

**FEATURES**

- Splash Proof
- Single Output
- 3 Year Warranty
- A Type: Class I Insulation
- Optional Output Connectors
- CEC and Energy Star Compliance
- 2 Types of Inlet Connectors Available
- Approved as Limited Power Source (LPS)
- Wide Input Voltage 90 to 264VAC, 47~63Hz
- B Type: Class II Insulation (Double Insulation)
- Output Voltages Available from 3VDC to 48VDC



**SPECIFICATIONS: DTSPU20 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>					
Operating Voltage Range		90		264	VAC
Input Frequency		47		63	Hz
Input Current (Low Line)	Io = Full Load, Vin = 115VAC			0.4	A
Input Current (High Line)	Io = Full Load, Vin = 230VAC			0.25	A
Inrush Current (Low Line)	Io = Full Load, 25°C, Cool Start, Vin = 115VAC		12	15	A
Inrush Current (High Line)	Io = Full Load, 25°C, Cool Start, Vin = 230VAC		26	30	A
Safety Ground Leakage Current (A Type)	Io = Full Load, Vin = 240VAC		0.5	0.75	mA
Safety Ground Leakage Current (B Type)	Io = Full Load, Vin = 240VAC		0.15	0.25	mA
Start-Up Time	Io = Full Load, Vin = 100VAC		0.25	0.5	s
<b>OUTPUT (V<sub>o</sub>)</b>					
Output Voltage Range		See Rating Chart			VDC
Load Regulation	Vin = 230VAC	1	3	5	%
Line Regulation	Io = Full Load		0.5	1	%
Output Power Range	Vin = 90 to 264VAC			20	W
Output Current Range		See Rating Chart			A
Ripple & Noise (peak to peak)	Full Load, Vin = 90VAC		0.5	1	%
Transient Response	Io = Full Load to Half Load, Vin = 100VAC			4	ms
Hold-Up Time	Io = Full Load, Vin = 110VAC	12	14	16	ms
<b>PROTECTION</b>					
Over Voltage Protection			Nil		%
Over Current Protection		110		150	%
<b>GENERAL</b>					
Efficiency	Io = Full Load, Vin = 230VAC	75	85	95	%
Dielectric Withstanding Voltage For Primary to Secondary	Primary to Secondary	4242			VDC
Dielectric Withstanding Voltage For Primary to Ground (A Type Only)	Primary to Ground	2121			VDC
Isolation Resistance	Test Voltage = 500VDC	50			MΩ
Power Consumption (No Load)	No Load, Vin = 240VAC	0	0.4	0.5	W
<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
MTBF		300,000			hours
<b>PHYSICAL</b>					
Weight		Approximately 170 grams			
Dimensions		3.90 x 1.65 x 1.22 inches			
Input Inlet		A Type: IEC-320-C6, B Type: IEC-320-C8			
Warranty		3			years
<b>SAFETY</b>					
CISPR (EMI Requirements for CISPR-22)	Vin = 220VAC	B			Class
FCC (EMI Requirements for FCC Part-15)	Vin = 110VAC	B			Class

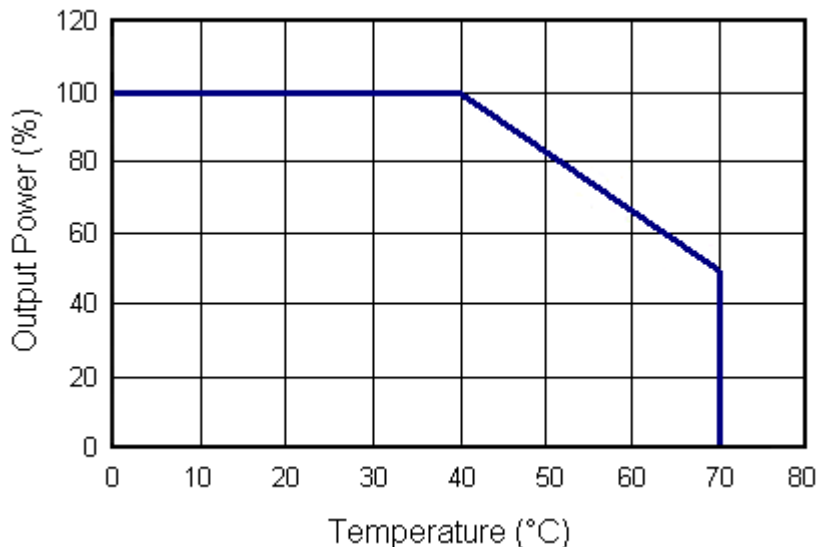
**OUTPUT VOLTAGE/ CURRENT RATING CHART**

Model Number	Preset Voltage	Output Voltage Range	Output Current	Total Regulation	Max Output Power	AC Inlet Connector
DTSPU20A-102	6 VDC	5 ~ 6 VDC	3.00 ~ 2.50A	5%	15W	IEC-320-C6
DTSPU20A-105	13 VDC	11 ~ 13 VDC	1.81 ~ 1.53A	4%	20W	
DTSPU20A-106	16 VDC	13 ~ 16 VDC	1.53 ~ 1.25A	4%	20W	
DTSPU20A-108	27 VDC	21 ~ 27 VDC	0.95 ~ 0.74A	3%	20W	
DTSPU20A-109	33 VDC	27 ~ 33 VDC	0.74 ~ 0.60A	3%	20W	
DTSPU20A-111	48 VDC	40 ~ 48 VDC	0.50 ~ 0.41A	3%	20W	
DTSPU20B-102	6 VDC	5 ~ 6 VDC	3.00 ~ 2.50A	5%	15W	IEC-320-C8
DTSPU20B-105	13 VDC	11 ~ 13 VDC	1.81 ~ 1.53A	4%	20W	
DTSPU20B-106	16 VDC	13 ~ 16 VDC	1.53 ~ 1.25A	4%	20W	
DTSPU20B-108	27 VDC	21 ~ 27 VDC	0.95 ~ 0.74A	3%	20W	
DTSPU20B-109	33 VDC	27 ~ 33 VDC	0.74 ~ 0.60A	3%	20W	
DTSPU20B-111	48 VDC	40 ~ 48 VDC	0.50 ~ 0.41A	3%	20W	

**NOTES**

1. The DTSPU20 Series is designated as DTSPU20x-y where x represents the type of AC input inlet connector which can either be A (IEC-320-C6) or B (IEC-320-C8); y can be 102, 103, 104, 105, 106, 107, 108, 109, 110 or 111 for output voltage.
2. 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.
3. To meet the total regulation specifications all models must use an AWG#18/4FT output cable. The regulation will change if the output cable is modified.
4. The PSE Mark is not for each model. Please contact sales if you need to put the PSE Mark on your products.
5. Optional output connectors are available (see "DC Output Plug Selector List" link located at the bottom of the "Desktop" category page).

**DERATING CURVE**



**MECHANICAL DRAWINGS**

Unit: inches [mm]

