YINGJIAO®

Enclosed Power Supplies

# YSI15 SERIES



**Input: 90-264V AC 50/60Hz**
**Output Voltage: 5V-48V DC**
**Rated Power: 15W max**

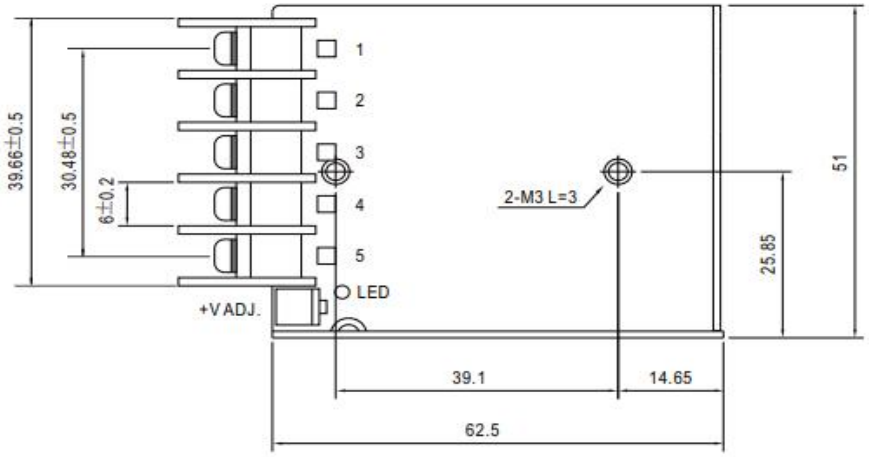
## Features

Univeral AC input/ Full range
Leakage Current: ＜2mA
No load power consumption＜0.5W
Extremely low leakage current
Protection:Over load/Over voltage/Short circuit/ Over Temperature
Withstand voltage : 3KV
Class I isolation level
Over-voltage class III (designed to meet EN61558)
Life Warranty: 3 years

## Application

Industrial automation control
Communication equipment
Led Lighting
Industrial control equipment

## Dimensions and Installation




Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment |
|---|---|---|---|
| 1 | AC/L | 4 | DC OUTPUT -V |
| 2 | AC/N | 5 | DC OUTPUT +V |
| 3 | FG ⏚ | | |



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| MODEL DETAIL SPEC. | | YSI15-5 | YSI15-12 | YSI15-24 | YSI15-48 |
|---|---|---|---|---|---|
| Average Efficiency: | Input Voltage: | 90-264VAC | | | |
| | Input Frequency: | 50/60Hz | | | |
| | Inrush Current: | Cold start 65A. at 230VAC/50Hz,full load | | | |
| | AC Current: | 0.35A/115VAC 0.25A/230VAC | | | |
| | Leakage Current: | < 2mA/240VAC | | | |
| | Average Efficiency: | 75% | 79% | 80% | 81% |
| | Max.Capacitive Load: | 2400uF | 1800uF | 600uF | 300uF |
| OUTPUT | DC Voltage: | 5V | 12V | 24V | 48V |
| | Rated Current: | 3A | 1.3A | 0.625 | 0.313A |
| | Rated Power: | 15W | 15.6W | 15W | 15W |
| | Voltage Tolerance: | ±2.0% | ±1.0% | ±1.0% | ±1.0% |
| | Ripple and Noise: | 75mVp-p | 120mVp-p | 200mVp-p | 200mVp-p |
| | Line Regulation: | ±0.5% | | | |
| | Load Regulation: | ±1.5% | ±0.5% | ±0.5% | ±0.5% |
| | Setup, Rise, Hold Up time: | 500ms, 30ms/70ms 230VAC 1000ms, 30ms/20ms 115VAC at full load | | | |
| ENVIRONMENTAL | Operating Temperature: | -20 ～ +60℃ (Refer to "Derating Curve") | | | |
| | Storage Temp: | -40℃ ～ 85℃ | | | |
| | Storage Humidity: | 10 ～ 95% RH | | | |
| | Working Humidity: | 20 ～ 95% RH non-condensing | | | |
| PROTECTION | Short Circuit | Protection type: Hiccup mode, recovers automatically after fault condition is removed | | | |
| | Over Load: | Above 105% rated output power | | | |
| | | Protection type: Hiccup mode, recovers automatically after fault condition is removed | | | |
| | Over Voltage: | 5V:5.75～ 6.75V 12V:13.8 ～ 16.2V 24V:27.6 ～ 32.4V 48V:55.2～64.8V | | | |
| | | Protection type: Shut down o/p voltage, re-power on to recover | | | |
| | Over Temperature: | Shut down o/p voltage, re-power on to recover | | | |
| SAFETY & EMC | Safety Regulations: | UL62368-1,TUV BS EN/EN62368-1, IEC60950-1:20 | | | |
| | Withstand Voltage: | I/P-O/P:3KV AC I/P-FG:2KV AC O/P-FG:0.5KV AC | | | |
| | Isolation Resistance: | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃/ 70% RH | | | |
| | EMC Emission: | Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3 Class A, GB9254 Class B | | | |
| | EMC Immunity: | EN/EN61000-4-2,11 perf.Criteria B； EN/EN61000-4-3,4,5,6,8 perf.CriteriaA ;BS EN/EN55035 | | | |
| OTHER | MTBF: | 600Khrs min. MIL-HDBK-217F(25℃) | | | |
| | Size: | 62.5*51*28mm | | | |
| | Weight: | 130g / pcs | | | |
| | Packaging: | 100PCS/CTN | | | |

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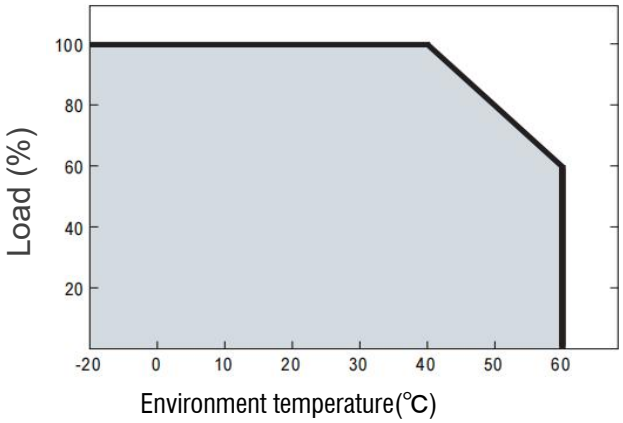
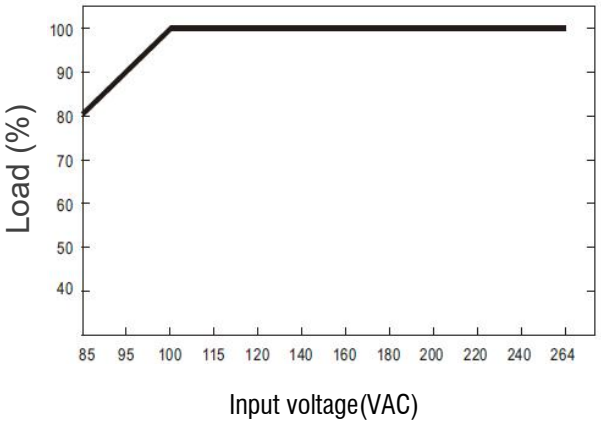
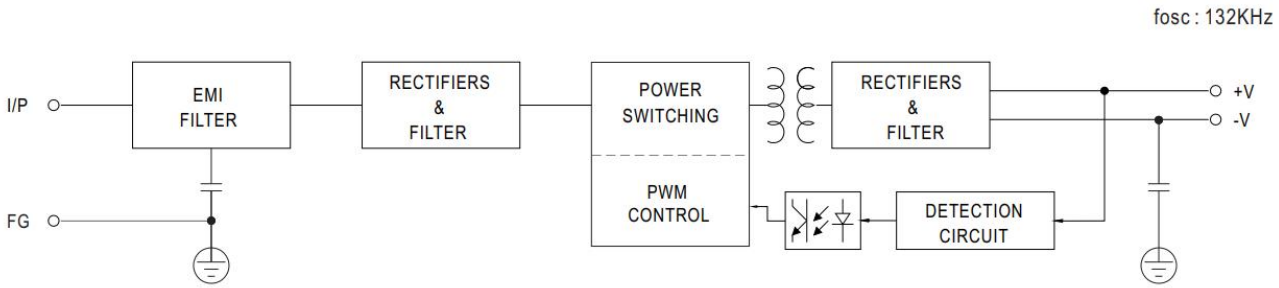
**Deduction curve and temperature**




**Minus output and input voltage curves**




**Functional Diagram**




# Note:

**1.1.All parameters NOT specially mentioned are measured at 115/230VAC input, rated load and 25℃ of ambient temperature.**
**2.Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.**
**3.Tolerance : includes set up tolerance, line regulation and load regulation.**
**4.Line regulation is measured from low line to highline at rated load.**
**5.Load regulation is measured from 0% to 100% rated load.**
**6.The ambient temperature derating of 5℃/1000m is needed for operating altitude greater than 2000m(6500ft).**
**7.The power supply is considered a component which will be installed into a final equipment.**
**All the EMC tests are been executed bymounting the unit on a 360mm*360mm metal plate with 1mm of thickness.**
**The final equipment must be re-confirmed that it still meets EMC directives.**