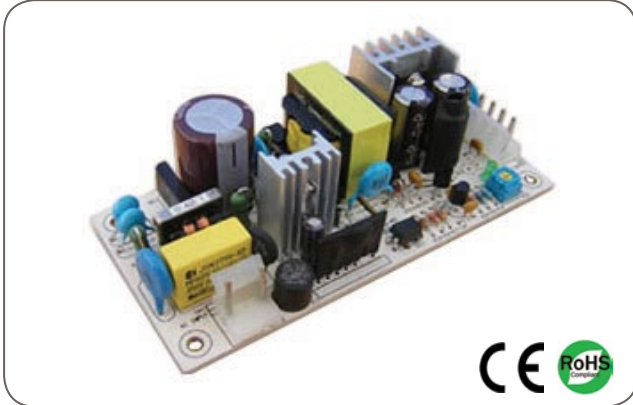


OFS30

MAX. Power 30W Isolated Open Frame Type AC-DC Converter

OFS30 Series Isolated Open Frame Type AC-DC Converter



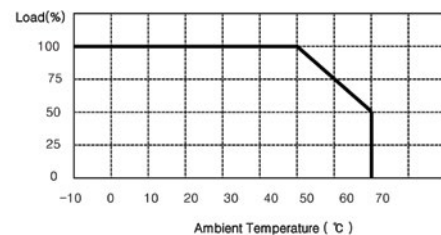
Features

- Power Saving Mode Operation
- High Efficiency
- Isolated Input - Output
- 60kHz fixed frequency and Current mode Control
- Low output Ripple & Noise
- Built-in over current protection circuit
- Short Circuit Protection
- Universal Input Voltage(Free Voltage)
- Built in EMI Filter
- Safety standard : CE approved
- RoHS compatible design
- 2-years warranty

Environment

- Operating Temperature : -10°C ~ 70°C
- Operating Humidity : 20% ~ 90% RH (Non condensing)
- Storage Temperature : -20°C ~ 75°C
- Cooling : Free-Air Convection
- MTBF : 4.3 x 10⁵ hrs

Derating Curve



* Operating Temperature Range : From -10°C to 70°C

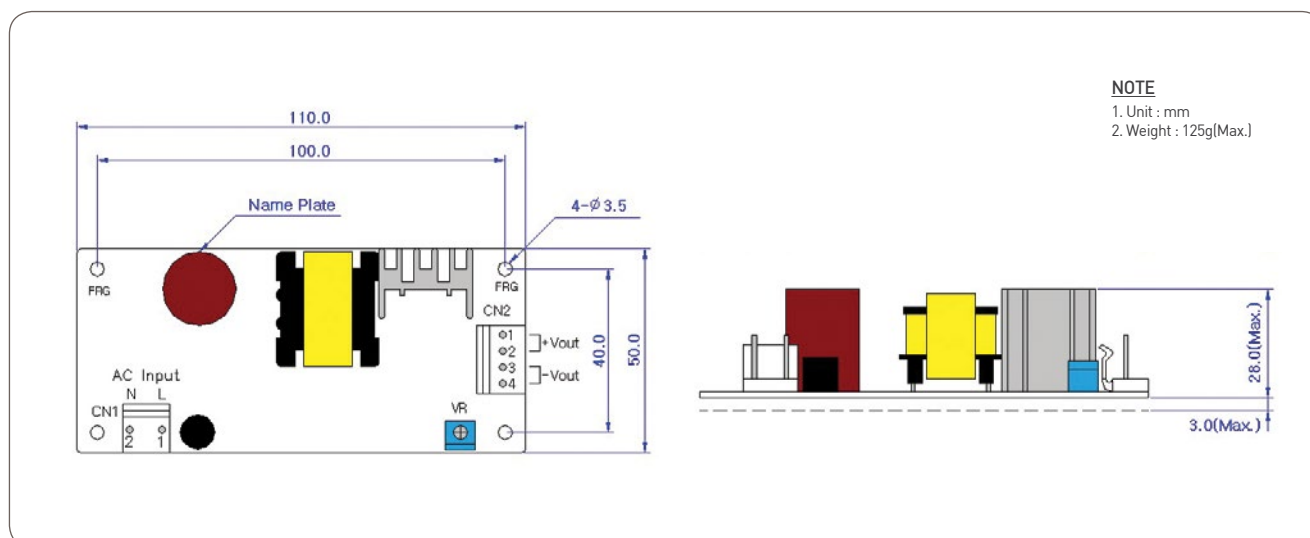
General Specifications

| | | |
|-----------------------|---------------------------|--|
| Input | Power Saving | less than 0.5W (@Input : 230Vac, Output : No Load) |
| | Voltage Range | AC90V ~ 264V OR DC120V ~ 370V |
| | Frequency | 44 ~ 440Hz(50Hz, 60Hz Typ.) |
| | Current | OFS10 : 0.33Amax, OFS15 : 0.49Amax OFS30 : 0.89Amax, OFS40 : 1.19Amax OFS50 : 1.25Amax, OFS60 : 1.50Amax OFS75 : 1.70Amax OFS100H : 1.20Amax, OFS100L : 2.30Amax |
| | Efficiency | 78% ~ 85% |
| | Inrush Current | 30Amax.(110Vac), 60Amax.(220Vac) @ Cold start |
| | Leakage Current | OFS10 ~ OFS75 : 0.2mAmax.(110Vac), 0.35mAmax.(220Vac) OFS100H : 0.75mAmax.(220Vac) OFS100L : 0.5mAmax.(110Vac) |
| Output | Output Voltage | 5V, 12V, 15V, 24V |
| | Line Regulation | ± 1.0% |
| | Load Regulation | ± 1.0% |
| | Output Voltage adj. Range | ± 10% |
| | Ripple & Noise | 1%(Peak to Peak) Max. |
| Protection Circuit | Over Current Protection | Works at over 105% of rating and recovers automatically |
| | Over Voltage Protection | Works at over 115% ~ 140% of rating |
| Electrically Isolated | Input - Output | AC3kV, 1minute / DC500V, 100MΩ min |
| | Input - FRG | AC2kV, 1minute / DC500V, 100MΩ min |
| | Output - FRG | AC0.5kV, 1minute / DC500V, 70MΩ min |

OFS30 Series Ordering Information (Single Output)

| MODEL | OFS30 - 05 | OFS30 - 12 | OFS30 - 15 | OFS30 - 24 | |
|-------------------------------|--|------------|------------|------------|------|
| Input Voltage (V) | AC90V ~ 264V, 44Hz ~ 440Hz or DC120V ~ 370V | | | | |
| Power Saving | less than 0.5W (@Input : 230Vac, Output : No Load) | | | | |
| Output | Vout (V) | 5 | 12 | 15 | 24 |
| | Iout (A) | 5 | 2.5 | 2 | 1.25 |
| Maximum Power (W) | 25 | 30 | 30 | 30 | |
| Ripple & Noise (mVp-p) | 100 | 120 | 150 | 200 | |
| Efficiency Typ. (%) | 78 | 84 | 85 | 85 | |
| Output Voltage adj. Range [%] | ±10 | ±10 | ±10 | ±10 | |

Outline Dimensions : (Unit : [mm])



Matching Crimp Housing & Terminals

| | Crimp Housings | Terminals |
|-----|------------------------------------|------------------------------------|
| CN1 | Molex 09 - 52 - 4034 or equivalent | Molex 08 - 70 - 0012 or equivalent |
| CN2 | Molex 09 - 52 - 4044 or equivalent | |

Pin assignments

| | Pin No. | Function |
|-----|---------|-------------------|
| CN1 | 1 | AC Input L |
| | 2 | AC input N |
| CN2 | 1, 2 | DC Output +V |
| | 3, 4 | DC Output -V(GND) |