

## SIDA45 SERIES



## 50W Desktop Power Supply for Industrial Equipment

- Wide Input Voltage 90 to 264 VAC, 47 to 63Hz
- IEC-320-C14 Input Inlet
- Output Voltage Available From 2VDC Thru 50VDC
- Input Surge Current, Over Voltage and Overload Protection
- Operating temperature -20~70°C
- Single to Triple Output
- Class I Insulation

3 Year Warranty

Approvals: UL US CBC CE GS FCC PSE JET PSE RoHS

### Single Output

| Part Number | Output Voltage | Max. Output Current | Total Regulation | Max Output Power |
|-------------|----------------|---------------------|------------------|------------------|
| SIDA45-S00  | 02 ~ 03 VDC    | 8.00 A max          | 7%               | 24W              |
| SIDA45-S01  | 03 ~ 05 VDC    | 8.00 A max          | 5%               | 40W              |
| SIDA45-S02  | 05 ~ 06 VDC    | 8.00 ~ 6.66 A       | 5%               | 40W              |
| SIDA45-S03  | 06 ~ 08 VDC    | 7.00 ~ 5.25 A       | 5%               | 42W              |
| SIDA45-S04  | 08 ~ 11 VDC    | 5.63 ~ 4.00 A       | 4%               | 45W              |
| SIDA45-S05  | 11 ~ 13 VDC    | 4.00 ~ 3.46 A       | 3%               | 45W              |
| SIDA45-S06  | 13 ~ 16 VDC    | 3.46 ~ 2.81 A       | 3%               | 45W              |
| SIDA45-S07  | 16 ~ 21 VDC    | 3.12 ~ 2.38 A       | 3%               | 50W              |
| SIDA45-S08  | 21 ~ 27 VDC    | 2.30 ~ 1.85 A       | 2%               | 50W              |
| SIDA45-S09  | 27 ~ 33 VDC    | 1.85 ~ 1.51 A       | 2%               | 50W              |
| SIDA45-S10  | 33 ~ 40 VDC    | 1.51 ~ 1.25 A       | 2%               | 50W              |
| SIDA45-S11  | 40 ~ 50 VDC    | 1.25 ~ 1.00 A       | 2%               | 50W              |

### Multi Output

| Model Number | Output 1 |       |       |        | Output 2 |       |       |        | Output 3 |       |       |        | Max Output Power |
|--------------|----------|-------|-------|--------|----------|-------|-------|--------|----------|-------|-------|--------|------------------|
|              | Vonom    | Iomin | Iomax | Regmax | Vonom    | Iomin | Iomax | Regmax | Vonom    | Iomin | Iomax | Regmax |                  |
| SIDA45-D00   | +3.3V    | 0.5A  | 5A    | 7%     | +12V     | 0.3A  | 2A    | 5%     |          |       |       |        | 40W              |
| SIDA45-D01   | +5V      | 0.5A  | 5A    | 5%     | +12V     | 0.3A  | 2A    | 5%     |          |       |       |        | 42W              |
| SIDA45-D02   | +5V      | 0.8A  | 5A    | 7%     | +15V     | 0.3A  | 1.5A  | 5%     |          |       |       |        | 42W              |
| SIDA45-D03   | +5V      | 0.5A  | 5A    | 5%     | +24V     | 0.1A  | 1A    | 5%     |          |       |       |        | 42W              |
| SIDA45-D04   | +3.3V    | 0.5A  | 5A    | 7%     | +5V      | 0.2A  | 2A    | 5%     |          |       |       |        | 26.5W            |
| SIDA45-D09   | +12V     | 0.3A  | 3A    | 5%     |          |       |       |        | -12V     | 0.1A  | 1A    | 5%     | 42W              |
| SIDA45-D10   | +15V     | 0.2A  | 2A    | 5%     |          |       |       |        | -15V     | 0.1A  | 1A    | 5%     | 42W              |
| SIDA45-D15   | +5V      | 0.5A  | 5A    | 5%     |          |       |       |        | -24V     | 0.1A  | 1A    | 5%     | 42W              |
| SIDA45-D16   | +5.1V    | 0A    | 1A    | 5%     |          |       |       |        | +7.2V    | 0.2A  | 2.6A  | 5%     | 23.82W           |
| SIDA45-T00   | +3.3V    | 1.0A  | 5A    | 7%     | +12V     | 0.3A  | 2A    | 5%     | -12V     | 0.1A  | 0.8A  | 5%     | 42W              |
| SIDA45-T01   | +5V      | 0.5A  | 5A    | 5%     | +12V     | 0.2A  | 2A    | 5%     | -5V      | 0A    | 0.8A  | 5%     | 42W              |
| SIDA45-T02   | +5V      | 0.5A  | 5A    | 5%     | +12V     | 0.2A  | 2A    | 5%     | -12V     | 0A    | 0.8A  | 5%     | 42W              |
| SIDA45-T03   | +5V      | 0.5A  | 5A    | 5%     | +15V     | 0.3A  | 2A    | 6%     | -15V     | 0A    | 0.8A  | 5%     | 42W              |
| SIDA45-T04   | +5V      | 0.5A  | 5A    | 5%     | +24V     | 0.2A  | 1A    | 5%     | -24V     | 0A    | 0.5A  | 5%     | 42W              |
| SIDA45-T05   | +5V      | 0.5A  | 5A    | 5%     | +24V     | 0.1A  | 1A    | 5%     | -12V     | 0A    | 0.8A  | 5%     | 42W              |
| SIDA45-T06   | +3.3V    | 0.5A  | 5A    | 7%     | +12V     | 0.4A  | 2A    | 5%     | -5V      | 0A    | 0.8A  | 5%     | 42W              |

SIDA45-S01,D04,D15,T05,T06 is not approved by TUV-PSE

### Conditions

| Parameter   | Test Conditions | Min.  | Typ. | Max. | Unit |
|---|-----------------|-------|------|------|------|
| Operating Temperature                                       |                 | -20   | 40   | 70   | °C   |
| Storage Temperature   |                 | -40   |      | 85   | °C   |
| Relative Humidity   |                 | 5     |      | 95   | %    |
| Operating Temperature at 25°C, calculated per MIL-HDBK-217F |                 | 0.1 M |      |      | Hrs  |
| De-rate linearly from 100% load at 40°C to 50% load at 70°C |                 |       |      |      |      |

## Electrical Characteristics

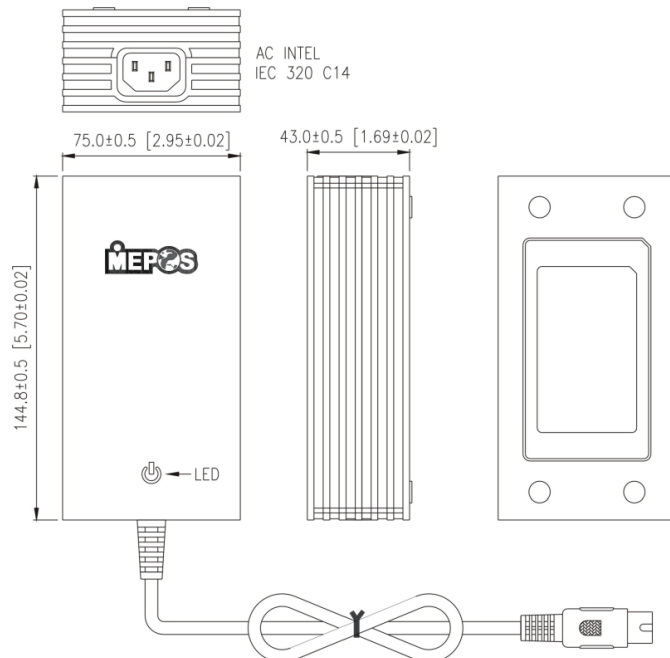
| Parameter                       | Test Conditions                            | Min.  | Typ. | Max. | Unit |
|---------------------------------|--|-------|------|------|------|
| Input Voltage                   | Operating Voltage                          | 90    |      | 264  | VAC  |
| Input Frequency                 |  | 47    |      | 63   | Hz   |
| Output Power Range              | Vin=90 to 264VAC                           | 0     |      | 50   | W    |
| Input Current (Low Line)        | Io=Full load, Vin=115VAC                   |       |      | 1.35 | A    |
| Input Current (High Line)       | Io=Full load, Vin=230VAC                   |       |      | 0.8  | A    |
| Low Line Inrush Current         | Io=Full load, 25°C, Cool start, Vin=115VAC |       | 12   | 15   | A    |
| High Line Inrush Current        | Io=Full load, 25°C, Cool start, Vin=230VAC |       | 26   | 30   | A    |
| Efficiency                      | Io=Full Load, Vin=230VAC                   | 75    | 83   | 88   | %    |
| Line Regulation                 | Io=Full Load                               |       | 0.5  | 1    | %    |
| Load Regulation                 | Vin=230VAC                                 |       | 3    | 15   | %    |
| Over Voltage Protection         |  | 112   |      | 132  | %    |
| Over Current Protection         |  | 110   |      | 150  | %    |
| Transient Response              | Io=Full Load to Half Load, Vin=100VAC      |       |      | 4    | mS   |
| Hold-Up Time                    | Io=Full Load, Vin=110VAC                   | 16    |      |      | mS   |
| Start Up Time                   | Io=Full Load, Vin=100VAC                   | 0.3   | 1    | 2    | S    |
| * Ripple & Noise (Peak to Peak) | Full Load, Vin=90VAC                       |       | 0.5  | 1    | %    |
| Safety Ground Leakage Current   | Io=Full Load, Vin=240VAC                   |       | 0.5  | 0.75 | mA   |
| Temperature Coefficient         | All output                                 | -0.04 |      | 0.04 | %/°C |

\*The Ripple & Noise which is under 3.3VDC at 2% max

## Approvals and Compliance

| Parameter  | Test Conditions                                 | Min. | Unit  |
|--|---|------|-------|
| Dielectric Withstanding Voltage for Primary to Secondary | Primary to Secondary                            | 4242 | VDC   |
| Dielectric Withstanding Voltage for Primary to Ground    | Primary to Ground (Not applicable for class II) | 2121 | VDC   |
| Isolation Resistance                                     | Test Voltage = 500VDC                           | 50   | MΩ    |
| EMI requirements for CISPR-22                            | Vin=220VAC                                      | B    | CLASS |
| EMI requirements for FCC PART-15                         | Vin=110VAC                                      | B    | CLASS |

## Mechanical



**Note:**

1. Dimensions are shown in inches or mm.
2. Weight: 535-560gs approx.
3. Optional output connector.