# **Product Specification**



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#### Model: AN4800 www.powerld.com Version: V00

### I. General

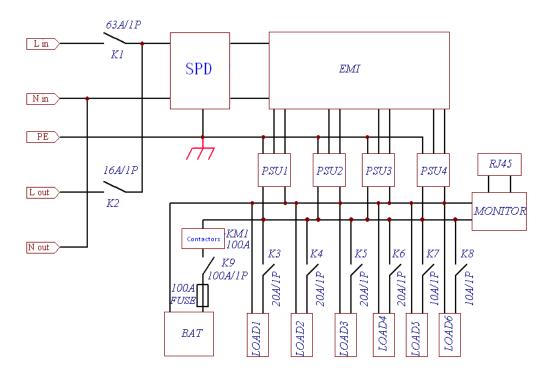


- Input range 90-286Vac
- Have PFC function, PF≥0.99
- It features input over/under voltage protection, output over current protection, output overvoltage protection, output short circuit protection
- Wide operating temperature range (-30  $^{\circ}$ C ~ 55  $^{\circ}$ C)
- System with battery management, power system monitoring, configure the sensor can achieve environmental monitoring, can provide RS485 (optional) communications can take the initiative to report alarms, easy to implement remote monitoring and unattended
- High efficiency, long life and high reliability

### II. Model and name

| Name                      | Model  | Remarks |
|---------------------------|--------|---------|
| Embedded power outlet box | AN4800 |         |

# **Ⅲ. Schematics system subrack**



#### Described below:

Plug the power supply system from the input terminal block box, the output terminal block, AC outlet, AC input breaker, AC output breaker, battery output open space, Load output open air, the signal terminals and structural shell components. By AC mains input terminals access, open space K1 after two routes output, one by air K2 open to the AC output terminals to provide users with AC; another pass after lightning and EMI filtering module into the rectifier module PSU1-PSU4, DC output rectifier after a 6-way power distribution units aggregated to the DC load power supply, 6 outputs, respectively, from the air control open K3-K8, respectively, Each provides users with overload and short circuit protection load. After the user's battery via contactors KM1 and open space K9 access the DC output side of the power supply system, Battery protection circuit breakers provide overload and short-circuit the battery protection. Front of the power supply system has a signal adapter plate, connecting sensors, input and output sections dry Point.

### IV. Environmental Conditions

| No. | Items                 | Technical Specifications | Unit       | Remarks  |
|-----|-----------------------|--------------------------|------------|--|
| 1   | Operating Temperature | -20 — +65                | °C         | -40°C full load start up,<br>+55~+65°C derating 20%<br>in linearity. |
| 2   | Storage Temperature   | -40 +70                  | $^{\circ}$ |  |
| 3   | Relative Humidity     | 5—95                     | %          | No condensation  |
| 4   | Altitude              | 0-5000                   | m          | derate 1°C with every 200 meters' rising at 2000-5000m               |

## V. Electrical Characteristics

| No.      | Item                     | Technical Requirement   | Unit | Remark   |  |  |  |
|----------|--------------------------|-------------------------|------|--|--|--|--|
| 1. Input | 1. Input Characteristics |                         |      |  |  |  |  |
|          | Rated input voltage      | 200—240                 |      | Max AC input voltage                                     |  |  |  |
| 1.1      | AC Input voltage range   | 90—290                  | Vac  | 310VAC(static state),no damage to the unit for long time |  |  |  |
| 1.2      | Frequency                | 45-65(typical50/60)     | Hz   |  |  |  |  |
| 1.3      | AC input format          | Single-phase three-wire |      | Can be used for 110Vac or 120Vac dual FireWire input     |  |  |  |

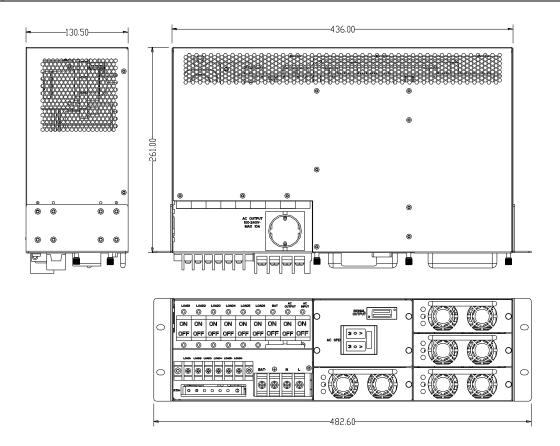
## VI. Safety & EMC

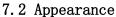
| No. | Item                         |               | Criterions   | Remark                                   |  |
|-----|------------------------------|---------------|--|--|--|
|     | Dialectical strength         | Input-output  | 4242Vdc/10mA/ 1min   |  |  |
| 1   |                              | Input-ground  | 2121Vdc/10mA/ 1min   | No flyover, no breakdown.                |  |
|     |                              | Output-ground | 700Vdc/10mA/ 1min  |  |  |
|     | Isolation resistance         | Input-output  | ≥10MΩ@500Vdc   |  |  |
| 2   |                              | Input-ground  | ≥10MΩ@500Vdc   | Under normal air pressure, humidity 90%, |  |
|     |                              | Output-ground | ≥10MΩ@500Vdc   | namany 5070,                             |  |
| 3   | Touch current (Input-ground) |               | Warning large leakage current, power mo                                  | ust be grounded before                   |  |
| 4   | Ground Resistance            |               | ≤0.1Ω  |  |  |
|     | Anti Lightning               |               | The AC input terminal can endure surge current wave of 5kA v 8/20 µS v 5 |  |  |
| 5   |                              |               | times each for positive and negative , time cycle 1 minute. (refer to    |  |  |
|     |                              |               | standard: YD 5098-2001). The module must pass anti-lighting test in      |  |  |
|     |                              |               | power on condition and power off condition.                              |  |  |

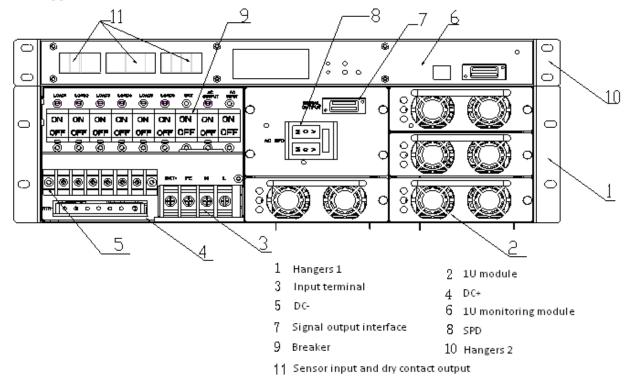
# VII. Mechanical Characteristics and Connector Definition

### 7.1 outline dimension (unit: mm)

L\*W\*H=482.6mm\*130.5mm\*261mm







### VIII. Packing List

| Name                       | Num   | Remarks                                    |
|----------------------------|-------|--|
| Power system subrack       | 1PCS  |  |
| False panel                | N PCS | 0≤N≤4                                      |
| Hangers                    | 2PCS  |  |
| Signal wiring              | 1PCS  | connection between Monitoring and plug box |
| Communications cable       | 1PCS  | RJ45 cable                                 |
| M4 Countersunk head screws | 16PCS | Size: M4*4                                 |

### IX. Packaging, transportation, storage

#### 1 packaging

Rectifier module individually packaged

#### 2 transport

Adapted to the vehicle, ship, aircraft, should canopy, transportation loading and unloading sunscreen, civilization.

#### 3 storage

The product when not in use should be placed in the package, the warehouse environment temperature of - 40  $^{\circ}$ C +70  $^{\circ}$ C, relative humidity is 5% - 95%, the warehouse are not allowed inside the harmful gases, flammable, explosive and corrosive chemical products, and no strong mechanical vibration, shock and strong magnetic field, packaging box should be at least 20cm pad off the ground, walls, windows or distance, heat air entrance at least 50cm, storage period in the specified conditions for the general 2 years, after more than 2 years should be re examined.

### X. Remarks

Warning large leakage current, power must be grounded before



powerld Model: AN4800 www.powerld.com Version: V00

### XI. Label



输入INPUT:200-240Vac;50/60Hz;40A MAX 输出OUTPUT:53.5V===80A

OR

输入INPUT:100-120Vac;50/60Hz;40A MAX

输出OUTPUT:53.5V===40A

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