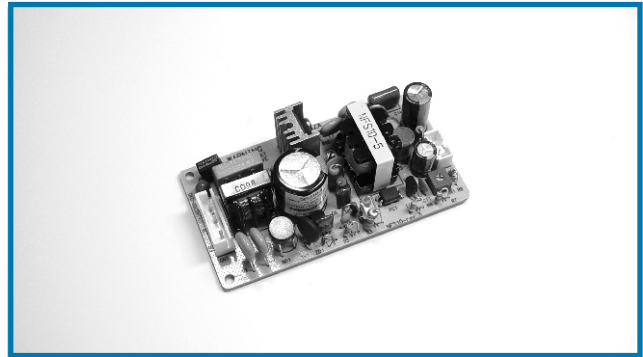


# NF 10

## NF 10 Series AC/DC Converters

**Total power**      **10 Watts**  
**Input voltages**   **AC85~264V or DC110~340V**  
**#of outputs**      **Single output**



### SPECIAL FEATURES

- Cost effective unit
- Small, compact footprint
- High efficiency
- Universal input
- Built - in EMI filter
- Inrush current limit
- Adjustable output voltage
- Output over current protection
- Low output ripple & noise
- Isolated output
- 2Years warranty

### ENVIRONMENTAL

- Operating temperature range ..... -10 ~60
- Storage temperature range ..... -20 ~70
- Humidity ..... 20%~90%RH
- Vibration ..... 10~55Hz at 2G 3minutes period
- Impact ..... 20G for 11ms, once on each X, Y and Z-axis
- Cooling method ..... Natural air
- MTBF .....  $2.3 \times 10^5$  hrs
- Safety ..... CB standard design
- Noise ..... Meets FCC class B

### ELECTRICAL SPECIFICATIONS

**INPUT**

- Voltage ..... AC85~264V (or DC 110~340V)
- Current ..... 0.21A max. @ 110VAC / 0.11A max. @ 220VAC
- Frequency ..... 47~440Hz max. (50~60Hz typ.)
- Efficiency ..... 70% min.
- Inrush current (at cold start) ..... 30A max. @ 110VAC / 60A max. @ 220VAC
- Leakage current ..... 0.5mA max. @ 110VAC / 0.75mA max. @ 220VAC

**OUTPUT**

- Voltage Set adj. Range .....  $\pm 10\%$  typ.
- Ripple and noise ..... 1% max.
- Line regulation .....  $\pm 1\%$  max.
- Load regulation .....  $\pm 1\%$  max.
- Dynamic load regulaion .....  $\pm 3\%$  max.
- Temperature drift .....  $\pm 1\%$  typ.
- Rising time ..... 100ms max.
- Holding time ..... 10ms min.

**PROTECTION CIRCUIT**

- Over current protection ..... Work at over 105% of rating & recovers automatically

**ELECTRICALLY ISOLATED**

- Input - Output ..... AC 3kV, 1minute, 10mA / DC 500V, 100MOhms min.
- Input - FG ..... AC 2kV, 1minute, 10mA / DC 500V, 100MOhms min.
- Output - FG ..... AC 0.5kV, 1minute, 10mA / DC 500V, 70MOhms min.

## Ordering Information

Input	Output	Maximum Power	Ripple & Noise max	Efficiency Typ.	Model Number
AC 85 ~ 264V or DC 110 ~ 340V	5V@2.00A	10.0W	80mVp-p	76%	<b>NFS10-5</b>
	12V@0.90A	10.8W	120mVp-p	77%	<b>NFS10-12</b>
	15V@0.70A	10.5W	150mVp-p	77%	<b>NFS10-15</b>
	24V@0.45A	10.8W	200mVp-p	77%	<b>NFS10-24</b>

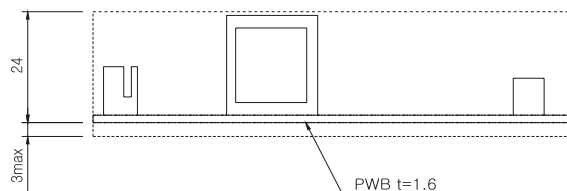
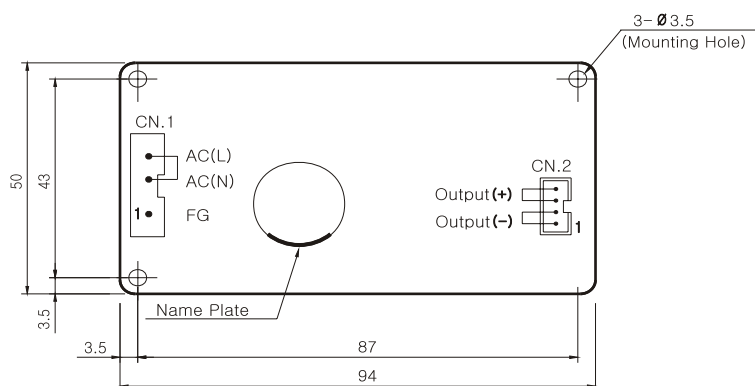
## Mating connectors

Name	I/O Connector	Mating Connector	Terminal
CN 1	YPW500 03	YPH500 03	YLT-500
CN 2	YW025-04	YH025-04	YST-025

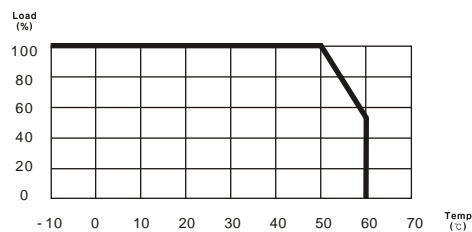
## Pin assignments

Connector	Pin assi.
CN 1 (input)	1. FG 2. AC(N) 3. AC(L)
CN 2 (output)	1. Gnd 2. Gnd 3. Output1 4. Output1

## Dimensions



## Derating curve



### NOTES

1. All dimensions are in mm
2. Weight : 75g or less