

## 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
<b>INPUT (V<sub>in</sub>)</b>					
Input Voltage		90		264	VAC
Input Frequency		47		63	Hz
Input Current (Low Line)	I <sub>o</sub> = Full Load, V <sub>in</sub> = 115VAC			1.35	A
Input Current (High Line)	I <sub>o</sub> = Full Load, V <sub>in</sub> = 230VAC			0.8	A
Inrush Current (Low Line)	I <sub>o</sub> = Full Load, 25°C, Cool Start, V <sub>in</sub> = 115VAC		12	15	A
Inrush Current (High Line)	I <sub>o</sub> = Full Load, 25°C, Cool Start, V <sub>in</sub> = 230VAC		26	30	A
Safety Ground Leakage Current	I <sub>o</sub> = Full Load, V <sub>in</sub> = 240VAC		0.5	0.75	mA
Start-Up Time	I <sub>o</sub> = Full Load, V <sub>in</sub> = 100VAC	0.3	1	2	s
<b>OUTPUT (V<sub>o</sub>)</b>					
Output Voltage Range		See Rating Chart			VDC
Load Regulation	V <sub>in</sub> = 230VAC		3	15	%
Line Regulation	I <sub>o</sub> = Full Load		0.5	1	%
Output Power Range	V <sub>in</sub> = 90 to 264VAC	0		50	W
Output Current Range		See Rating Chart			A
*Ripple & Noise (peak to peak)	Full Load, V <sub>in</sub> = 90VAC		0.5	1	%
Transient Response	I <sub>o</sub> = Full Load to Half Load, V <sub>in</sub> = 100VAC			4	ms
Hold-Up Time	I <sub>o</sub> = Full Load, V <sub>in</sub> = 110VAC	16			ms
<b>PROTECTION</b>					
Over Voltage Protection		112		132	%
Over Current Protection		110		150	%
<b>GENERAL</b>					
Efficiency	I <sub>o</sub> = Full Load, V <sub>in</sub> = 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
<b>ENVIRONMENTAL</b>					
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
<b>PHYSICAL</b>					
Weight		Approximately 535 ~ 560			grams
Dimensions		5.75(L) x 2.99(W) x 1.69(H)			inches
Warranty		2			years
<b>SAFETY</b>					
EMI Requirements for CISPR-22	V <sub>in</sub> = 220VAC	B			Class
EMI Requirements for FCC PART-15	V <sub>in</sub> = 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

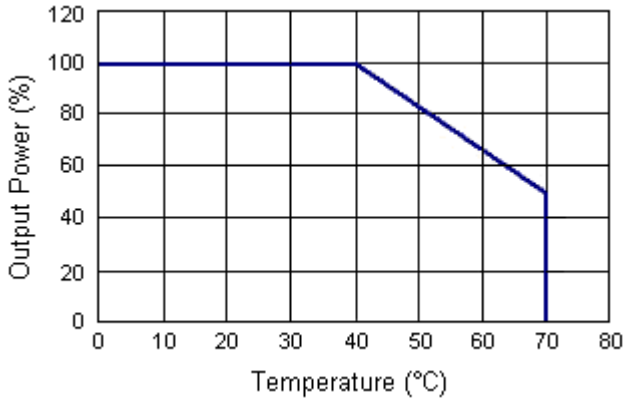
DUAL OUTPUT MODELS						
Model Number	Output Voltage	Min. Output Current	Max. Output Current	Max. Regulation	Max. Output Power	
*DTSPU45-200	Output 1	+3.3 VDC	0.5A	5A	7%	40W
	Output 2	+12.0 VDC	0.3A	2A	5%	
*DTSPU45-201	Output 1	+5.0 VDC	0.5A	5A	5%	42W
	Output 2	+12.0 VDC	0.3A	2A	5%	
*DTSPU45-202	Output 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]

