

#### **FEATURES**

- Splash Proof
- 2 Year Warranty
- Class I Insulation
- Energy Star Compliant
- IEC-320-C14 Input Inlet
- Power Factor Correction
- Optional Output Connector
- Wide Input Voltage 90 to 264VAC, 47~63Hz
- Output Voltage Protection (Crowbar Design)
- Output Voltage Available from 11VDC thru 48VDC
- Input Surge Current, Over Voltage, and Over Load Protection















# SPECIFICATIONS: DTSPU80 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

NPUT (V <sub>in</sub> )		ve the right to change specifications based on technological ac		1		
Operating Voltage Range   90   264   VAC	SPECIFICATION	TEST CONDITIONS	Min	Nom	Max	Unit
Input Frequency						
Input Current (Low Line)   Io = Full Load, Vin = 115VAC   Input Current (High Line)   Io = Full Load, Vin = 230VAC   0.5	Operating Voltage Range		90		264	VAC
Input Current (High Line)   Io = Full Load, Vin = 230VAC   12 15 A	Input Frequency		47		63	Hz
Inrush Current (Liow 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   A   A   A   A   A   A   A   A	Input Current (Low Line)	Io = Full Load, Vin = 115VAC			1.07	Α
Inrush Current (High Line)   Io = Full Load, Z5°C, Cool Start, Vin = 230VAC   26   30   A   Safety Ground Leakage Current   Io = Full Load, Vin = 240VAC   0.5   0.75   mA   Start-Up Time   Io = Full Load, Vin = 100VAC   0.3   1   2   s   OUTPUT (V.) Output Voltage Range   See Rating Chart   VDC   Load Regulation   Vin = 230VAC   3   7   %   Line Regulation   Io = Full Load   0.5   1   %   Output Power   Vin = 90 to 264VAC   0   80   W   Output Current Range   See Rating Chart   A   Ripple & Noise (peak to peak)   Full Load, Vin = 90VAC   0.5   1   %   Irrashient Response   Io = Full Load, Vin = 100VAC   0.5   1   %   Irrashient Response   Io = Full Load, Vin = 100VAC   0.5   1   %   Irrashient Response   Io = Full Load, Vin = 100VAC   0.5   1   %   Irrashient Response   Io = Full Load, Vin = 110VAC   In   Over Voltage Protection   In   In   In   Over Voltage Protection   In   In   In   Over Voltage Protection   In   In   In   Dielectric Withstanding Voltage   Primary to Secondary   Primary to Ground   In   In   Dielectric Withstanding Voltage   Primary to Ground   In   In   In   Dielectric Withstanding Voltage   Primary to Ground   In   In   In   Dielectric Withstanding Voltage   Primary to Ground   In   In   In   Dielectric Withstanding Voltage   Primary to Ground   In   In   In   In   Dielectric Withstanding Voltage   In   In   In   In   In   In   In   I	Input Current (High Line)				0.5	Α
Safety Ground Leakage Current   Io = Full Load, Vin = 240VAC   0.3	Inrush Current (Low Line)	Io = Full Load, 25°C, Cool Start, Vin = 115VAC		12	15	Α
Start-Up Time   Io = Full Load, Vin = 100VAC   0.3   1   2   S	Inrush Current (High Line)	Io = Full Load, 25°C, Cool Start, Vin = 230VAC		26	30	Α
Output Voltage Range	Safety Ground Leakage Current	lo = Full Load, Vin = 240VAC		0.5	0.75	mA
Output Voltage Range         See Rating Chart         VDC           Load Regulation         Vin = 230VAC         3 7 %           Line Regulation         10 = Full Load         0.5 1 %           Output Dower         Vin = 90 to 264VAC         0 80 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 = 110VAC         16 ms           Noer Didle Protection         Io = Full Load, Vin = 110VAC         16 ms           PROTECTION         1112 ms         132 %           Over Current Protection         1110 ls50 %         15 %           GENERAL         Fifficiency         Io = Full Load, Vin = 230VAC         80 83 88 %         %           Dielectric Withstanding Voltage For Primary to Secondary         4242 V         VDC         VDC           Isolation Resistance         Primary to Ground         2121 V         VDC           Isolation Resistance         Test Voltage = 500VDC         0.95 0.97 1.0         10           Poperating Temperature         Derate linearly from 100% Load at 40°C to 50% load at 70°C         0 +70 °C         C           Storage Temperature         All Outputs         -0.04 +85 °C	Start-Up Time	Io = Full Load, Vin = 100VAC	0.3	1	2	S
Load Regulation   Vin = 230VAC   3 7	OUTPUT (V <sub>o</sub> )					
Load Regulation   Vin = 230VAC   3 7	Output Voltage Range		Se	e Rating C	hart	VDC
Output Power   Vin = 90 to 264VAC   0   80   W	Load Regulation	Vin = 230VAC				
Output Current Range   Full Load, Vin = 90VAC   0.5   1	Line Regulation	lo = Full Load		0.5	1	%
Ripple & Noise (peak to peak)	Output Power	Vin = 90 to 264VAC	0		80	W
Ripple & Noise (peak to peak)	Output Current Range		See Rating Chart		Α	
Transient Response   Io = Full Load to Half Load, Vin = 100VAC   16   ms	Ripple & Noise (peak to peak)	Full Load, Vin = 90VAC				%
PROTÉCTION		Io = Full Load to Half Load, Vin = 100VAC			4	ms
Over Voltage Protection	Hold-Up Time	Io = Full Load, Vin = 110VAC	16			ms
Over Current Protection         110         150         %           GENERAL         Efficiency         Io = Full Load, Vin = 230VAC         80         83         88         %           Dielectric Withstanding Voltage For Primary to Secondary         Primary to Secondary         4242         VDC         VDC           Dielectric Withstanding Voltage For Primary to Ground         Primary to Ground         2121         VDC         VDC           For Primary to Ground         Test Voltage = 500VDC         50         MΩ         MΩ           Power Factor Correction         Io = Full Load, Vin = 90~260VAC         0.95         0.97         1.0           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         95         95         95         95         95         95         95         95         95         96         96         96         96         97         1.0         96         97         1.0         96         95         95         95         95         96         96         96         95	PROTECTION					
Over Current Protection	Over Voltage Protection		112		132	%
Io = Full Load, Vin = 230VAC			110		150	%
Dielectric Withstanding Voltage For Primary to Secondary   Dielectric Withstanding Voltage For Primary to Ground   2121   VDC	GENERAL			,		
For Primary to Secondary   Primary to Secondary   Primary to Secondary   Primary to Secondary   Dielectric Withstanding Voltage   Primary to Ground   2121   VDC	Efficiency	lo = Full Load, Vin = 230VAC	80	83	88	%
Dielectric Withstanding Voltage For Primary to Ground   Primary to Ground   Primary to Ground   Solation Resistance   Test Voltage = 500VDC   50   MΩ	Dielectric Withstanding Voltage	Drimon, to Consolan.	4040			VDC
For Primary to Ground   Primary to Ground	For Primary to Secondary	Primary to Secondary	4242			VDC
Solation Resistance   Test Voltage = 500VDC   50   MΩ	Dielectric Withstanding Voltage	Drimary to Cround	2121			VDC
Power Factor Correction         Io = Full Load, Vin = 90~260VAC         0.95         0.97         1.0           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 600~700         grams           Dimensions         5.75 x 2.99 x 1.69         inches           Warranty         2         years           SAFETY           EMI Requirements for CISPR-22         Vin = 220VAC         B         Class	For Primary to Ground	Primary to Ground	2121			VDC
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 600~700         grams           Dimensions         5.75 x 2.99 x 1.69         inches           Warranty         2         years           SAFETY           EMI Requirements for CISPR-22         Vin = 220VAC         B         Class	Isolation Resistance					ΜΩ
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 600~700         grams           Dimensions         5.75 x 2.99 x 1.69         inches           Warranty         2         years           SAFETY           EMI Requirements for CISPR-22         Vin = 220VAC         B         Class	Power Factor Correction	Io = Full Load, Vin = 90~260VAC	0.95	0.97	1.0	
Storage Temperature         -40         +85         °C           Relative Humidity         5         95         %           Temperature Coefficient         All Outputs         -0.04         +0.04         %/°C           PHYSICAL           Weight         Approximately 600~700         grams           Dimensions         5.75 x 2.99 x 1.69         inches           Warranty         2         years           SAFETY           EMI Requirements for CISPR-22         Vin = 220VAC         B         Class	ENVIRONMENTAL					
Relative Humidity         5         95         %           Temperature Coefficient         All Outputs         -0.04         +0.04         %°C           PHYSICAL           Weight         Approximately 600~700         grams           Dimensions         5.75 x 2.99 x 1.69         inches           Warranty         2         years           SAFETY           EMI Requirements for CISPR-22         Vin = 220VAC         B         Class		Derate linearly from 100% Load at 40°C to 50% load at 70°C	0		+70	
Temperature Coefficient         All Outputs         -0.04         +0.04         %°C           PHYSICAL           Weight         Approximately 600~700         grams           Dimensions         5.75 x 2.99 x 1.69         inches           Warranty         2         years           SAFETY           EMI Requirements for CISPR-22         Vin = 220VAC         B         Class			-40		+85	°C
PHYSICAL           Weight         Approximately 600~700 grams           Dimensions         5.75 x 2.99 x 1.69 inches           Warranty         2 years           SAFETY           EMI Requirements for CISPR-22         Vin = 220VAC         B         Class			5			
Weight         Approximately 600~700         grams           Dimensions         5.75 x 2.99 x 1.69         inches           Warranty         2         years           SAFETY           EMI Requirements for CISPR-22         Vin = 220VAC         B         Class	Temperature Coefficient	All Outputs	-0.04		+0.04	%/°C
Dimensions         5.75 x 2.99 x 1.69         inches           Warranty         2         years           SAFETY           EMI Requirements for CISPR-22         Vin = 220VAC         B         Class	PHYSICAL					
Warranty         2         years           SAFETY         EMI Requirements for CISPR-22         Vin = 220VAC         B         Class	Weight		Approximately 600~700		grams	
Warranty         2         years           SAFETY         EMI Requirements for CISPR-22         Vin = 220VAC         B         Class	Dimensions		5.75 x 2.99 x 1.69		inches	
EMI Requirements for CISPR-22 Vin = 220VAC B Class	Warranty					years
	SAFETY					
	EMI Requirements for CISPR-22	Vin = 220VAC	В			Class
	EMI Requirements for FCC PART-15	Vin = 110VAC	В			Class



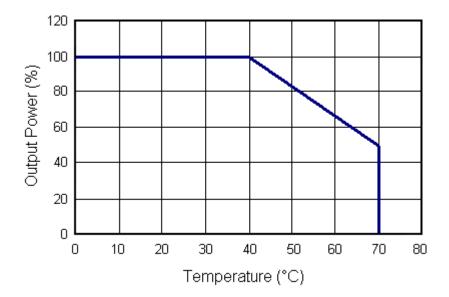
### **OUTPUT VOLTAGE / CURRENT RATING CHART**

Model Number	Preset Voltage	Output Voltage Range	Output Current	Total Regulation	Maximum Output Power
*DTSPU80-105	11 VDC	11 ~ 13 VDC	7.27 ~ 6.15 A	5%	80W
*DTSPU80-106	13 VDC	13 ~ 16 VDC	6.15 ~ 5.00 A	5%	80W
*DTSPU80-107	16 VDC	16 ~ 21 VDC	5.00 ~ 3.80 A	4%	80W
*DTSPU80-108	21 VDC	21 ~ 27 VDC	3.80 ~ 2.96 A	3%	80W
*DTSPU80-109	27 VDC	27 ~ 33 VDC	2.96 ~ 2.42 A	2%	80W
DTSPU80-110	33 VDC	33 ~ 40 VDC	2.42 ~ 2.00 A	2%	80W
DTSPU80-111	40 VDC	40 ~ 48 VDC	2.00 ~ 1.66 A	2%	80W

#### **NOTES**

- 1. The asterisk " \* " next to the model number indicates PSE approval.
- 2. The models with output voltages under 30VDC have been approved by TUV/PSE.
- 3. The output voltage is specified as a range (Ex: 40 ~ 48VDC); the preset voltage will be set as standard models if nothing different is requested. Please contact factory for ordering details.
- 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.

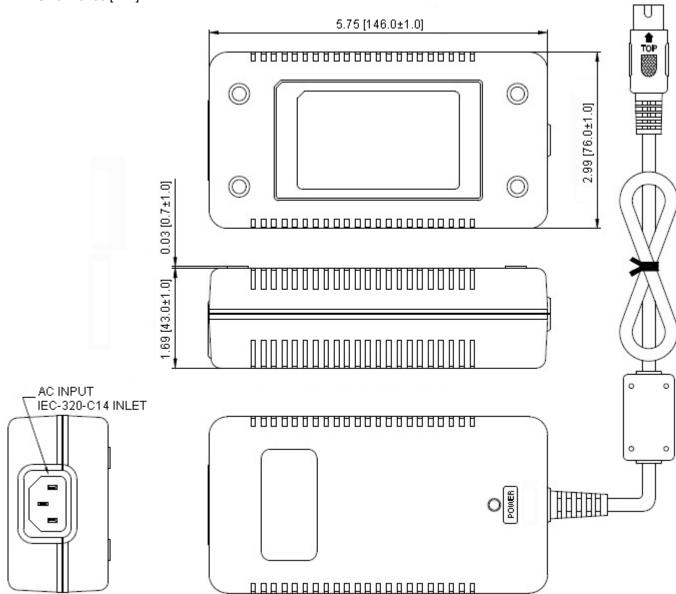
#### **DERATING CURVE**





### **MECHANICAL DRAWING**

Unit: inches [mm]



# **NOTES**

- 1. Dimensions are shown in inches [mm]
- 2. Weight: Approximately 600-700 grams.
- 3. Optional output connectors available: ("DC Output Plug Selector List")