

### 75 Watts

- Ultra Slim Design - 32 mm
- 150% Peak Load for 3 seconds
- Ambient Operation from -25 °C to +70 °C
- Full Load at 60 °C
- High Efficiency - Up to 91%
- Volt-Free Contact for DC OK
- Selectable Parallel Operation
- 85 to 264 VAC Operation
- 3 Year Warranty



#### Dimensions:

**DSR75:**  
1.26 x 4.88 x 4.69" (32.0 x 124.0 x 119.0 mm)

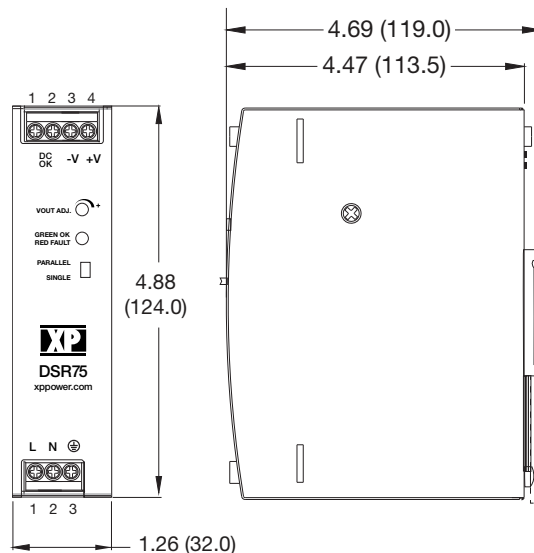
### Models & Ratings

| Output Voltage | Output Power | Output Voltage Trim <sup>(3)</sup> | Output Current | Peak Current <sup>(2)</sup> | Typical Efficiency <sup>(1)</sup> | Model Number |
|----------------|--------------|------------------------------------|----------------|-----------------------------|-----------------------------------|--------------|
| 12 V           | 75 W         | 12.0-14.0 V                        | 6.3 A          | 9.45 A                      | 88%                               | DSR75PS12    |
| 24 V           | 75 W         | 24.0-28.0 V                        | 3.2 A          | 4.80 A                      | 91%                               | DSR75PS24    |
| 48 V           | 75 W         | 48.0-56.0 V                        | 1.6 A          | 2.40 A                      | 91%                               | DSR75PS48    |

#### Notes

1. Typical efficiency at 230 VAC and full load.
2. Peak current is for a maximum of 3 s, see Application Notes. Average power is not to exceed nominal output power.
3. Output current should be limited so that nominal output power is not exceeded.

### Mechanical Details



| Pin Connector |     |             |
|---------------|-----|-------------|
| Conn          | Pin | Designation |
| AC I/P        | 1   | L           |
|               | 2   | N           |
|               | 3   | Ground      |
| DC O/P        | 1   | DC OK       |
|               | 2   | DC OK       |
|               | 3   | -Vout       |
|               | 4   | +Vout       |

#### Notes

1. All dimensions in inches (mm)
2. Weight: 1.06 lbs (480g)
3. Tolerance: ±0.02 in (±0.5 mm)

### Input

| Characteristic            | Minimum                              | Typical | Maximum | Units | Notes & Conditions                          |
|---------------------------|--------------------------------------|---------|---------|-------|---|
| Input Voltage - Operating | 85                                   |         | 264     | VAC   |   |
| Input Frequency           | 47                                   | 50/60   | 63      | Hz    |   |
| Power Factor              |                                      | 0.95    |         |       | At 230 VAC. Conforms to EN61000-3-2 Class A |
| Input Current - Full Load |                                      | 0.8/0.4 |         | A     | 115/230 VAC                                 |
| Inrush Current            |                                      |         | 30/60   | A     | At 115/230 VAC. Cold start, 25 °C           |
| Earth Leakage Current     |                                      |         | 1.0     | mA    | At 264 VAC, 60 Hz                           |
| Input Protection          | T5.0 A / 250 V internal in-line fuse |         |         |       |   |

### Output

| Characteristic            | Minimum | Typical | Maximum     | Units    | Notes & Conditions  |
|---------------------------|---------|---------|-------------|----------|---|
| Output Voltage - V1       | 12      |         | 48          | VDC      | See Models and Ratings table  |
| Initial Set Accuracy      |         |         | ±1          | %        | At 100% load  |
| Output Voltage Adjustment |         |         |             | %        | See Models and Ratings table  |
| Minimum Load              | 0       |         |             | A        | No minimum load required  |
| Start Up Delay            |         |         | 500         | ms       | At 100 VAC  |
| Hold Up Time              | 20      |         |             | ms       | At full load  |
| Line Regulation           |         |         | ±0.5        | %        |   |
| Load Regulation           |         |         | ±1          | %        |   |
| Transient Response - V1   |         |         | 5           | %        | Recovery within 1% in less than 200 µs for a 50% step load change at 0.2 A/µs |
| Ripple & Noise            |         |         | 100/120/240 | mV pk-pk | 12 V/24 V/48 V models. Measured at 20 MHz bandwidth 0-70°C                    |
|                           |         |         | 200/240/240 |          | 12 V/24 V/48 V models. Measured at 20 MHz bandwidth -25-0°C                   |
| Overvoltage Protection    | 15      |         | 20          | V        | 12 V model, at 115/230 VAC input  |
|                           | 29      |         | 40          | V        | 24 V model, at 115/230 VAC input  |
|                           | 58      |         | 65          | V        | 48 V model  |
| Overload Protection       | 110     |         | 150         | %        | Trip & restart. See application note.   |
| Short Circuit Protection  |         |         |             |          | Trip & restart (hiccup mode), auto recovery                                   |
| Thermal Protection        |         | 110 ±10 |             | °C       | Measured internally, recycle AC to reset                                      |
| Temperature Coefficient   |         |         | 0.03        | %/°C     |   |

### General

| Characteristic  | Minimum   | Typical    | Maximum | Units  | Notes & Conditions                             |
|---|---|------------|---------|--------|--|
| Efficiency  |   | 91         |         | %      | See Models & Ratings table                     |
| Isolation: Input to Output<br>Input to Ground<br>Output to Ground | 3000  |            |         | VAC    |  |
|   | 2500  |            |         | VAC    |  |
|   | 500   |            |         | VAC    |  |
| Switching Frequency   |   | 65         |         | kHz    | PFC, fixed                                     |
|   | 60  |            | 400     | kHz    | Main converter, variable, at 115/230 VAC input |
| DC OK Signal  | Volt free contacts rated at 60 VDC/0.3 A, 30 VDC/1.0 A or 30 VAC/0.3 A (resistive load) |            |         |        |  |
| Output LED  | Green LED to indicate output on.  |            |         |        |  |
| Mean Time Between Failure   | 300   |            |         | kHrs   | MIL-HDBK-217F, +25 °C GB                       |
| Weight  |   | 1.06 (480) |         | lb (g) |  |