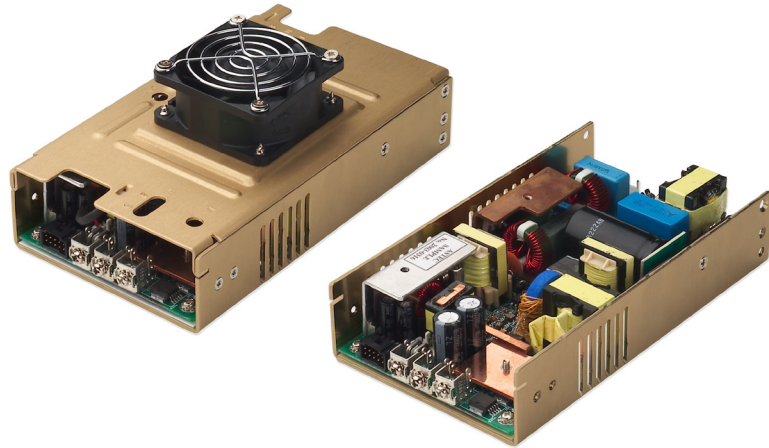


## NTS350 Series

350 Watts

**Total Power:** 200 - 350 Watts  
**Input Voltage:** 85 - 264 VAC  
120 - 300VDC  
**# of Outputs:** Single



### Special Features

- Active power factor correction
- IEC EN6100-3-2 compliance
- Remote sense
- Power fail and remote inhibit
- Single wire current sharing
- Built-in EMI filter
- Low output ripple
- 5V standby
- 12V fan output
- Overvoltage protection
- Overload protection
- Thermal overload protection
- DC power good
- Built in OR-ing diode / FET
- Optional fan cover (-CF suffix)

### Safety

- TUV 60950
- UL 0950
- CSA 60950
- NEMKO 60950
- AUSTEL 60950
- CB Certificate and report
- CE Mark (LVD)

## Electrical Specifications

| Input                         |  |
|-------------------------------|--|
| Input range                   | 85 - 264 VAC (wide range)  |
| Frequency                     | 47-440 Hz  |
| Inrush current                | 38A max., cold start @ 25°C  |
| Efficiency                    | 85% typical at full load   |
| EMI filter                    | FCC Class B conducted and radiated; CISPR22 Class B conducted and radiated; EN55022 Class B conducted and radiated; VDE0878PT3 Class B conducted and radiated. |
| Safety ground leakage current | <0.5mA @ 50/60 Hz, 264 VAC input   |
| Output                        |  |
| Maximum power                 | 200W for convection; 350W with 30CFM forced air  |
| Adjustment range              | ±5%  |
| Standby output                | 5V @ 2A regulated, ±5%   |
| Fan output                    | 12 V @ 1A, -5 %, +7%, 0.5A for -CF version   |
| Hold-up time                  | 20 ms @ 350 W load, 115 VAC nominal line at factory voltage setting  |
| Overload protection           | Short circuit protection on all outputs. Case overload protected @ 115-130% above peak rating  |
| Overvoltage protection        | 20-35% above nominal output  |



## Logic Control

|               |  |
|---------------|--|
| Power failure | TTL logic signal goes high 100-500 msec after main output. It goes low at least 4 msec before loss of regulation |
| Remote on/off | Requires an external contact closure to inhibit outputs  |
| DC OK         | TTL logic goes high after the output is in regulation. It goes low when there is loss of regulation.             |
| Remote sense  | Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.  |

## Environmental Specifications

|                                 |   |
|---------------------------------|---|
| Operating temperature:          | 0° to 50°C ambient derate each output as 2.5% per degree from 50° to 70°C.  |
| Storage temperature:            | -40°C to +85°C  |
| Electromagnetic susceptibility: | designed to meet EN61000-4; -2, -3, -4, -5, -6, -8, -11 Level 3   |
| Humidity:                       | Operating; non-condensing 10% to 90% RH   |
| Vibration:                      | Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 2 G peak 8 Hz to 500 Hz, operational |
| MTBF demonstrated               | 1M hours at full load and 25°C ambient conditions   |

## Ordering Information

| Model Number | Output Voltage | Minimum Load | Maximum Load with Convection Cooling | Maximum Load with 30CFM Forced Air | Peak Load <sup>1</sup> | Regulation <sup>2</sup> | Ripple P/P (PARD) <sup>3</sup> |
|--------------|----------------|--------------|--------------------------------------|------------------------------------|------------------------|-------------------------|--------------------------------|
| NTS353       | 12V            | 0A           | 16.6A                                | 29.2A                              | 33A                    | ±2%                     | 120mV                          |
| NTS355       | 24V            | 0A           | 8.3A                                 | 14.6A                              | 16.5A                  | ±2%                     | 240mV                          |
| NTS358       | 48V            | 0A           | 4.2A                                 | 7.3A                               | 8.2A                   | ±2%                     | 480mV                          |
| NTS359       | 54V            | 0A           | 3.7A                                 | 6.5A                               | 7.4A                   | ±2%                     | 540mV                          |

1. Peak current lasting <30 seconds with a maximum 10% duty cycle.
2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
3. Peak-to-peak with 20 MHz bandwidth and 10 µF (tantalum capacitor) in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.

## Pin Assignments

### Connector

|            |        |                       |
|------------|--------|-----------------------|
| <b>SK1</b> | PIN 1  | Line                  |
|            | PIN 3  | Neutral               |
|            | PIN 5  | Ground                |
| <b>SK5</b> | PIN 1  | V1 swp                |
|            | PIN 2  | - Remote Sense        |
|            | PIN 3  | + Remote Sense        |
|            | PIN 4  | 5VSB (standby)        |
|            | PIN 5  | 5VSB return           |
|            | PIN 6  | +12V                  |
|            | PIN 7  | Common                |
|            | PIN 8  | Inhibit               |
|            | PIN 9  | DC power good (DC OK) |
|            | PIN 10 | Power Fail (POK)      |



### Mating Connectors

**SK1 AC input** Molex 09-50-8051 (USA)  
Molex 09-91-0500 (UK)  
PINS: 08-52-0113

**SK2,3,4** Molex BB-124-08

**SK5 Control signals** Molex 90142-0010  
PINS: 90119-2110 or  
Amp: 87977-3  
PINS: 87309-8

Astec Connector Kit #70-841-022 includes all of the above

### Notes:

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ±.02".
3. Specifications are at factory settings
4. Mounting maximum insertion depth is 0.12".
5. Warranty: 2 year
6. Weight: 2.5 lb. / 1.13 kg.

### Adjustment Potentiometers

|    |                   |
|----|-------------------|
| P1 | +V1 Output adjust |
| P3 | +5VSB adjust      |

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