

FEATURES

- Splash Proof
- Class I Insulation
- Two Year Warranty
- IEC-320-C14 Input Inlet
- Optional Output Connectors
- Single, Dual, and Triple Outputs
- Over Voltage Protection (Crowbar Design)
- Wide Input Voltage 90 to 264VAC, 47~63Hz
- Output Voltage Available from 2VDC to 50VDC
- Input Surge Current, Over Voltage, and Over Load Protection



| SPECIFICATIONS: DTSPU45 Series | | | | | |
|---|--|-----------------------------|-----|-------|--------|
| All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted. We reserve the right to change specifications based on technological advances. | | | | | |
| SPECIFICATION | TEST CONDITIONS | Min | Nom | Max | Unit |
| INPUT (V_{in}) | | | | | |
| Input Voltage | | 90 | | 264 | VAC |
| Input Frequency | | 47 | | 63 | Hz |
| Input Current (Low Line) | I _o = Full Load, V _{in} = 115VAC | | | 1.35 | A |
| Input Current (High Line) | I _o = Full Load, V _{in} = 230VAC | | | 0.8 | A |
| Inrush Current (Low Line) | I _o = Full Load, 25°C, Cool Start, V _{in} = 115VAC | | 12 | 15 | A |
| Inrush Current (High Line) | I _o = Full Load, 25°C, Cool Start, V _{in} = 230VAC | | 26 | 30 | A |
| Safety Ground Leakage Current | I _o = Full Load, V _{in} = 240VAC | | 0.5 | 0.75 | mA |
| Start-Up Time | I _o = Full Load, V _{in} = 100VAC | 0.3 | 1 | 2 | s |
| OUTPUT (V_o) | | | | | |
| Output Voltage Range | | See Rating Chart | | | VDC |
| Load Regulation | V _{in} = 230VAC | | 3 | 15 | % |
| Line Regulation | I _o = Full Load | | 0.5 | 1 | % |
| Output Power Range | V _{in} = 90 to 264VAC | 0 | | 50 | W |
| Output Current Range | | See Rating Chart | | | A |
| *Ripple & Noise (peak to peak) | Full Load, V _{in} = 90VAC | | 0.5 | 1 | % |
| Transient Response | I _o = Full Load to Half Load, V _{in} = 100VAC | | | 4 | ms |
| Hold-Up Time | I _o = Full Load, V _{in} = 110VAC | 16 | | | ms |
| PROTECTION | | | | | |
| Over Voltage Protection | | 112 | | 132 | % |
| Over Current Protection | | 110 | | 150 | % |
| GENERAL | | | | | |
| Efficiency | I _o = Full Load, V _{in} = 230VAC | 75 | 83 | 88 | % |
| Dielectric Withstanding Voltage For Primary to Secondary | Primary to Secondary | 4242 | | | VDC |
| Dielectric Withstanding Voltage For Primary to Ground | Primary to Ground | 2121 | | | VDC |
| Isolation Resistance | Test Voltage = 500VDC | 50 | | | MΩ |
| ENVIRONMENTAL | | | | | |
| Operating Temperature | Derate linearly from 100% Load at 40°C to 50% load at 70°C | 0 | | 70 | °C |
| Storage Temperature | | -40 | | 85 | °C |
| Relative Humidity | | 5 | | 95 | % |
| Temperature Coefficient | All Outputs | -0.04 | | +0.04 | %/°C |
| PHYSICAL | | | | | |
| Weight | | Approximately 535 ~ 560 | | | grams |
| Dimensions | | 5.75(L) x 2.99(W) x 1.69(H) | | | inches |
| Warranty | | 2 | | | years |
| SAFETY | | | | | |
| EMI Requirements for CISPR-22 | V _{in} = 220VAC | B | | | Class |
| EMI Requirements for FCC PART-15 | V _{in} = 110VAC | B | | | Class |

*Note: The Ripple & Noise for output voltages under 3.3VDC is 2% max.

OUTPUT VOLTAGE / CURRENT RATING CHARTS

| SINGLE OUTPUT MODELS | | | | | |
|----------------------|----------------|----------------------|---------------------|------------------|-------------------|
| Model Number | Preset Voltage | Output Voltage Range | Max. Output Current | Total Regulation | Max. Output Power |
| DTSPU45-100 | 3 VDC | 2 ~ 3 VDC | 8.00A max. | 7% | 24W |
| DTSPU45-101 | 5 VDC | 3 ~ 5 VDC | 8.00A max. | 5% | 40W |
| *DTSPU45-102 | 6 VDC | 5 ~ 6 VDC | 8.00 ~ 6.66A | 5% | 40W |
| *DTSPU45-103 | 8 VDC | 6 ~ 8 VDC | 7.00 ~ 5.25A | 5% | 42W |
| *DTSPU45-104 | 11 VDC | 8 ~ 11 VDC | 5.63 ~ 4.00A | 4% | 45W |
| *DTSPU45-105 | 13 VDC | 11 ~ 13 VDC | 4.00 ~ 3.46A | 3% | 45W |
| *DTSPU45-106 | 16 VDC | 13 ~ 16 VDC | 3.46 ~ 2.81A | 3% | 45W |
| DTSPU45-107 | 21 VDC | 16 ~ 21 VDC | 3.12 ~ 2.38A | 3% | 50W |
| DTSPU45-108 | 27 VDC | 21 ~ 27 VDC | 2.30 ~ 1.85A | 2% | 50W |
| DTSPU45-109 | 33 VDC | 27 ~ 33 VDC | 1.85A ~ 1.51A | 2% | 50W |
| DTSPU45-110 | 40 VDC | 33 ~ 40 VDC | 1.51 ~ 1.25A | 2% | 50W |
| DTSPU45-111 | 50 VDC | 40 ~ 50 VDC | 1.25 ~ 1.00A | 2% | 50W |

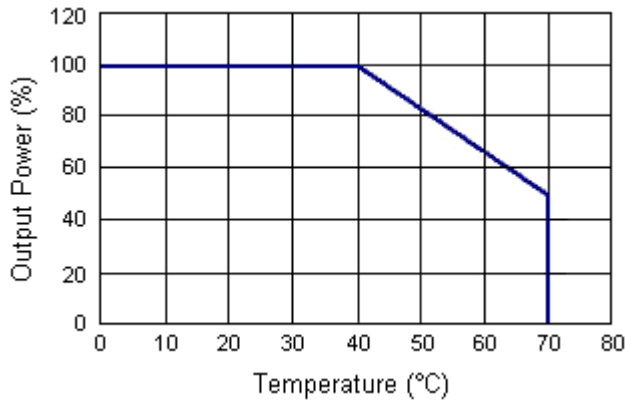
| DUAL OUTPUT MODELS | | | | | | |
|--------------------|----------------|---------------------|---------------------|-----------------|-------------------|--------|
| Model Number | Output Voltage | Min. Output Current | Max. Output Current | Max. Regulation | Max. Output Power | |
| *DTSPU45-200 | Output 1 | +3.3 VDC | 0.5A | 5A | 7% | 40W |
| | Output 2 | +12.0 VDC | 0.3A | 2A | 5% | |
| *DTSPU45-201 | Output 1 | +5.0 VDC | 0.5A | 5A | 5% | 42W |
| | Output 2 | +12.0 VDC | 0.3A | 2A | 5% | |
| *DTSPU45-202 | Output 1 | +5.0 VDC | 0.8A | 5A | 7% | 42W |
| | Output 2 | +15.0 VDC | 0.3A | 1.5A | 5% | |
| DTSPU45-203 | Output 1 | +5.0 VDC | 0.5A | 5A | 5% | 42W |
| | Output 2 | +24.0 VDC | 0.1A | 1A | 5% | |
| DTSPU45-204 | Output 1 | +3.3 VDC | 0.5A | 5A | 7% | 26.5W |
| | Output 2 | +5.0 VDC | 0.2A | 2A | 5% | |
| *DTSPU45-209 | Output 1 | +12 VDC | 0.3A | 3A | 5% | 42W |
| | Output 3 | -12 VDC | 0.1A | 1A | 5% | |
| *DTSPU45-210 | Output 1 | +15.0 VDC | 0.2A | 2A | 5% | 42W |
| | Output 3 | -15.0 VDC | 0.1A | 1A | 5% | |
| DTSPU45-215 | Output 1 | +5.0 VDC | 0.5A | 5A | 5% | 42W |
| | Output 3 | -24.0 VDC | 0.1A | 1A | 5% | |
| DTSPU45-216 | Output 1 | +5.1 VDC | 0A | 1A | 5% | 23.82W |
| | Output 3 | +7.2 VDC | 0.2A | 2.6A | 5% | |

| TRIPLE OUTPUT MODELS | | | | | | |
|----------------------|----------------|---------------------|---------------------|-----------------|-------------------|-----|
| Model Number | Output Voltage | Min. Output Current | Max. Output Current | Max. Regulation | Max. Output Power | |
| *DTSPU45-300 | Output 1 | +3.3 VDC | 1.0A | 5A | 7% | 42W |
| | Output 2 | +12.0 VDC | 0.3A | 2A | 5% | |
| | Output 3 | -12.0 VDC | 0.1A | 0.8A | 5% | |
| *DTSPU45-301 | Output 1 | +5.0 VDC | 0.5A | 5A | 5% | 42W |
| | Output 2 | +12.0 VDC | 0.2A | 2A | 5% | |
| | Output 3 | -5.0 VDC | 0A | 0.8A | 5% | |
| *DTSPU45-302 | Output 1 | +5.0 VDC | 0.5A | 5A | 5% | 42W |
| | Output 2 | +12.0 VDC | 0.2A | 2A | 5% | |
| | Output 3 | -12.0 VDC | 0A | 0.8A | 5% | |
| *DTSPU45-303 | Output 1 | +5.0 VDC | 0.5A | 5A | 5% | 42W |
| | Output 2 | +15.0 VDC | 0.3A | 2A | 6% | |
| | Output 3 | -15.0 VDC | 0A | 0.8A | 5% | |
| DTSPU45-304 | Output 1 | +5.0 VDC | 0.5A | 5A | 5% | 42W |
| | Output 2 | +24.0 VDC | 0.2A | 1A | 5% | |
| | Output 3 | -24.0 VDC | 0A | 0.5A | 5% | |
| DTSPU45-305 | Output 1 | +5.0 VDC | 0.5A | 5A | 5% | 42W |
| | Output 2 | +24.0 VDC | 0.1A | 1A | 5% | |
| | Output 3 | -12.0 VDC | 0A | 0.8A | 5% | |
| *DTSPU45-306 | Output 1 | +3.3 VDC | 0.5A | 5A | 7% | 42W |
| | Output 2 | +12.0 VDC | 0.4A | 2A | 5% | |
| | Output 3 | -5.0 VDC | 0A | 0.8A | 5% | |

NOTES

1. For single output models the output voltage is specified as a range (Ex: 40 ~ 50VDC); the preset voltage will be set as standard models if nothing different is requested. Please contact factory for ordering details.
2. The “ * ” symbol means PSE approval.
3. Models with output voltages under 15VDC have been approved by TUV/PSE.
4. Optional output connectors are available (see “DC Output Plug Selector List” link located at the bottom of the “Desktop” category page). Please call factory for ordering details.

DERATING CURVE



MECHANICAL DRAWINGS

Unit: inches [mm]

