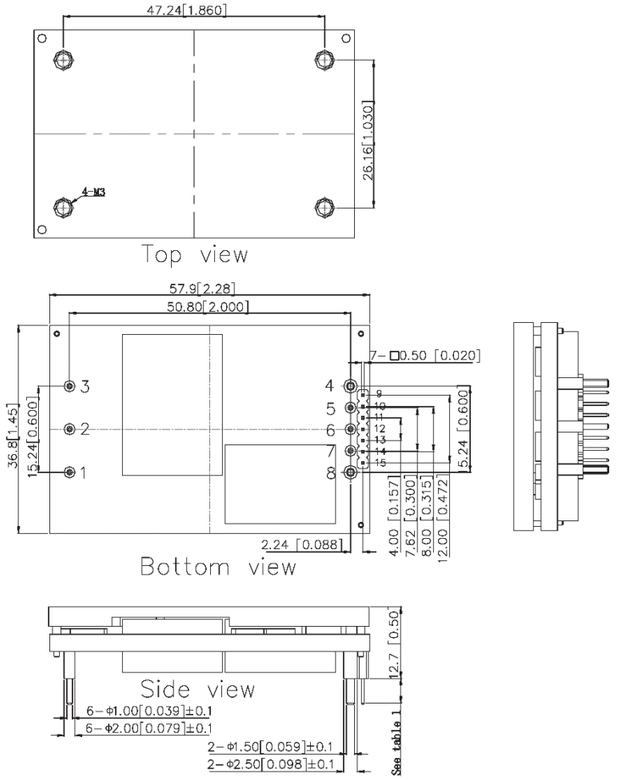
## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1 | +Vin | Positive input voltage |
| 2 | REM | Remote control |
| 3 | -Vin | Negative input voltage |
| 4 | GND | Negative output voltage |
| 5 | -SENSE | Negative remote compensation |
| 6 | TRIM | Output voltage trim |
| 7 | +SENSE | Positive remote compensation |
| 8 | Vo1 | Positive output voltage |

## Order information(With PMBus)

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physica Dimensions |
|---|---|---|---|---|---|---|
| LDFQ900-48S12DCPX1 | 36-75Vdc | 12Vdc | 75A | 900W | 96% | Quarter-Brick |
| LDFQ1000-54S12DCPX1 | 40-60Vdc | 12Vdc | 83.3A | 1000W | 95% | Quarter-Brick |

Outline diagram




Unit:mm[inch]

## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1 | +Vin | Positive input voltage |
| 2 | REM | Remote control |
| 3 | -Vin | Negative input voltage |
| 4 | GND | Negative output voltage |
| 5 | -S | Negative remote compensation |
| 6 | TRIM | Output voltage trim |
| 7 | +S | Positive remote compensation |
| 8 | +Vo1 | Positive output voltage |
| 9 | PG | Power good |
| 10 | SIG_GND | Signal GND |
| 11 | DATA | PMBus data |
| 12 | SMBALERT# | PMBus Alarm |
| 13 | CLOCK | PMBus Clock |
| 14 | AD01 | PMBus Address Pinstrap 01 |
| 15 | AD00 | PMBus Address Pinstrap 00 |

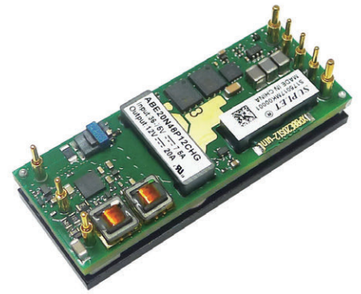
Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- Industry standard “Eighth-Brick” footprint
- Up to 40A output current
- High efficiency up to 94.5%
- Low output ripple and noise
- Excellent thermal performance
- Adjustable output voltage (-20%~+10%Vo)
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863



## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 36-75Vdc |
| Remote Control Note② | Positive(P), Negative (N) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Output over voltage protection | Hiccup mode<br>Automatic recovery |
| Over current protection | Hiccup mode<br>Automatic recovery |
| Short circuit protection | Hiccup mode<br>Automatic recovery |
| Over temperature protection | Hiccup mode<br>Automatic recovery |

### Output Characteristic

| Parameter | Specifications |
|---|---|
| Output power Note① | 200-300W |
| Output voltage Note① | 5/12Vdc |
| Output voltage precision | ±2% |
| Output voltage trim logic Note② | Positive(P), Negative(N) |
| Output voltage adjustment range | -20%~+10%Vo |
| Line regulation | ±0.2% |
| Load regulation | ±0.5% |
| Dynamic response | ±5%Vo/250us@25%-50%-75%<br>Io(max.) di/dt=2.5A/μs |
| Ripple and noise | 100mV(typ.) |

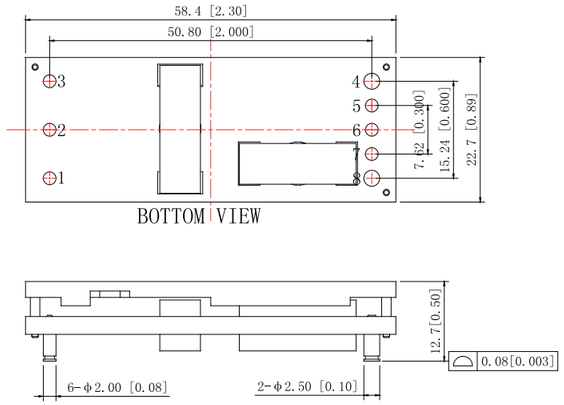
### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 94.5%(max.) |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching Frequency | 150-210kHz |
| Temperature coefficient | 200PPM |
| Isolation voltage | 1500Vdc |
| Isolation resistance | 10MΩ (min.) |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 8Mhours Telcordia SR332<br>Issue 4,2016, 40℃ |
| Packaging | Through-Hole or SMD |

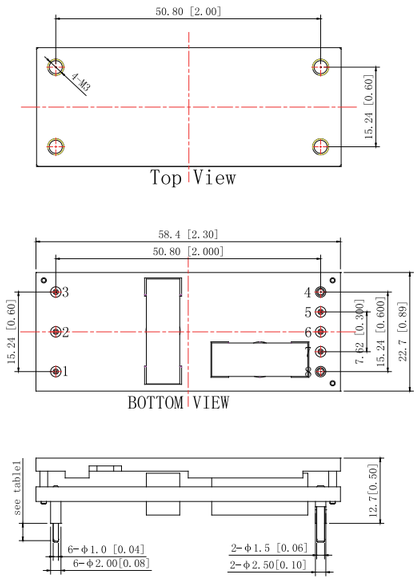
Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Outline Diagram (Unit:mm[inch])

Outline diagram（Surface mounting version）




Outline diagram（Through-hole mounting version）




## Pin Designations

| Pin No. | Symbol | Function | Pin No. | Symbol | Function |
|---|---|---|---|---|---|
| 1 | +Vin | Positive input voltage | 5 | -SENSE | Negative remote compensate |
| 2 | REM | Remote control | 6 | TRIM | Output voltage trim |
| 3 | -Vin | Negative input voltage | 7 | +SENSE | Positive remote compensate |
| 4 | GND | Negative output voltage | 8 | Vo1 | Positive output voltage |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| ABE40N48P5BHG | 36-75Vdc | 5V | 40A | 200W | 94.2% | Eighth-Brick |
| ABE40N48P5CHG | 36-75Vdc | 5V | 40A | 200W | 94.2% | Eighth-Brick |
| ABE40P48P5AHG | 36-75Vdc | 5V | 40A | 200W | 94.2% | Eighth-Brick |
| ABE20N48P12CHG | 36-75Vdc | 12V | 20A | 240W | 94% | Eighth-Brick |
| ABE20N48S12BHG | 36-75Vdc | 12V | 20A | 240W | 94% | Eighth-Brick |
| ABE25P48S12BTG | 36-75Vdc | 12V | 25A | 300W | 94.5% | Eighth-Brick |

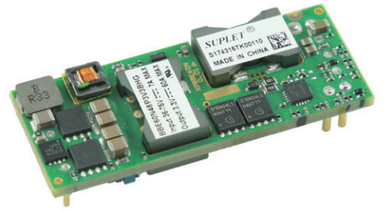
Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- Industry standard “Eighth-Brick” footprint
- Up to 40A output current
- High efficiency up to 94.5%
- Low output ripple and noise
- Excellent thermal performance
- Adjustable output voltage (-20%~+10%Vo)
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863



## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 36-75Vdc |
| | 18-60Vdc |
| Remote Control Note② | Positive(P), Negative (N) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Output over voltage protection | Hiccup mode Automatic recovery |
| Over current protection | Hiccup mode Automatic recovery |
| Short circuit protection | Hiccup mode Automatic recovery |
| Over temperature protection | Hiccup mode Automatic recovery |

### Output Characteristic

| Parameter | Specifications |
|---|---|
| Output power Note① | 72-300W |
| Output voltage Note① | 2.5/3.3/5/12Vdc |
| Output voltage precision | ±2% |
| Output voltage trim logic Note② | Positive(P), Negative(N) |
| Output voltage adjustment range | -20%~+10%Vo |
| Line regulation | ±0.2% |
| Load regulation | ±0.5% |
| Dynamic response | ±5%Vo/250us@25%-50%-75% Io(max.) di/dt=2.5A/μs |
| Ripple and noise | 100mV(typ.) |

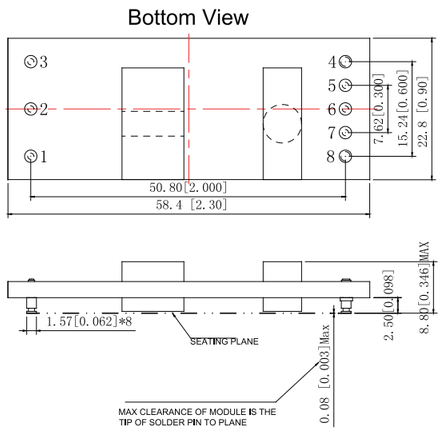
### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 94.5%(max.) |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching Frequency | 110-420kHz |
| Temperature coefficient | 200PPM |
| Isolation voltage | 1500Vdc |
| Isolation resistance | 10MΩ (min.) |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 8Mhours Telcordia SR332 Issue 4,2016, 40℃ |
| Packaging | Through-Hole or SMD |

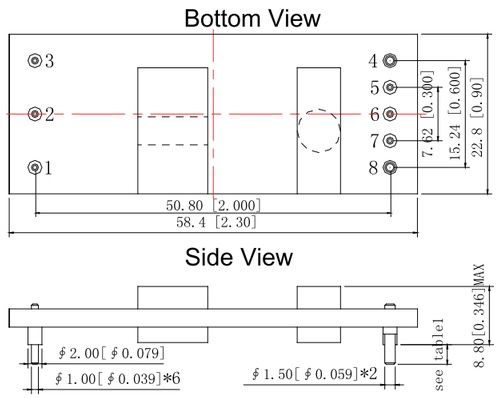
Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Outline Diagram (Unit:mm[inch])

Outline diagram（Surface mounting version）




Outline diagram（Through-hole mounting version）




## Pin Designations

| Pin No. | Symbol | Function | Pin No. | Symbol | Function |
|---|---|---|---|---|---|
| 1 | +Vin | Positive input voltage | 5 | -SENSE | Negative remote compensate |
| 2 | REM | Remote control | 6 | TRIM | Output voltage trim |
| 3 | -Vin | Negative input voltage | 7 | +SENSE | Positive remote compensate |
| 4 | GND | Negative output voltage | 8 | Vo1 | Positive output voltage |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| BBE6N48P12GSG | 36-75Vdc | 12Vdc | 6A | 72W | 92.5% | 1/8 Brick |
| BBE15N48P5GSG | 36-75Vdc | 5Vdc | 15A | 75W | 92% | 1/8 Brick |
| BBE20N48P5GSG | 36-75Vdc | 5Vdc | 20A | 100W | 92% | 1/8 Brick |
| BBE35N48P3V3BHGW | 18-60Vdc | 3.3Vdc | 35A | 115.5W | 92.5% | 1/8 Brick |
| BBE30N48P5CHG | 36-75Vdc | 5Vdc | 30A | 150W | 92% | 1/8 Brick |
| BBE60N48P3V3BHG | 36-75Vdc | 3.3Vdc | 60A | 198W | 93.5% | 1/8 Brick |
| BBE60N48P2V5BHG | 36-75Vdc | 2.5 Vdc | 60A | 150 | 92% | 1/8 Brick |
| BBE40N48P5GSG | 36-75Vdc | 5Vdc | 40A | 200W | 94.2% | 1/8 Brick |
| BBE20N48P12BHG | 36-75Vdc | 12Vdc | 20A | 240W | 94% | 1/8 Brick |
| BBE25N48S12CTGB | 36-75Vdc | 12Vdc | 25A | 300W | 94.5% | 1/8 Brick |
| BBE25N48S12BHG | 36-75Vdc | 12Vdc | 25 | 300W | 94.5% | 1/8 Brick |

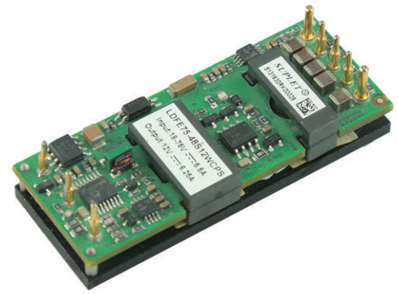
Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- Industry standard “Eighth-Brick” footprint
- Up to 30A output current
- High efficiency up to 95%
- Low output ripple and noise
- Excellent thermal performance
- Adjustable output voltage(-20%~+10%Vo)
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863



## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 36-75Vdc |
| | 18-60Vdc |
| | 18-36Vdc |
| | 18-75Vdc |
| | -57--26Vdc |
| Remote Control Note② | Positive(Blank),Negative(P) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Output over voltage protection | Hiccup mode Automatic recovery |
| Over current protection | Hiccup mode Automatic recovery |
| Short circuit protection | Hiccup mode Automatic recovery |
| Over temperature protection | Hiccup mode Automatic recovery |
| Input under voltage protection | Yes |

### Output Characteristic

| Parameter | Specifications |
|---|---|
| Output power Note① | 33-300W |
| Output voltage Note① | 3.3/5/6/12/24/28/50Vdc |
| Output voltage precision | ±2% |
| Output voltage trim logic Note② | Positive(S), Negative(Blank) |
| Output voltage adjustment range | -20%~+10%Vo |
| Line regulation | ±0.2% |
| Load regulation | ±0.5% |
| Dynamic response | ±5%Vo/250us@25%-50%-75% Io(max.) di/dt=2.5A/μs |
| Ripple and noise | 100mV(typ.) |

### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 94%(max.) |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching Frequency | 202-390kHz |
| Temperature coefficient | 200PPM |
| Isolation voltage | 1500Vdc |
| Isolation resistance | 10MΩ (min.) |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 8Mhours Telcordia SR332 Issue 4,2016, 40℃ |

Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

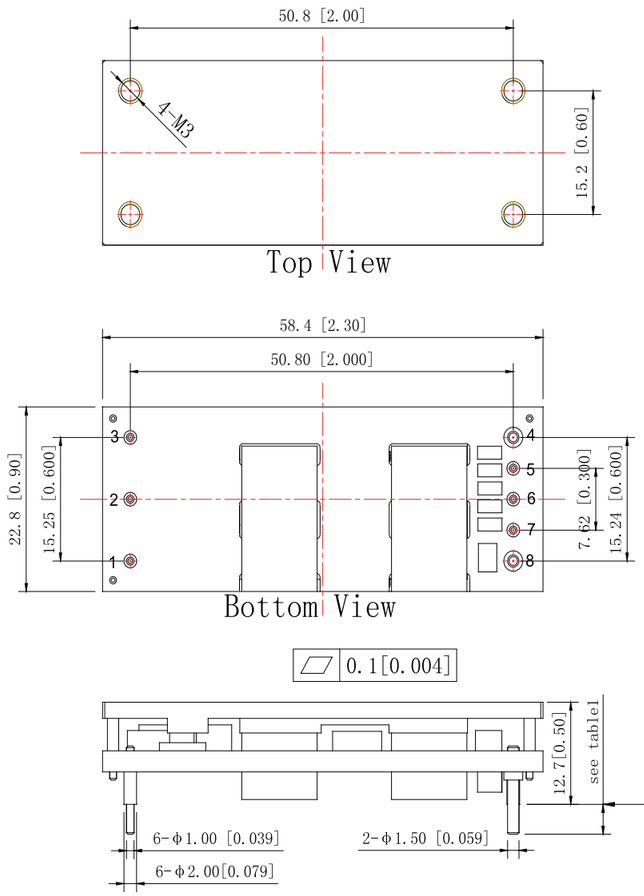
## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency |
|---|---|---|---|---|---|
| LDFE50-48S3V3PS | 36-75Vdc | 3.3Vdc | 10A | 33 | 90% |
| LDFE75-48S3V3PS | 36-75Vdc | 3.3Vdc | 15A | 49.5 | 92% |
| LDFE50-48S12CPS | 36-72Vdc | 12Vdc | 4A | 50 | 89% |
| LDFE50-48S12PS | 36-75Vdc | 12Vdc | 4A | 50 | 91% |
| LDFE50-48S12WPS | 18-60Vdc | 12Vdc | 4A | 50 | 89.5% |
| LDFE50-48S15PS | 36-72Vdc | 15Vdc | 3.5A | 50 | 91% |
| LDFE50-48S5CS | 36-75Vdc | 5Vdc | 10A | 50 | 92% |
| LDFE50-48S5PS | 36-75Vdc | 5Vdc | 10A | 50 | 92% |
| LDFE50-48S55PSZ2 | 36-75Vdc | 55Vdc | 1A | 55 | 90% |
| LDFE100-48S3V3PS | 36-75Vdc | 3.3Vdc | 20A | 66 | 92% |
| LDFE100-48S3V3S | 36-75Vdc | 3.3Vdc | 20A | 66 | 92% |
| LDFE75-48S12CPS | 36-75Vdc | 12Vdc | 6A | 72 | 92.5% |
| LDFE75-48S12PS | 36-75Vdc | 12Vdc | 6A | 72 | 92.5% |
| LDFE75-48S12S | 36-75Vdc | 12Vdc | 6A | 72 | 92.5% |
| LDFE75-24S48PS | 18-36Vdc | 48Vdc | 1.56A | 75 | 91% |
| LDFE75-24S6CPN | 18-36Vdc | 6Vdc | 12.5A | 75 | 92% |
| LDFE75-48S12WCPS | 18-75Vdc | 12Vdc | 6.25A | 75 | 92% |
| LDFE75-48S12WCPSZ2 | 18-75Vdc | 12Vdc | 6.25A | 75 | 92% |
| LDFE75-48S24CPS | 36-75Vdc | 24Vdc | 3.125A | 75 | 92% |
| LDFE75-48S5CPS | 36-75Vdc | 5Vdc | 15A | 75 | 92% |
| LDFE75-48S5PS | 36-75Vdc | 5Vdc | 15A | 75 | 92% |
| LDFE75-48S5PS | 36-75Vdc | 5Vdc | 15A | 75 | 90% |
| LDFE75-48S5S | 36-75Vdc | 5Vdc | 15A | 75 | 92% |
| LDFE75-48S32CPS | -57--26Vdc | 32Vdc | 2.5A | 80 | 90% |
| LDFE100-48S48CPS | 36-75Vdc | 48Vdc | 2A | 96 | 92% |
| LDFE100-48S48PS | 36-75Vdc | 48Vdc | 2A | 96 | 92% |
| LDFE150-48S3V3CS | 36-75Vdc | 3.3Vdc | 30A | 99 | 92% |
| LDFE150-48S3V3PS | 36-75Vdc | 3.3Vdc | 30A | 99 | 91.4% |
| LDFE100-48S5CPS | 36-75Vdc | 5Vdc | 20A | 100 | 92% |
| LDFE100-48S5PS | 36-75Vdc | 5Vdc | 20A | 100 | 92% |
| LDFE120-48S12CPS | 36-75Vdc | 12Vdc | 10A | 120 | 92.5% |
| LDFE120-48S12PS | 36-75Vdc | 12Vdc | 10A | 120 | 92.5% |
| LDFE150-48S5PS | 36-75Vdc | 5Vdc | 30A | 150 | 92% |
| LDFE300-48S28CS | 36-75Vdc | 28Vdc | 11A | 300 | 94% |
| LDFE300-48S50CS | 36-75Vdc | 50Vdc | 6A | 300 | 93.5% |





## Outline Diagram (Unit:mm[inch])



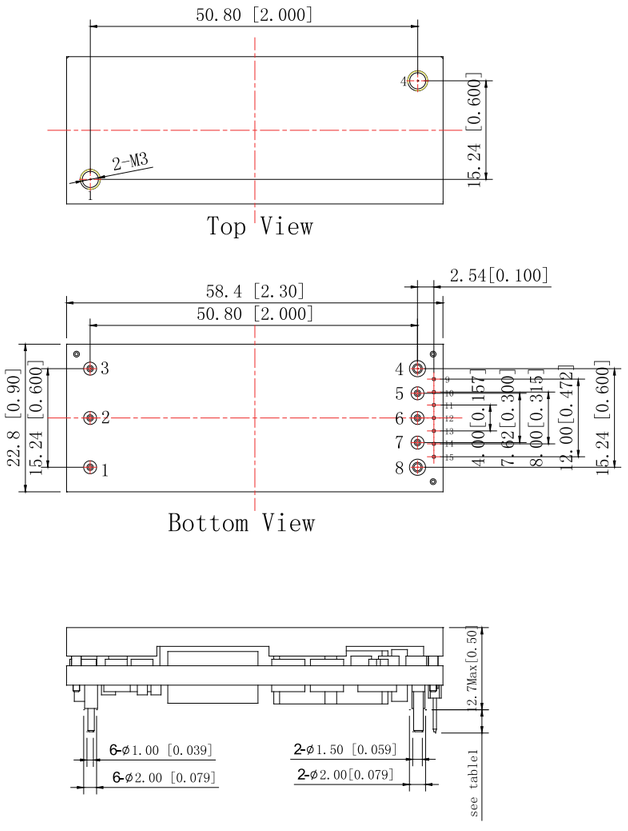

## Pin Designations

| Pin No. | Symbol | Function | Pin No. | Symbol | Function |
|---|---|---|---|---|---|
| 1 | +Vin | Positive input voltage | 5 | -SENSE | Negative remote compensation |
| 2 | REM | Remote control | 6 | TRIM | Output voltage trim |
| 3 | -Vin | Negative input voltage | 7 | +SENSE | Positive remote compensation |
| 4 | GND | Negative output voltage | 8 | Vo1 | Positive output voltage |

## Order information(With PMBus)

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency |
|---|---|---|---|---|---|
| LDFE300-48S12DCPX1 | 36-75Vdc | 12Vdc | 25A | 300W | 95% |
| LDFE400-48S12DCPX1 | 36-75Vdc | 12Vdc | 33.3A | 400W | 95% |
| LDFE450-48S12DCPX1 | 36-75Vdc | 12Vdc | 37.5A | 450W | 95% |
| LDFE600-48S12DCPX1 | 36-75Vdc | 12Vdc | 50A | 600W | 95% |

Outline Diagram (Unit:mm[inch])




## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1 | +Vin | Positive input voltage |
| 2 | REM | Remote control |
| 3 | -Vin | Negative input voltage |
| 4 | GND | Negative output voltage |
| 5 | -S | Negative remote compensation |
| 6 | TRIM | Output voltage trim |
| 7 | +S | Positive remote compensation |
| 8 | +Vo1 | Positive output voltage |
| 9 | PG | Power Good |
| 10 | SIN_GND | Signal GND |
| 11 | DATA | PMBus Data |
| 12 | SMBALERT# | PMBus Alarm |
| 13 | CLOCK | PMBus Clock |
| 14 | AD01 | PMBus Address Pinstrap 01 |
| 15 | AD00 | PMBus Address Pinstrap 00 |

Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- Industry standard “Sixteenth-Brick” footprint
- Up to 20A output current
- High efficiency up to 92.5%
- Low output ripple and noise
- Excellent thermal performance
- Adjustable output voltage(-20%~+10%Vo)
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863

## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 36-75Vdc |
| Remote Control Note② | Positive(P), Negative(N) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Output over voltage protection | Hiccup mode<br>Automatic recovery |
| Over current protection | Hiccup mode<br>Automatic recovery |
| Short circuit protection | Hiccup mode<br>Automatic recovery |
| Over temperature protection | Hiccup mode<br>Automatic recovery |

### Output Characteristic

| Parameter | Specifications |
|---|---|
| Output power Note① | 50-100W |
| Output voltage Note① | 5/12/4.2Vdc |
| Output voltage precision | ±2% |
| Output voltage trim logic Note② | Positive(P),Negative(N) |
| Output voltage adjustment range | -20%~+10%Vo |
| Line regulation | ±0.2% |
| Load regulation | ±0.5% |
| Dynamic response | ±5%Vo/200us@25%-50%-75% Io(max.) di/dt=2.5A/μs |
| Ripple and noise | 80mV |

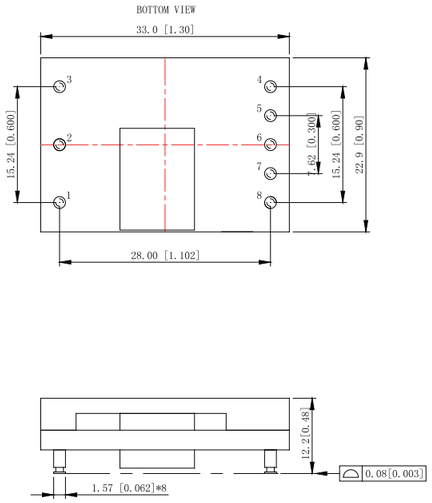
### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 92.5%(max.) |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching Frequency | 250-350kHz |
| Temperature coefficient | 200PPM |
| Isolation voltage | 1500Vdc |
| Isolation resistance | 10MΩ (min.) |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 12Mhours Telcordia SR332 Issue 4, 2016, 40℃ |
| Packaging | Through-Hole or SMD |

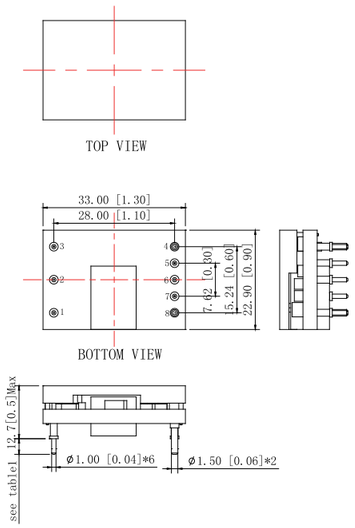
Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Outline Diagram (Unit:mm[inch])

Outline diagram（Surface mounting version）




Outline diagram（Through-hole mounting version）




## Pin Designations

| Pin No. | Symbol | Function | Pin No. | Symbol | Function |
|---|---|---|---|---|---|
| 1 | +Vin | Positive input voltage | 5 | -SENSE | Negative remote compensation |
| 2 | REM | Remote control | 6 | TRIM | Output voltage trim |
| 3 | -Vin | Negative input voltage | 7 | +SENSE | Positive remote compensation |
| 4 | GND | Negative output voltage | 8 | Vo1 | Positive output voltage |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| ABS10N48P5CHG | 36-75Vdc | 5Vdc | 10A | 50W | 90% | Sixteenth-Brick |
| ABS7P48P12IHG | 36-75Vdc | 12Vdc | 7A | 84W | 91% | Sixteenth-Brick |
| ABS17P48P12IHGA | 36-75Vdc | 12Vdc | 17A | 200W | 92.5% | Sixteenth-Brick |
| ABS20N48P5BHGA | 36-75Vdc | 5Vdc | 20A | 100W | 92% | Sixteenth-Brick |
| ABS20N48P5GSGA | 36-75Vdc | 5Vdc | 20A | 100W | 92% | Sixteenth-Brick |
| ABS20P48P5BHGI | 36-75Vdc | 5Vdc | 20A | 100W | 92% | Sixteenth-Brick |
| ABS8N48P12BHGS | 36-75Vdc | 12Vdc | 8.3A | 100W | 92.5% | Sixteenth-Brick |
| ABS30N48P5BHGA | 36-75Vdc | 5Vdc | 30A | 150W | 92% | Sixteenth-Brick |
| ABS30N48P4V2GSGA | 36-75Vdc | 4.2Vdc | 30A | 126W | 90% | Sixteenth-Brick |

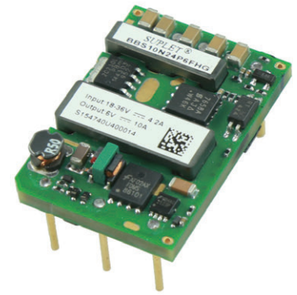
Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- Industry standard “Sixteenth-Brick” footprint
- Up to 25A output current
- High efficiency up to 93.5%
- Low output ripple and noise
- Excellent thermal performance
- Adjustable output voltage(-20%~+10%Vo)
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863



## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 18-36Vdc |
| | 36-75Vdc |
| | 18-75Vdc |
| Remote Control Note② | Positive(P), Negative(N) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Output over voltage protection | Hiccup mode<br>Automatic recovery |
| Over current protection | Hiccup mode<br>Automatic recovery |
| Short circuit protection | Hiccup mode<br>Automatic recovery |
| Over temperature protection | Hiccup mode<br>Automatic recovery |

### Output Characteristic

| Parameter | Specifications |
|---|---|
| Output power Note① | 30-150W |
| Output voltage Note① | 3.3/4/4.2/5/6/12/15/30Vdc |
| Output voltage precision | ±2%Vo |
| Output voltage trim logic Note② | Positive(P),Negative(N) |
| Output voltage adjustment range | -20%~+10%Vo |
| Line regulation | ±0.2% |
| Load regulation | ±0.5% |
| Dynamic response | ±5%Vo/200us@25%-50%-75%<br>Io(max.) di/dt=2.5A/μs |
| Ripple and noise | 80mV |

### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 93.5%(max.) |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching Frequency | 270-400kHz |
| Temperature coefficient | 200PPM |
| Isolation voltage | 1500Vdc |
| Isolation resistance | 10MΩ (min.) |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 12Mhours Telcordia SR-332 Issue4, 2016, 40℃ |
| Packaging | Through-Hole or SMD |

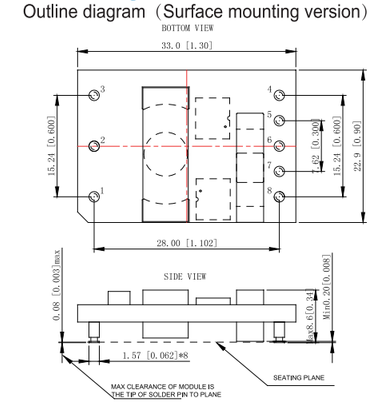
Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Order Information

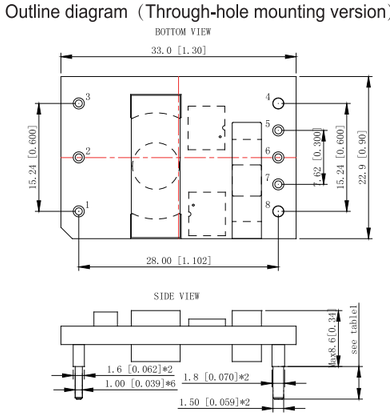
| MPN | Input voltage | Output voltage | Output current | Power | Efficiency |
|---|---|---|---|---|---|
| BBS2N48P12BTG | 36-75Vdc | 12Vdc | 2A | 89% | Sixteenth-Brick |
| BBS2N48P12BHGA | 36-75Vdc | 12Vdc | 2A | 90% | Sixteenth-Brick |
| BBS2N48P15BHG | 36-75Vdc | 15Vdc | 2A | 89% | Sixteenth-Brick |
| BBS10N48P3V3BTG | 36-75Vdc | 3.3Vdc | 10A | 91.5% | Sixteenth-Brick |
| BBS10N48P3V3CTG | 36-75Vdc | 3.3Vdc | 10A | 91.5% | Sixteenth-Brick |
| BBS10N48P3V3GSG | 36-75Vdc | 3.3Vdc | 10A | 91.5% | Sixteenth-Brick |
| BBS3N24P15FHE | 18-36Vdc | 15Vdc | 3A | 88% | Sixteenth-Brick |
| BBS10N48P5BHGW | 18-75Vdc | 5Vdc | 10A | 90% | Sixteenth-Brick |
| BBS10N48P5GSG | 36-75Vdc | 5Vdc | 10A | 90% | Sixteenth-Brick |
| BBS15N48P3V3BHGW | 18-75Vdc | 3.3Vdc | 15A | 90.5% | Sixteenth-Brick |
| BBS15N48P3V3BTG | 36-75Vdc | 3.3Vdc | 15A | 90% | Sixteenth-Brick |
| BBS15N48P3V3GSG | 36-75Vdc | 3.3Vdc | 15A | 90% | Sixteenth-Brick |
| BBS15N48P3V3GSGW | 18-75Vdc | 3.3Vdc | 15A | 90.5% | Sixteenth-Brick |
| BBS4N48P12BTG | 36-75Vdc | 12Vdc | 4.17A | 90% | Sixteenth-Brick |
| BBS12N48P4V2BHGW | 18-75Vdc | 4.2Vdc | 12.5A | 90% | Sixteenth-Brick |
| BBS10N24P6FHE | 18-36Vdc | 6Vdc | 10A | 92.5% | Sixteenth-Brick |
| BBS12N24P5FHE | 18-36Vdc | 5Vdc | 12A | 91.5% | Sixteenth-Brick |
| BBS12N48P5BTG | 36-75Vdc | 5Vdc | 12A | 91% | Sixteenth-Brick |
| BBS12N48P5FHE | 36-75Vdc | 5Vdc | 12A | 89% | Sixteenth-Brick |
| BBS12P48P5BTG | 36-75Vdc | 5Vdc | 12A | 91% | Sixteenth-Brick |
| BBS5N24P12FHE | 18-36Vdc | 12Vdc | 5A | 89% | Sixteenth-Brick |
| BBS20N24P3V3FHE | 18-36Vdc | 3.3Vdc | 20A | 89% | Sixteenth-Brick |
| BBS17N48P5BHG | 36-75Vdc | 5Vdc | 17A | 90% | Sixteenth-Brick |
| BBS25N48P3V3BHG | 36-75Vdc | 3.3Vdc | 25A | 91.5% | Sixteenth-Brick |
| BBS7N48P12BTG | 36-75Vdc | 12Vdc | 7A | 91% | Sixteenth-Brick |
| BBS17N24P5FHE | 18-36Vdc | 5Vdc | 17A | 91.5% | Sixteenth-Brick |
| BBS3N48P30BHGA | 36-75Vdc | 30Vdc | 3A | 93.5% | Sixteenth-Brick |
| BBS8N24P12FHE | 18-36Vdc | 12Vdc | 8A | 89% | Sixteenth-Brick |
| BBS8N48P12BHGA | 36-75Vdc | 12Vdc | 8.3A | 92.5% | Sixteenth-Brick |
| BBS20N48P5BHGA | 36-75Vdc | 5Vdc | 20A | 92% | Sixteenth-Brick |
| BBS8N48P12CHGA | 36-75Vdc | 12Vdc | 8.3A | 92.5% | Sixteenth-Brick |
| BBS25N48P4V2BHGA | 36-75Vdc | 4.2Vdc | 25A | 92% | Sixteenth-Brick |
| BBS30N48P5BHGA | 36-75Vdc | 5Vdc | 30A | 91% | Sixteenth-Brick |
| BBS30N48P4BHGA | 36-75Vdc | 4Vdc | 30A | 92% | Sixteenth-Brick |

## Outline Diagram (Unit:mm[inch])

Outline diagram（Surface mounting version）




Outline diagram（Through-hole mounting version）




## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1 | +Vin | Positive input voltage |
| 2 | REM | Remote control |
| 3 | -Vin | Negative input voltage |
| 4 | GND | Negative output voltage |
| 5 | -SENSE | Negative remote compensation |
| 6 | TRIM | Output voltage trim |
| 7 | +SENSE | Positive remote compensation |
| 8 | Vo1 | Positive output voltage |

Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- Industry standard “Thirty-Second-Brick” footprint
- Up to 5A output current
- High efficiency up to 88%
- Low output ripple and noise
- Excellent thermal performance
- Adjustable output voltage(-20%~+10%Vo)
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863

## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 36-75Vdc |
| Remote Control Note② | Positive(P), Negative(N) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Output over voltage protection | Hiccup mode Automatic recovery |
| Over current protection | Hiccup mode Automatic recovery |
| Short circuit protection | Hiccup mode Automatic recovery |
| Over temperature protection | Hiccup mode Automatic recovery |

### Output Characteristic

| Parameter | Specifications |
|---|---|
| Output power Note① | 25W |
| Output voltage Note① | 3.3/5Vdc |
| Output voltage trim logic Note② | Positive(P),Negative(N) |
| Output voltage precision | ±1% |
| Output voltage adjustment range | -20%~+10%Vo |
| Line regulation | ±0.1% |
| Load regulation | ±0.3% |
| Dynamic response | 150mV/75us@50%-75%-50% di/dt=2.5A/μs |
| Ripple and noise | 50mV |

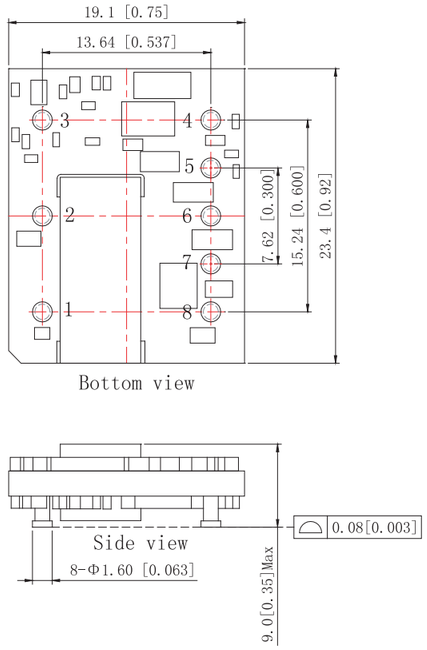
### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 88%(max.) |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching frequency | 450kHz |
| Temperature coefficient | 200PPM |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | Meets Telcordia SR332 Issue 4, 2016, 40℃ |
| Packaging | Through-Hole or SMD |

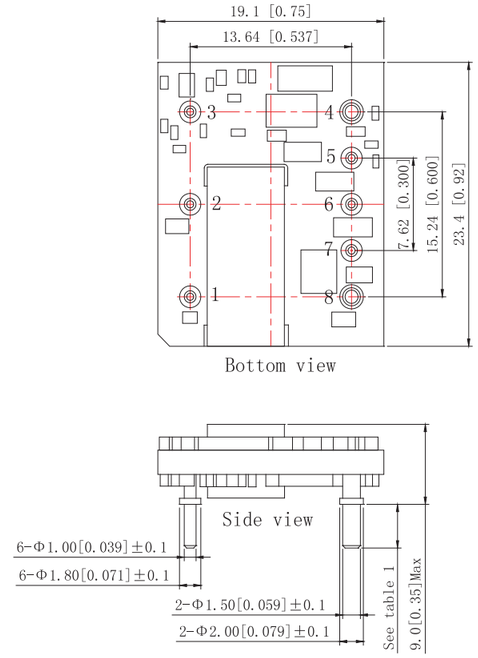
Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Outline Diagram (Unit:mm[inch])

Outline diagram（Surface mounting version）




Outline diagram（Through-hole mounting version）




## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1 | +Vin | Positive input voltage |
| 2 | REM | Remote control |
| 3 | -Vin | Negative input voltage |
| 4 | GND | Negative output voltage |
| 5 | -SENSE | Negative remote compensation |
| 6 | TRIM | Output voltage trim |
| 7 | +SENSE | Positive remote compensation |
| 8 | Vo1 | Positive output voltage |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| BBT5N48P5GSG | 36-75Vdc | 5Vdc | 5A | 25W | 88% | Thirty-Second-Brick |
| BBT7N48P3V3GSG | 36-75Vdc | 3.3Vdc | 7.5A | 25W | 85.5% | Thirty-Second-Brick |
| BBT7N48P3V3BHG | 36-75Vdc | 3.3Vdc | 7.5A | 25W | 85.5% | Thirty-Second-Brick |

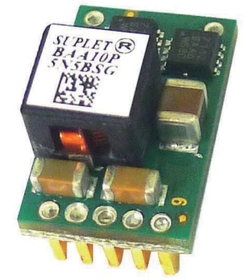
Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- Small size and profile
- Up to 10A output current
- High efficiency up to 93%
- Low output ripple and noise
- Excellent thermal performance
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863




## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 3.0-13.8Vdc |
| Remote Control Note② | Positive(P), Negative (N) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Over current protection | Hiccup mode<br>Automatic recovery |
| Short circuit protection | Hiccup mode<br>Automatic recovery |
| Over temperature protection | Hiccup mode<br>Automatic recovery |

### Output Characteristic

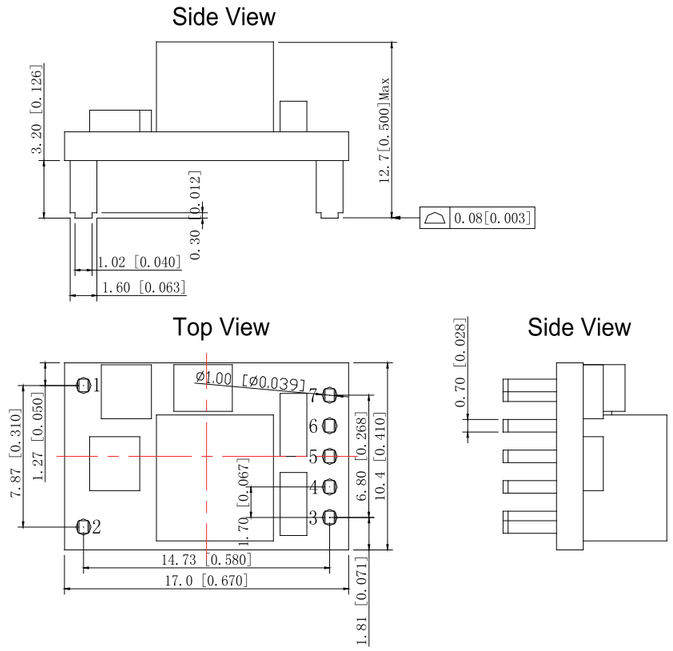
| Parameter | Specifications |
|---|---|
| Output power Note① | 55-108W |
| Output voltage Note① | 3.0-13.8Vdc |
| Output voltage trim logic Note② | Positive(P), Negative(N) |
| Output voltage precision | 1% |
| Line regulation | 30mV |
| Load regulation | 30mV |
| Dynamic response | 55mV/20us@25%~50%Io(nom),<br>di/dt=2.5A/μS. |
| Ripple and noise | 45mV(typ.) |

### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 93% |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching frequency | 620kHz |
| Temperature coefficient | 200PPM |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 20Mhours Telcordia SR332<br>Issue 4, 2016,40℃ |
| Packaging | Through-Hole or SMD |

Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Outline Diagram (Unit:mm[inch])




## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1,2 | NC | Location Pin |
| 3 | TRIM/POWERGOOD | Output voltage |
| | | adjustment/Power good indicator |
| 4 | Vo1 | Positive output voltage |
| 5 | GND | Negative input and output |
| 6 | +Vin | Positive input voltage |
| 7 | REM | Remote control |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| BAA10P5N5BIG | 3.0-13.8Vdc | 0.59-5.1Vdc | 10A | 50W | 93% | 17.00*10.40*8.20mm |
| BAA10P5N5BSG | 3.0-13.8Vdc | 0.59-5.1Vdc | 10A | 50W | 93% | 17.00*10.40*12.70mm |

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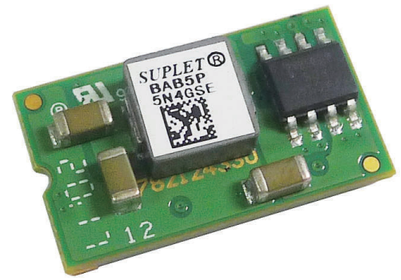
## Features

- Small size and profile
- Up to 5A output current
- High efficiency up to 95%
- Low output ripple and noise
- Excellent thermal performance
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863




## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 3.0-5.8Vdc |
| Remote Control Note② | Positive(P), Negative (N) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Over current protection | Hiccup mode Automatic recovery |
| Short circuit protection | Hiccup mode Automatic recovery |
| Over temperature protection | Hiccup mode Automatic recovery |

### Output Characteristic

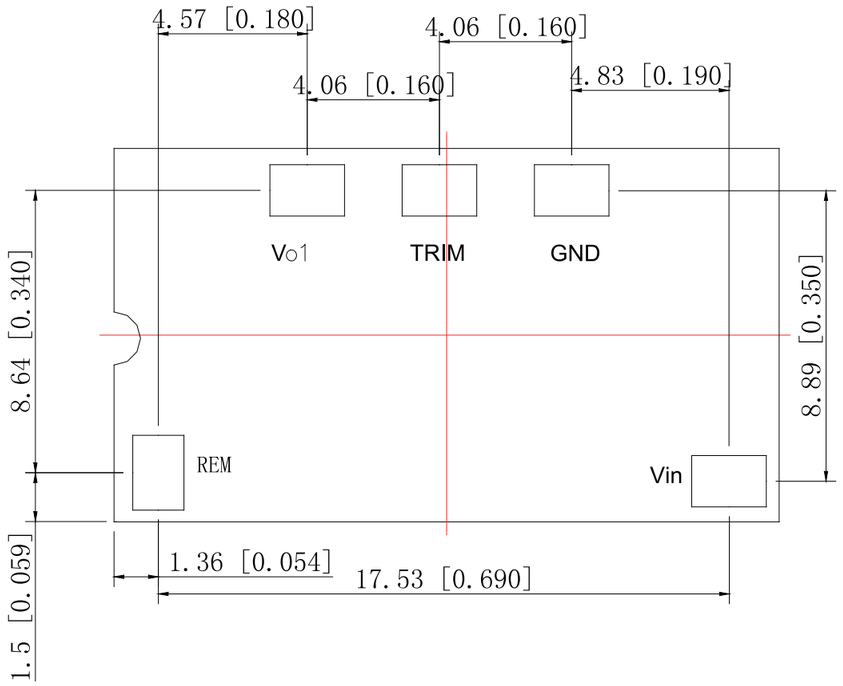
| Parameter | Specifications |
|---|---|
| Output power Note① | 20-275W |
| Output voltage Note① | 3.0-5.8Vdc |
| Output voltage trim logic Note② | Positive(P), Negative(N) |
| Output voltage precision | 3.0% |
| Line regulation | ±0.3% |
| Load regulation | ±0.4% |
| Dynamic response | 130mV/50us@25%~50%~75%Io(nom), di/dt=2.5A/μs |
| Ripple and noise | 25mV(typ.) |

### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 95% |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching frequency | 250-350kHz |
| Temperature coefficient | 200PPM |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 20Mhours Telcordia SR332 Issue 4, 2016,40℃ |
| Packaging | SMD |

Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Outline Diagram (Unit:mm[inch])




## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1 | Vo1 | Positive output voltage |
| 2 | TRIM | Output voltage trim |
| 3 | GND | Negative input and output |
| 4 | +Vin | Positive input voltage |
| 5 | REM | Remote control |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| BAB5P5N4GSE | 3.0-5.8Vdc | 0.75-4.0Vdc | 5A | 20W | 95 | 20.3*11.4*6.1mm |

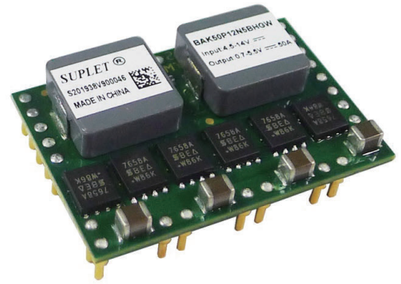
Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- Small size and profile
- Up to 50A output current
- High efficiency up to 95%
- Low output ripple and noise
- Excellent thermal performance
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863



## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 4.5-14Vdc |
| Remote Control Note② | Positive(P), Negative (N) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Over current protection | Hiccup mode<br>Automatic recovery |
| Over temperature protection | Hiccup mode<br>Automatic recovery |

### Output Characteristic

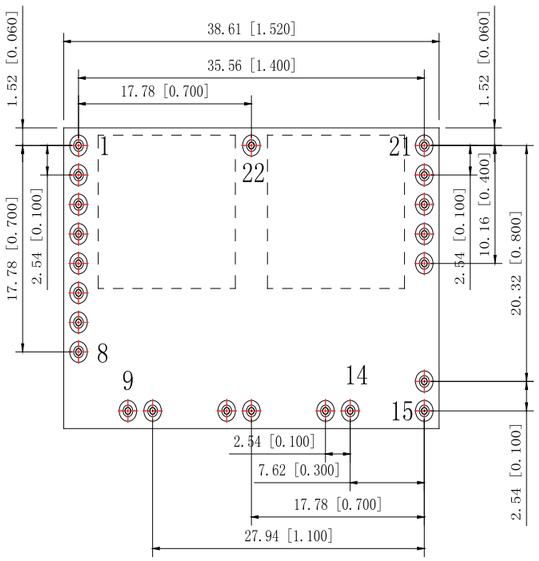
| Parameter | Specifications |
|---|---|
| Output power Note① | 275W |
| Output voltage Note① | 0.7-5.5Vdc |
| Output voltage trim logic Note② | Positive(P), Negative(N) |
| Output voltage precision | 1.5% |
| Line regulation | ±5mV |
| Load regulation | ±5mV |
| Dynamic response | 240mV/100us@50%-100%-50%Io(max), di/dt=2.5A/μs |
| Ripple and noise | 100mV(typ.) |

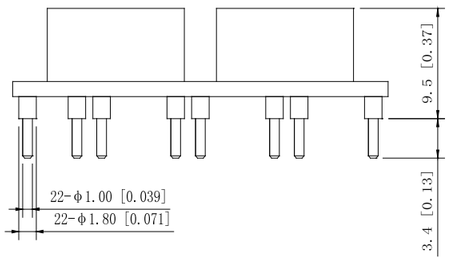
### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 95% |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -540℃-+125℃ |
| Switching frequency | 300kHz |
| Temperature coefficient | 200PPM |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 16Mhours Telcordia SR332<br>Issue 4, 40℃,2016 |
| Packaging | Through-Hole |

Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Outline Diagram (Unit:mm[inch])




## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1 | REMOTE | Remote control |
| 2 | TRACK | Sequence |
| 3 | NC | No connection |
| 4 | TRIM | Output voltage trim |
| 5 | +S | Positive Remote Compensation |
| 6 | -S | Negative Remote Compensation |
| 7 8 | Vin+ | Positive Input Voltage |
| 9 10 | GND | Input / Output Ground |
| 11 12 | VO | Output Voltage |
| 13 14 | GND | Input / Output Ground |
| 15 16 | Vin+ | Positive Input Voltage |
| 17 | CLK | Clock |
| 18 | GND | Input / Output Ground |
| 19 | COMP | Compensation Voltage |
| 20 | VSHARE | Current Share Bus |
| 21 | CONFIG | Current Share Configuration |
| 22 | NC | No Connection |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| BAK50P12N5BHGW | 4.5-14Vdc | 0.7-5.5Vdc | 50A | 275 | 95% | 38.61*25.9*12.9mm |

Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- Small size and profile
- Up to 60A output current
- High efficiency up to 95%
- Low output ripple and noise
- Excellent thermal performance
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863


## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 4.5-14Vdc |
| | 5.0-14.0Vdc |
| | 5.0-14.4Vdc |
| | 6.0-14.0Vdc |
| Remote Control Note② | Positive(P), Negative (N) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Over current protection | Hiccup mode<br>Automatic recovery |
| Short circuit protection | Hiccup mode<br>Automatic recovery |
| Over temperature protection | Hiccup mode<br>Automatic recovery |

### Output Characteristic

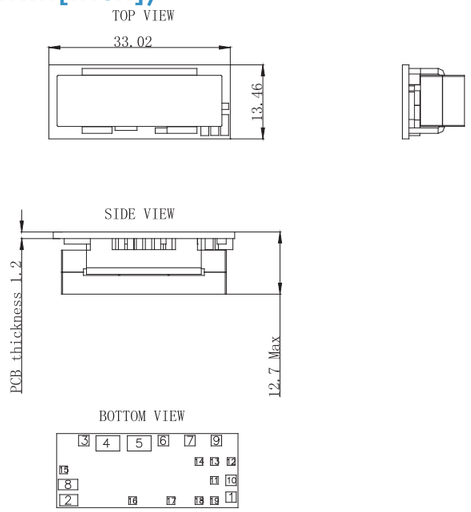
| Parameter | Specifications |
|---|---|
| Output power Note① | 80-120W |
| Output voltage trim logic Note② | Positive(P), Negative(N) |
| Output voltage precision | 1.5% |
| Line regulation | ±0.2% |
| Load regulation | ±0.5% |
| Dynamic response | ±3%Vo/200us@25%-50%-75%<br>Io(max)，di/dt=2.5A/μs |
| Ripple and noise | 80mV(typ.) |

### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 94.7% |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching frequency | 330-635kHz |
| Temperature coefficient | 200PPM |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | (Vout <=30A, 20MHours;<br>Vout>30A,16MHours)<br>Telcordia SR332 Issue 4, 2016,40℃ |
| Packaging | SMD |

Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Outline Diagram (Unit:mm[inch])




## Pin Designations

| Pin No. | Symbol | Function | Pin No. | Symbol | Function |
|---|---|---|---|---|---|
| 1 | REM | Remote Control ON/OFF | 11 | SIG_GND | Signal GND |
| 2 | VIN | Input Voltage | 12 | VS- | Negative Sense |
| 3 | SEQ | Sequence | 13 | CLK | PMBus Clock |
| 4 | GND | Negative Output Voltage | 14 | DATA | PMBus Data |
| 5 | VOUT | Output Voltage | 15 | SYNC | Synchronization |
| 6 | TRIM | Output Voltage Adjustment | 16 | PG | Power Good |
| 7 | VS+ | Positive Sense | 17 | SMBALERT# | PMBus Alarm |
| 8 | GND | Negative Output Voltage | 18 | ADDRESS0 | PMBus Address Pinstrap 0 |
| 9 | SHARE | Current Sharing | 19 | ADDRESS 1 | PMBus Address Pinstrap 1 |
| 10 | GND | Negative Output Voltage | | | |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| BAM40N12D0V6GSG | 5.0-14.4Vdc | 0.6-2.0Vdc | 40A | 80 | 91.5% | 33.02*13.46*12.70mm |
| BAM20N12N5V5GSG | 4.5-14Vdc | 0.69-5.5Vdc | 20A | 110 | 91% | 33.02*13.46*8.50mm |
| BAM60N12D0V6GSG | 5.0-14.0Vdc | 0.6-2.0Vdc | 60A | 120 | 91.5% | 33.02*13.46*12.70mm |
| BAM60N12D0V6GSGA | 5.0-14.0Vdc | 0.6-2.0Vdc | 60A | 120 | 88.5% | 33.02*13.46*12.7mm |
| BAM30N12N5GSG | 6.0-14.0Vdc | 0.8-5.0Vdc | 30A | 150 | 94.7% | 33.02*13.46*9.30mm |

Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- Small size and profile
- Up to 20A output current
- High efficiency up to 91%
- Low output ripple and noise
- Excellent thermal performance
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863


## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 4.5-13.8Vdc |
| Remote Control Note② | Positive(P), Negative (N) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Over current protection | Hiccup mode<br>Automatic recovery |
| Short circuit protection | Hiccup mode<br>Automatic recovery |
| Over temperature protection | Hiccup mode<br>Automatic recovery |

### Output Characteristic

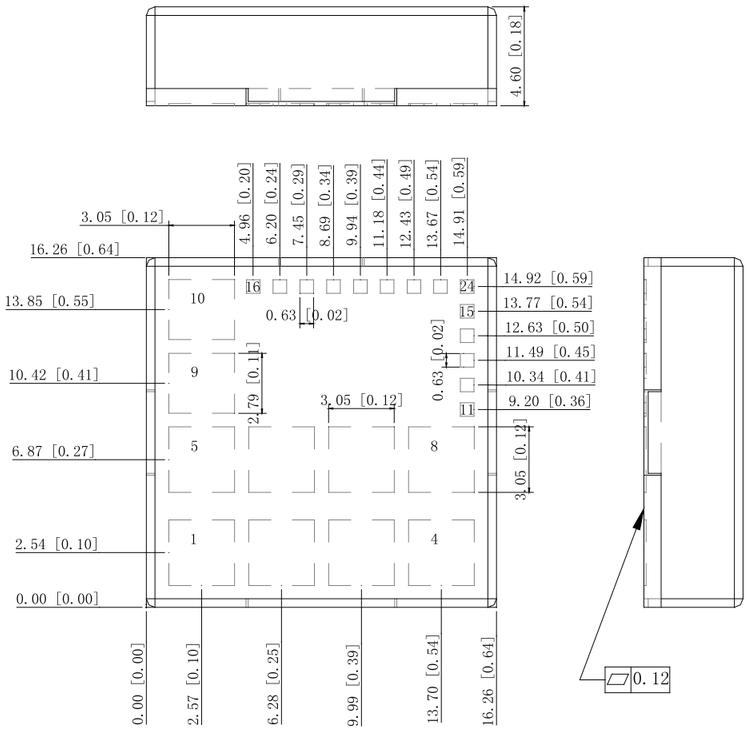
| Parameter | Specifications |
|---|---|
| Output power Note① | 80-120W |
| Output voltage Note① | 0.59-5.1Vdc |
| Output voltage trim logic Note② | Positive(P), Negative(N) |
| Output voltage precision | 1.0% |
| Line regulation | ±0.2% |
| Load regulation | ±0.5% |
| Dynamic response | 200mV/25us<br>@50%~100%Io(nom),di/dt=5A/μS |
| Ripple and noise | 70mV(typ.) |

### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 91% |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -40℃-+125℃ |
| Switching frequency | 640-960kHz |
| Temperature coefficient | 200PPM |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 20Mhours Telcordia SR332<br>Issue 4, 2016, 40℃ |
| Packaging | SMD |

Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Outline Diagram (Unit:mm[inch])




## Pin Designations

| Pin No. | Symbol | Function | Pin No. | Symbol | Function |
|---|---|---|---|---|---|
| 1,2,3,4 | VO | Positive output | 14 | -Sense | Negative output voltage remote sense |
| 5,6,7,8 | GND | Negative input and output | 15 | +Sense | Positive output voltage remote sense |
| 9,10 | Vin | Positive input | 21 | Enable | Remote on/off control |
| 11,16～20 | NC | No connection | 22 | Power Good | Power state indicator |
| 12 | -Offset | Downward margin adjustment | 23 | Margin Control | Output voltage subtle adjustment |
| 13 | +Offset | Upward margin adjustment | 24 | TRIM | Output voltage Set-point adjustment |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| DAC20P12P0V59GSE | 4.5-13.8Vdc | 0.59-5.1Vdc | 20A | 91% | 100W | 0.64×0.64×0.18inch |

Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- Small size and profile
- Up to 30A output current
- High efficiency up to 94%
- Low output ripple and noise
- Excellent thermal performance
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863


## General Specifications

### Input Characteristics

| Parameter | | Specifications |
|---|---|---|
| Input voltage Note① | | 7.0-14.5Vdc |
| | | 8.0-14.5Vdc |
| Inhibit Control Note② | Inhibit High Voltage | 1.8Vdc- Open |
| | Inhibit Low Voltage | -0.3-+0.6Vdc |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Over current protection | Hiccup mode Automatic recovery |
| Short circuit protection | Hiccup mode Automatic recovery |
| Over temperature protection | Hiccup mode Automatic recovery |

### Output Characteristic

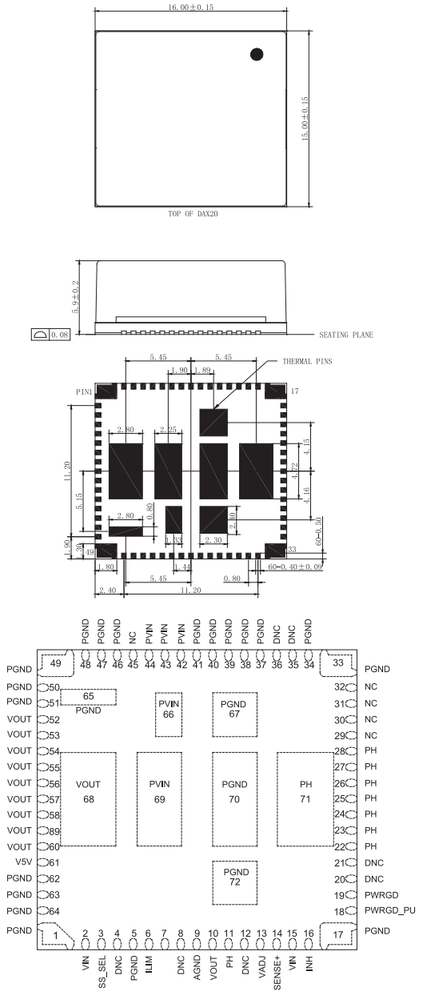
| Parameter | Specifications |
|---|---|
| Output power Note① | 55-108W |
| Output voltage Note① | 1.2-5.5Vdc, 0.6-3.6Vdc |
| Output voltage trim logic Note② | Positive(P), Negative(N) |
| Output voltage precision | ±2.0%Vo |
| Line regulation | ±0.1% |
| Load regulation | ±0.5% |
| Dynamic response | ±100mV/75us@25%-75% Io(max.) di/dt=2.5A/μs |
| Ripple and noise | 25mV |

### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 94%(max.) |
| Operating ambient temperature | -40℃-+80℃ |
| Storage temperature | -55℃-+150℃ |
| Switching frequency | 470-570kHz |
| Temperature coefficient | ±0.25%/℃ |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 20Mhours Telcordia SR332 Issue 4, 2016, 40℃ |
| Packaging | SMD |

Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Outline Diagram (Unit:mm[inch])




DAX20U12P0V6GSG

## Pin Designations

| Symbol | Function |
|---|---|
| AGND | Signal GND |
| DNC | Do Not Connect |
| FREQ_SEL | Frequency Select pin |
| ILIM | Current limit setting pin |
| INH | Inhibit pin |
| PGND | Power GND |
| PH | Phase switch node |
| PVIN | Input switching voltage pin |
| PWRGD | Power Good flag pin |
| PWRGD_1 | Power Good flag pin |
| PWRGD_UP | Power Good pull-up pin |
| SENSE+ | Remote sense connection |
| SS_SEL | Slow-start select pin |
| V5V | 5V regulator pin |
| VADJ | Output voltage adjust pin |
| VIN | Input bias voltage pins |
| VOUT | Output voltage |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| DAX10U12P0V6GSG | DAX10U12P0V6GSG | 1.2-5.5Vdc | 10A | 55W | 91% | 15.0*9.0*6.1mm |
| DAX20U12P0V6GSG | DAX20U12P0V6GSG | 0.6-3.6Vdc | 20A | 72W | 94% | 16.00*15.00*5.9mm |
| DAX30U12P0V6GSG | DAX30U12P0V6GSG | 0.6-3.6Vdc | 30A | 108W | 94% | 16.0*15.0*6.1mm |

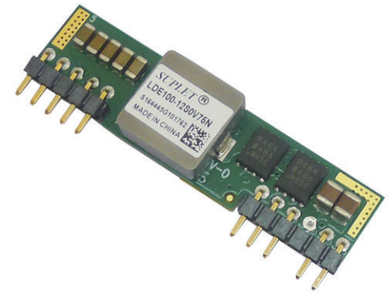
Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- Small size and profile
- Up to 20A output current
- High efficiency up to 95%
- Low output ripple and noise
- Excellent thermal performance
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863



## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 3-5.5Vdc |
| | 4.5-5.5Vdc |
| | 9-14Vdc |
| | 4.5-14Vdc |
| Remote Control Note② | Positive(P), Negative (N) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Over current protection | Hiccup mode<br>Automatic recovery |
| Short circuit protection | Hiccup mode<br>Automatic recovery |
| Over temperature protection | Hiccup mode<br>Automatic recovery |

### Output Characteristic

| Parameter | Specifications |
|---|---|
| Output power Note① | 10-110W |
| Output voltage | Note① |
| Line regulation | ±0.2% |
| Load regulation | ±0.5% |
| Dynamic response | ±3%Vo% /200us<br>@25%-50%-75% Io(max.) di/dt=2.5A/μs |
| Ripple and noise | 80mV(typ.) |

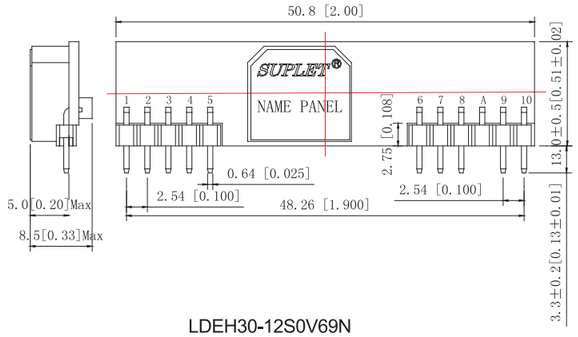
### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 95%(max.) |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching frequency | 250-350kHz |
| Temperature coefficient | 200PPM |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 20Mhours Telcordia SR332<br>Issue 4, 2016,40℃ |
| Packaging | Through-Hole |

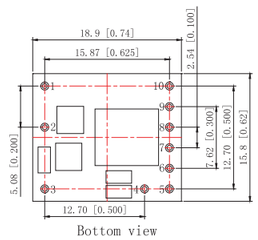
Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

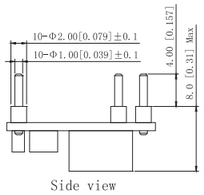
## Outline Diagram (Unit:mm[inch])

LDE100-12S0V75N




LDEH30-12S0V69N




## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1,2,4 | Vo1 | Positive input voltage |
| 3 | Sense | Remote compensate |
| 5,6 | GND | Negative input and output |
| 7,8 | +Vin | Positive input voltage |
| A | NC | No connection |
| 9 | TRIM | Output voltage trim |
| 10 | REM | Remote control |

| Pin No. | Symbol | Function |
|---|---|---|
| 1 | N/A | / |
| 2 | +Vin | Positive input voltage |
| 3 | GND | Negative input and output |
| 4 | Vout | Positive output voltage |
| 5 | +SENSE | Positive Remote Compensation |
| 6 | -SENSE | Negative Remote Compensation |
| 7 | TRIM | Output voltage trim |
| 8 | N/A | / |
| 9 | Track | Sequence |
| 10 | REM | Remote control |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| LDE30-5S1V0 | 3-5.5Vdc | 1Vdc | 10A | 10W | 92% | 50.8*12.7*7.52mm |
| LDE30-5S2V5 | 4.5-5.5Vdc | 2.5Vdc | 10A | 25W | 93% | 50.8*12.7*7.52mm |
| LDE30-5S3V3 | 4.5-5.5Vdc | 3.3Vdc | 10A | 33W | 92% | 50.8*12.7*7.52mm |
| LDE30-5S0V75N | 3-5.5Vdc | 0.75-3.63Vdc | 10A | 36.3W | 93% | 50.8*12.7*7.52mm |
| LDE50-5S0V75N | 3.0-5.5Vdc | 0.75-3.63Vdc | 16A | 50W | 92% | 50.8*12.7*7.52mm |
| LDE50-12S0V75N | 9-14Vdc | 0.75-5.5Vdc | 10A | 55W | 92% | 50.8*13.0*8.5mm |
| LDE50-12S0V75NP | 9-14Vdc | 0.75-5.5Vdc | 10A | 55W | 93% | 50.8*13.0*8.5mm |
| LDE80-12S0V75N | 9-14Vdc | 0.75-5.5Vdc | 16A | 88W | 92% | 50.8*13.0*8.5mm |
| LDE80-12S0V75NP | 9-14Vdc | 0.75-5.5Vdc | 16A | 88W | 92% | 50.8*13.0*8.5mm |
| LDE100-12S0V75N | 9-14Vdc | 0.75-5.5Vdc | 20A | 110W | 95% | 50.8*13.0*8.5mm |
| LDEH30-12S0V69N | 4.5-14Vdc | 0.69-5.5Vdc | 6A | 30W | 85% | 18.92*15.75*7.50mm |

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## Features

- Small size and profile
- Up to 16A output current
- High efficiency up to 94%
- Low output ripple and noise
- Excellent thermal performance
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863


## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 2.8-5.5Vdc |
| | 3.0-5.5Vdc |
| | 9-14Vdc |
| Remote Control Note② | Positive(P), Negative (N) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Over current protection | Hiccup mode<br>Automatic recovery |
| Short circuit protection | Hiccup mode<br>Automatic recovery |
| Over temperature protection | Hiccup mode<br>Automatic recovery |

### Output Characteristic

| Parameter | Specifications |
|---|---|
| Output power Note① | 12-80W |
| Output voltage adjustment range | Note① |
| Line regulation | ±0.2% |
| Load regulation | ±0.5% |
| Dynamic response | ±3%Vo% /200us@25%-50%-75%<br>Io(max.) di/dt=2.5A/μs |
| Ripple and noise | 80mV(typ.) |

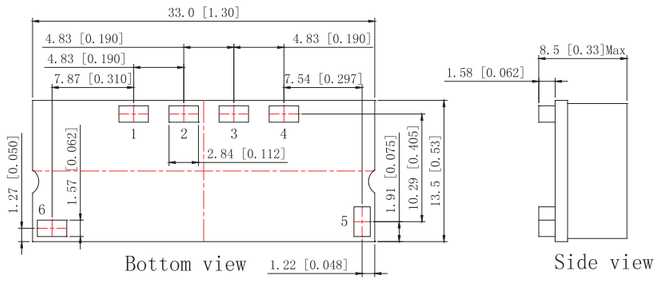
### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 94%(max.) |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching frequency | 250-350kHz |
| Temperature coefficient | 200PPM |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 20Mhours Telcordia SR332<br>Issue 4, 2016, 40℃ |
| Packaging | SMD |

Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Outline Diagram (Unit:mm[inch])

LDES30-5S1V2




## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1 | GND | Negative input and output |
| 2 | Vo1 | Positive output voltage |
| 3 | TRIM | Output voltage trim |
| 4 | +Sense | Remote Compensation |
| 5 | REM | Remote control |
| 6 | +Vin | Positive input voltage |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| LDES30-5S1V2 | 3.0-5.5Vdc | 1.2Vdc | 10A | 12W | 85% | 33.00*13.50*8.28mm |
| LDES20-5S0V75N | 2.8-5.5Vdc | 0.75-3.63Vdc | 6A | 20W | 94% | 27.90*11.40*7.46mm |
| LDES30-5S2V5 | 3.0-5.5Vdc | 2.5Vdc | 10A | 25W | 92% | 33.00*13.50*8.28mm |
| LDES30-5S0V75NT | 2.8-5.5Vdc | 0.75-3.63Vdc | 10A | 36.3W | 94% | 33.00*13.50*8.28mm |
| LDES50-5S1V2 | 3.0-5.5Vdc | 1.2Vdc | 16A | 50W | 84% | 33.00*13.46*8.50mm |
| LDES50-5S0V75N | 3.0-5.5Vdc | 0.75-3.63Vdc | 16A | 58W | 93% | 33.00*13.46*8.50mm |
| LDES80-12S0V75N | 9-14Vdc | 0.75~5.5Vdc | 16A | 80W | 94% | 33.00*13.50*8.30mm |

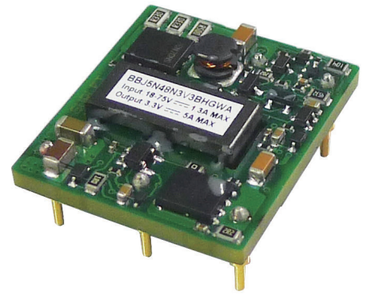
Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- 1*1 inch footprint
- Up to 5A output current
- High efficiency up to 88.5%
- Low output ripple and noise
- Excellent thermal performance
- Adjustable output voltage(-10%~+10%Vo)
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863



## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 18-75Vdc |
| | 36-75Vdc |
| Remote Control Note② | Positive(P),Negative(N) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Output over voltage protection | Hiccup mode Automatic recovery |
| Over current protection | Hiccup mode Automatic recovery |
| Short circuit protection | Hiccup mode Automatic recovery |
| Over temperature protection | Hiccup mode Automatic recovery |

### Output Characteristic

| Parameter | Specifications |
|---|---|
| Output power Note① | 15-16.5W |
| Output voltage Note① | 3.3/5/12Vdc |
| Output voltage precision | ±2%Vo |
| Output voltage trim logic Note② | Positive(P),Negative(N) |
| Output voltage adjustment range | -10%~+10%Vo |
| Line regulation | ±0.2% |
| Load regulation | ±0.5% |
| Dynamic response | ±3%Vo% /200us@25%-50%-75% Io(max.) di/dt=2.5A/μs |
| Ripple and noise | 80mV(typ.) |

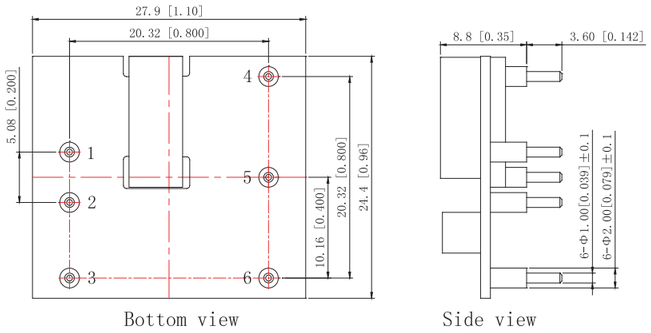
### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 88.5%(max.) |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching frequency | 300-500kHz |
| Temperature coefficient | 200PPM |
| Isolation voltage | 1500Vdc |
| Isolation resistance | 10MΩ (min.) |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 20Mhours Telcordia SR332 Issue 4, 2016, 40℃ |
| Packaging | Through-Hole or SMD |

Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Outline Diagram (Unit:mm)

BBJ5N48N3V3BHGWA




Bottom view




Side view

## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1 | +Vin | Positive input voltage |
| 2 | -Vin | Negative input voltage |
| 3 | REM | Remote control |
| 4 | Vout+ | Positive output voltage |
| 5 | TRIM | Output voltage trim |
| 6 | Vout- | Negative output voltage |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| BBJ3N48N5EHG | 18-75Vdc | 5Vdc | 3A | 15W | 86% | 1*1 inch |
| BBJ3N48N5GSG | 36-75Vdc | 5Vdc | 3A | 15W | 86% | 1*1 inch |
| BBJ1N48N12CHGW | 18-75Vdc | 12Vdc | 1.3A | 15.6W | 88.5% | 1*1 inch |
| BBJ5N48N3V3BHGWA | 18-75Vdc | 3.3Vdc | 5A | 16.5W | 88% | 1*1 inch |

Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- 1*1 inch footprint
- Up to 1A output current
- High efficiency up to 78%
- Low output ripple and noise
- Excellent thermal performance
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863


## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 36-72Vdc |
| Remote Control Note② | Positive (Blank), Negative (P) |

### Output Characteristic

| Parameter | Specifications |
|---|---|
| Output power Note① | 5W |
| Output voltage Note② | 5.05Vdc |
| Output voltage precision | ±1%Vo |
| Line regulation | ±0.2% |
| Load regulation | ±0.5% |
| Dynamic response | ±3%Vo/300us@25%-50%-25%,50%-75%-50% Io(max.) di/dt=2.5A/μs |
| Ripple and noise | 50mV |

### Protection Characteristics

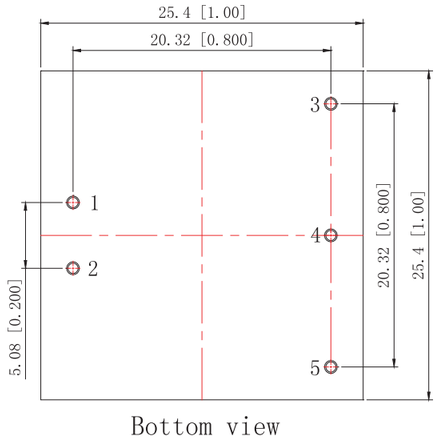
| Parameter | Specifications |
|---|---|
| Output over voltage protection | Hiccup mode Automatic recovery |
| Short circuit protection | Hiccup mode Automatic recovery |

### General Characteristic

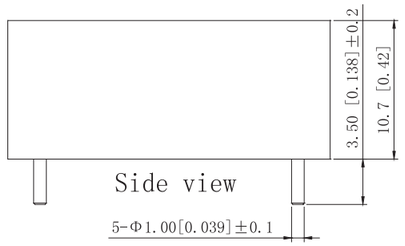
| Parameter | Specifications |
|---|---|
| Efficiency | 78%(max.) |
| Operating ambient temperature | -25℃-+55℃ |
| Storage temperature | -25℃-+95℃ |
| Switching frequency | 300kHz |
| Temperature coefficient | 200PPM |
| Isolation voltage | 1500Vdc |
| Isolation resistance | 100MΩ (min.) |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 2Mhours min. Telcordia SR332 Issue 3, 40℃ |
| Packaging | Through-Hole |

Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Outline Diagram (Unit:mm[inch])




Bottom view




Side view

## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1 | +Vin | Positive input voltage |
| 2 | -Vin | Negative input voltage |
| 3 | Vo1 | Positive output voltage |
| 4 | NP | No pin |
| 5 | GND | Negative output voltage |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| LDB5-48S5 | 36-72Vdc | 5.05Vdc | 1A | 5W | 78% | 1*1 inch |

Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- 2*2 inch footprint
- Up to 10A output current
- High efficiency up to 88%
- Low output ripple and noise
- Excellent thermal performance
- Adjustable output voltage (-10%~+10%Vo)
- IUVP, OVP, OTP,OCP, SCP


## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 9.5-18Vdc |
| | 36-72Vdc |
| Remote Control Note② | Positive(Blank), Negative(P) |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Output over voltage protection | Hiccup mode Automatic recovery |
| Over current protection | Hiccup mode Automatic recovery |
| Short circuit protection | Hiccup mode Automatic recovery |
| Over temperature protection | Hiccup mode Automatic recovery |

### Output Characteristic

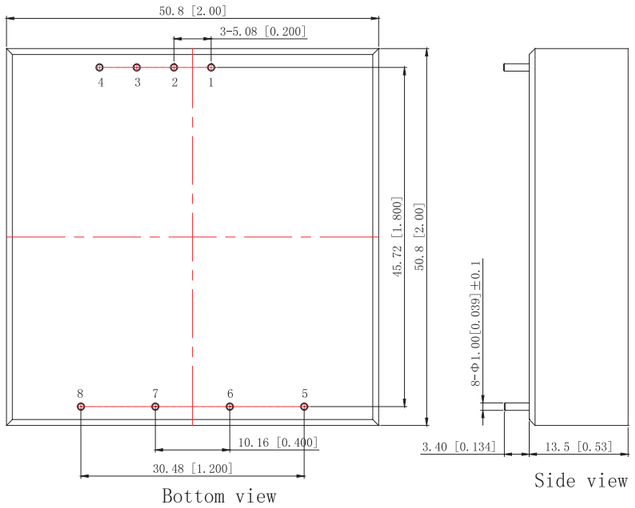
| Parameter | Specifications |
|---|---|
| Output power Note① | 33-48W |
| Output voltage Note① | 3.3/48Vdc |
| Output voltage precision | ±2%Vo |
| Output voltage trim logic Note② | Positive (S), Negative ( Blank ) |
| Output voltage adjustment range | -10%~+10%Vo |
| Line regulation | ±0.2% |
| Load regulation | ±0.5% |
| Dynamic response | ±5%Vo/200us@25%-50%-75% Io(max.) di/dt=2.5A/μs |
| Ripple and noise | 80mV(typ.) |

### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 88%(max.) |
| Operating ambient temperature | -40℃-+70℃ |
| Storage temperature | -40℃-+105℃ |
| Switching frequency | 300kHz |
| Temperature coefficient | 200PPM |
| Isolation voltage | 1500Vdc |
| Isolation resistance | 100MΩ (min.) |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 300khours min. Telcordia SR332 Issue 3, 40℃ |
| Packaging | Through-Hole or SMD |

Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Outline Diagram (Unit:mm[inch])




## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1 | +Vin | Positive input voltage |
| 2 | -Vin | Negative input voltage |
| 3 | NP | No pin |
| 4 | REM | Remote control |
| 5 | NP | No pin |
| 6 | Vo1 | Positive output voltage |
| 7 | GND | Output ground |
| 8 | TRIM | Output voltage trim |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| LDB40-48S3V3 | 36-72Vdc | 3.3Vdc | 10A | 33W | 88% | 2*2 inch |
| LDB40-12S48 | 9.5-18Vdc | 48Vdc | 1A | 48W | 84% | 2*2 inch |

Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





## Features

- Flexible BMP module application
- Up to 35A output current
- High efficiency up to 93%
- Low output ripple and noise
- Excellent thermal performance
- Adjustable output voltage(-10%~+10%Vo)
- IUVP, OVP, OTP,OCP, SCP
- Compliance with the EU RoHS directive 2011/65/EU and (EU)2015/863


## General Specifications

### Input Characteristics

| Parameter | Specifications |
|---|---|
| Input voltage Note① | 8-14Vdc |
| | 16-36Vdc |
| | 36-75Vdc |
| Remote Control | Note② |

### Protection Characteristics

| Parameter | Specifications |
|---|---|
| Input under voltage protection | Yes |
| Output over voltage protection | Hiccup mode Automatic recovery |
| Over current protection | Hiccup mode Automatic recovery |
| Short circuit protection | Hiccup mode Automatic recovery |
| Over temperature protection | Hiccup mode Automatic recovery |

### Output Characteristic

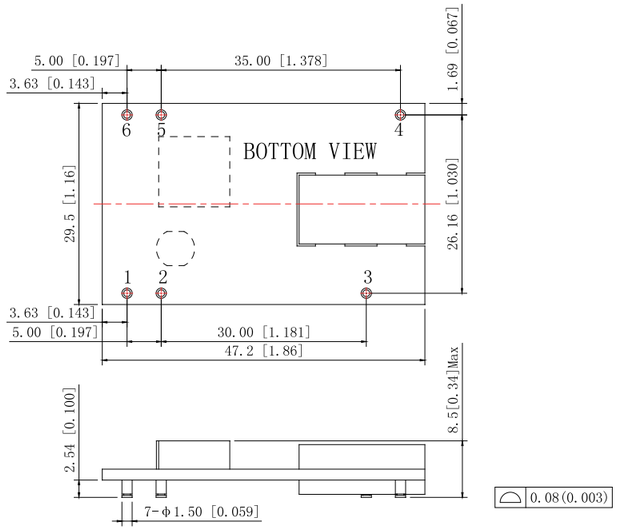
| Parameter | Specifications |
|---|---|
| Output power Note① | 16.5-200W |
| Output voltage | Note① |
| Output voltage precision | ±2%Vo |
| Line regulation | ±0.2% |
| Load regulation | ±0.5% |
| Dynamic response | ±5%Vo/200us@25%-50%-75% Io(max.) di/dt=2.5A/μs |
| Ripple and noise | 300mV(max.) |

### General Characteristic

| Parameter | Specifications |
|---|---|
| Efficiency | 94% |
| Operating ambient temperature | -40℃-+85℃ |
| Storage temperature | -55℃-+125℃ |
| Switching frequency | 280-500kHz |
| Temperature coefficient | 200PPM |
| Isolation voltage | 1500Vdc |
| Isolation resistance | 10MΩ (min.) |
| Safety | Meets IEC60950-1&IEC/UL/EN62368-1 |
| MTBF | 1.4Mhours min. Telcordia SR332 Issue 3, 40℃ |
| Packaging | Through-Hole or SMD |

Note① Refer to order-information list in the following page for specific values of input and output
Note② Refer to the production naming rules

## Outline Diagram (Unit:mm[inch])




## Pin Designations

| Pin No. | Symbol | Function |
|---|---|---|
| 1 | +Vin | Positive input voltage |
| 2 | -Vin | Negative input voltage |
| 3 | REM | Remote control |
| 4 | TRIM | Output voltage trim |
| 5 | GND | Negative output voltage |
| 6 | +Vo1 | Positive output voltage |

## Order Information

| MPN | Input voltage | Output voltage | Output current | Power | Efficiency | Physical Dimensions |
|---|---|---|---|---|---|---|
| BBG5N48P3V3GSG | 36-75Vdc | 3.3Vdc | 5A | 16.5W | 87% | 47.2*29.5*8.5mm |
| BBG4N48P5GSG | 36-75Vdc | 5Vdc | 4A | 20W | 89% | 47.2*29.5*8.5mm |
| LDF100-12D3V8-2V8 | 8-14Vdc | 3.8Vdc | 16A | 100W | 86% | 67.97*67mm |
| | | 2.8Vdc | 8A | | | |
| LDES125-12S0V75N | 9-14Vdc | 0.75~5.5Vdc | 25A | 125W | 94% | 330*13.5*8.3mm |
| LDF126-12S4V2 | 8-14.5Vdc | 4.2Vdc | 30A | 126W | 90% | 80*36.8*16.5mm |
| NHD136-3V9/AE | 36-75Vdc | 3.9Vdc | 35A | 136W | 91% | 80*36.8*24mm |
| NHD136-3V9/AE-BHG | 36-75Vdc | 3.9Vdc | 35A | 136W | 91% | 80*36.8*12mm |
| NHD200-4V/AE | 36-75Vdc | 4.2Vdc | 35A | 147W | 93% | 80*36.8*24mm |
| NHD200-4V/AE-A | 36-75Vdc | 4.2Vdc | 35A | 147W | 93% | 87*36.8*15.5mm |
| NHD200-4V/AE-BHG | 36-75Vdc | 4.2Vdc | 35A | 147W | 93% | 80*36.8*12mm |
| NHD200-4V/AE-L | 36-75Vdc | 4.2Vdc | 35A | 147W | 93% | 87*36.8*24mm |
| NHD200-4V2/CC | 36-75Vdc | 4.2Vdc | 35A | 147W | 93% | 75*51.55*12mm |
| NHD200-4V-AE-A | 36-75Vdc | 4.2Vdc | 35A | 147W | 91% | 87*36.8*15.5mm |
| NHD200-4V6/AE | 36-75Vdc | 4.6Vdc | 35A | 161W | 91% | 80*36.8*24mm |
| LDK200-24S24 | 16-36Vdc | 24Vdc | 8.5A | 200W | 89% | 160*90*40mm |

Note: All information contained in this catalog is subject to change without notice, please visit our official website www.suplet.com or contact our sales for the latest information.





**Naming Rules for Suplet Standard Products(Basic Version.2022)**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Typical Power | L | D | F | (H) | 450 | -48 | S | 28 | (CGSZ3) |
| | | Sulet Power | A:AC/DC Series<br>D:DC/DC Series<br>H:Hybrid AC/DC | A/B/C:Copper or aluminium case<br>E:Non-isolated SIP or SMT<br>F:Open frame<br>G/M:Aluminum baseplate<br>K:Enclosed Type<br>O:Compatible with Micro Power<br>S:Adapter with output cable and socket-type input terminal | Blank:Full Brick<br>H:Half Brick<br>Q:Quarter Brick<br>E:Eighth Brick<br>S:Sixteenth Brick | Power(W) | Input Voltage(V)<br>-48=48Vdc | Types of output<br>S:Single output<br>D:Dual output<br>T:Three outputs<br>M:Multiple outputs | Output Voltage(V) | Additonal notes:<br>C: With heatsink(The default is without heatsink)<br>P: Negative remote control(The default is Positige)<br>S: Positive TRIM logic(The default is negative)<br>G: High efficiency<br>W: Wide input voltage<br>Z1/Z2/Z3/Z4/Z5 stands for different pin length |
| 2 | Small Modular Power-Single Output | A | B | E | 40 | N | 48 | P | 5 | (BHG) |
| | | A: Open frame with heatsink<br>B: Open frame without heatsink<br>D: Glue-injecting Encapsulation | A: Non-isoalted, wide input voltage& adjustable output voltage<br>B: I/O isolated | E:Eighth Brick<br>S:Sixteenth Brick<br>A/B/C/G/J/K/M/X: Standard footprints defined by other companies | Output Current (A) | Remote Control<br>P:Positive logic<br>N:Negative logic<br>S:Without remote control | Input Voltage(V)<br>48: 48Vdc | S output voltage trim logic<br>P:Positive Logic<br>N:Negative Logic<br>S:Without Trim function | Output Voltage(V) | A/B/C/D/E/F:Different pin length<br>H:Through-hole<br>S:SMT<br>G:RoHS |
| 3 | Rectifier | S | R | 48 | | 50 | （H） | (-1U) | (-RB) | |
| | | C:Compact Rectifier<br>M:Mini Rectifier<br>S:Standard Rectifier | Rectifier | Nominal Output Voltage(V) | | Output Current(A) | Efficiency<br>Default: Typical Efficiency<br>M: Middle Efficiency<br>H:High Efficiency | Height of SR series standard rectifier,<br>-1U: 1U height<br>Default: 2U height | Additional items:<br>RB:Rear Backboard | |
| 4 | Monitoring and Controller | CAS | | -05 | | | | (T) | | |
| | | Control And Supervision | | 02: RS232/485/LAN, 03: RS232/485<br>04: RS232/485, DIO optional, 05:RS232/485/LAN, DIO optional | | | | Additional items(Optional) | | |
| 5 | Power System | S | T | P | 48 | 350 | H4 | C1 | D1 | |
| | | Suplet | Telecom | Power system | Voltage | Output Current | Height ~U | C: Controller<br>1 means CAS-02<br>2 means CAS-04 | D: Different Distribution<br>1: Internal Number | |
| 6 | Server Power Supply | SAC | 1600 | -220 | D | 12 | -12 | (-054) | -AA | |
| | | SAC:AC+(DC) input<br>SDC:DC input | Power(W) | Input Voltage(Vac or Vdc)<br>-220: 220Vac<br>-48: 48Vdc | Types of output:<br>D:Dual output | Main output voltage(Vdc) | Standby output voltage(Vdc)<br>-12=12Vdc<br>(-3V3=3.3Vdc) | Server Power Supply Code<br>The default is Intel CRPS Standard<br>(-054:facebook SLIM 054 standard) | Additional items:<br>AA- Normal airflow direction<br>RA- Reverse airflow direction | |