



Size: 4.53in x 1.97in x 1.22in
(115mm x 50mm x 31mm)

FEATURES

- 70-264VAC Input Voltage Range
- Protection Class I
- 65 Watts Output Power
- High Efficiency
- Efficiency Level VI
- 2xMOPP
- Suitable for BF Application
- IP22 Rating
- IP54 Rated
- Built-In EMI Filter
- High Surge Immunity
- Extremely Low Leakage Current
- Passes LPS
- Short Circuit, Over Voltage, Over Load, and Over Temperature Protection
- IEC 62368-1 Edition 2.0, IEC 62368-1 Edition 3.0, EN 62368-1, UL62368-1, CAN/CSA-C22.2 NO.62368-1-14, IEC 60601-1 Edition 3.2, EN60601-1, ANSI/AAMI ES60601-1: 2005 (R2012), CSA C22.2 NO. 60601-1:14
- IEC-320-C14 AC Inlet Connector
- Designed to Meet ISN & 60335

APPLICATIONS

- Medical
- Telecommunication
- Consumer Electronics
- Industrial

OPTIONS

- OVC III
- IP54
- Withstand 297VAC Surge Input for 2 Minutes

DESCRIPTION

The DTMHP65 series of AC/DC desktop power supplies provides 65 watts of continuous output power in a 4.35" x 1.97" x 1.22" package. This series consists of single output models ranging from 8VDC to 48VDC with a 70~264VAC input voltage range and an IEC-320-C14 AC inlet connector. Some features include high efficiency, IP22 and IP54 rating, and short circuit, over voltage, over load, and over temperature protection. All units are RoHS and Efficiency Level VI compliant and have IEC 62368-1 Edition 2.0, IEC 62368-1 Edition 3.0, EN 62368-1, UL62368-1, CAN/CSA-C22.2 NO.62368-1-14, IEC 60601-1 Edition 3.2, EN60601-1, ANSI/AAMI ES60601-1: 2005 (R2012), CSA C22.2 NO. 60601-1:14 safety approvals.

MODEL SELECTION TABLE

Model Number ⁽¹⁾	Input Voltage Range	Output Voltage	Output Current	Efficiency		Output Power	Max. No Load Consumption	Ripple & Noise	Total Regulation	Limited Power Source
				Avg.	10% Load					
DTMHP65-08S	70-264VAC	8VDC	6.75A	89.0%	79.0%	54W	0.15W	80mVp-p	±5%	x
DTMHP65-09S		9VDC	6A	89.0%	79.0%	54W	0.15W	100mVp-p	±5%	x
DTMHP65-12S		12VDC	5.42A	89.0%	79.0%	65W	0.15W	100mVp-p	±3%	√
DTMHP65-15S		15VDC	4.33A	89.0%	79.0%	65W	0.15W	100mVp-p	±3%	√
DTMHP65-16S		16VDC	4.06A	89.0%	79.0%	65W	0.15W	120mVp-p	±3%	√
DTMHP65-18S		18VDC	3.61A	89.0%	79.0%	65W	0.15W	120mVp-p	±3%	√
DTMHP65-19S		19VDC	3.43A	89.0%	79.0%	65W	0.15W	120mVp-p	±3%	√
DTMHP65-20S		20VDC	3.25A	89.0%	79.0%	65W	0.15W	130mVp-p	±3%	√
DTMHP65-24S		24VDC	2.7A	89.0%	79.0%	65W	0.15W	150mVp-p	±2.5%	√
DTMHP65-28S		28VDC	2.32A	89.0%	79.0%	65W	0.15W	180mVp-p	±2.5%	√
DTMHP65-30S		30VDC	2.16A	89.0%	79.0%	65W	0.15W	200mVp-p	±2.5%	√
DTMHP65-48S		48VDC	1.36A	89.0%	79.0%	65W	0.15W	200mVp-p	±2.5%	√

TECHNICAL SPECIFICATIONS

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	Typ	Max	Unit
INPUT SPECIFICATIONS					
Nominal Input Voltage	100/240VAC, Single Phase	100		240	VAC
Input Voltage Range	Derate linearly from 100% load at 90VAC to 70% Load at 70VAC	70		264	
Input Frequency	Sine Wave	47		63	Hz
Input Current	Low Line; Vin=115VAC, Full Load			1.5	A
	High Line; Vin=230VAC, Full Load			0.75	
Inrush Current	Low Line; Vin=115VAC, Full Load, 25°C, Cool Start			50	A
	High Line; Vin=230VAC, Full Load, 25°C, Cool Start			100	
OUTPUT SPECIFICATIONS					
Output Voltage			See Table		
Line Regulation	Full Load, Vin=100~120VAC			0.5	%
Load Regulation	Vin=100~240VAC		See Table		
Output Power		See Table			
Output Current		See Table			
Ripple & Noise (20MHz BW)		See Table			
Hold-up Time	Measured from the end of the last charging pulse to the time which the main output drops down to low limit of main output at rated load and nominal line		12		ms
Start-up Time	Full Load, Vin=100~120VAC			3	s
Rise Time	At 115VAC & 230VAC			50	ms
Temperature Coefficient	All Conditions			±0.04	%/°C
No Load Consumption		See Table			
PROTECTION					
Over Load Protection	Hiccup Mode, Non-Latching, Automatic Recovery	110		154	%
Over Voltage Protection	Latch Mode	105		150	%
Short Circuit Protection	Hiccup Mode, Non-Latching, Automatic Recovery				
Over Temperature Protection	Hiccup Mode, Non-Latching, Automatic Recovery				
GENERAL SPECIFICATIONS					
Average Efficiency	CoC v5 (tier2)	See Table			
Earth Leakage Current	@264VAC Normal Condition			0.1	mA
	@264VAC Single Fault Condition			0.3	
ENVIRONMENTAL SPECIFICATIONS					
Operating Temperature	Derating linearly from 100% Load at 40°C to 50% load at 70°C	-40		+70	°C
Storage Temperature	Surrounding Air Temperature	-40		+85	°C
Operating Humidity	Non-Condensing	10		95	%RH
Storage Humidity		0		95	%RH
Operating Altitude		5000			m
Waterproof & Dustproof Degree		IP22, IP54			
Vibration	Non-Operating, 5~500Hz, 2.09 grams, 20 min. each 3 axis			2.09	G
Surge Voltage	Line-Neutral			1	kV
	Line-PE & Neutral-PE			2	
MTBF	1 million hours based on Telcordia SR-332 @115VAC, Max. Load, and 25°C ambient		1000		khours
PHYSICAL SPECIFICATIONS					
Weight	DTMHP65-20S with a 16AWG, 4FT Standard Cable	7.94oz (225g)			
Dimensions (L x W x H)		4.53in x 1.97in x 1.22in (115mm x 50mm x 31mm)			
AC Inlet		IEC-320-C14			
Recommended Output Cable ⁽¹⁾	8V-9V Models	AWG#14, 2FT, UL11353, 80°C			
	12V Models	AWG#16, 4FT, UL1571, 80°C			
	15V-16V Models	AWG#16, 4FT, UL1571, 80°C			
	18V-24V Models	AWG#18, 4FT, UL1571, 80°C			
	28V-48V	AWG#20, 4FT, UL1185, 80°C			

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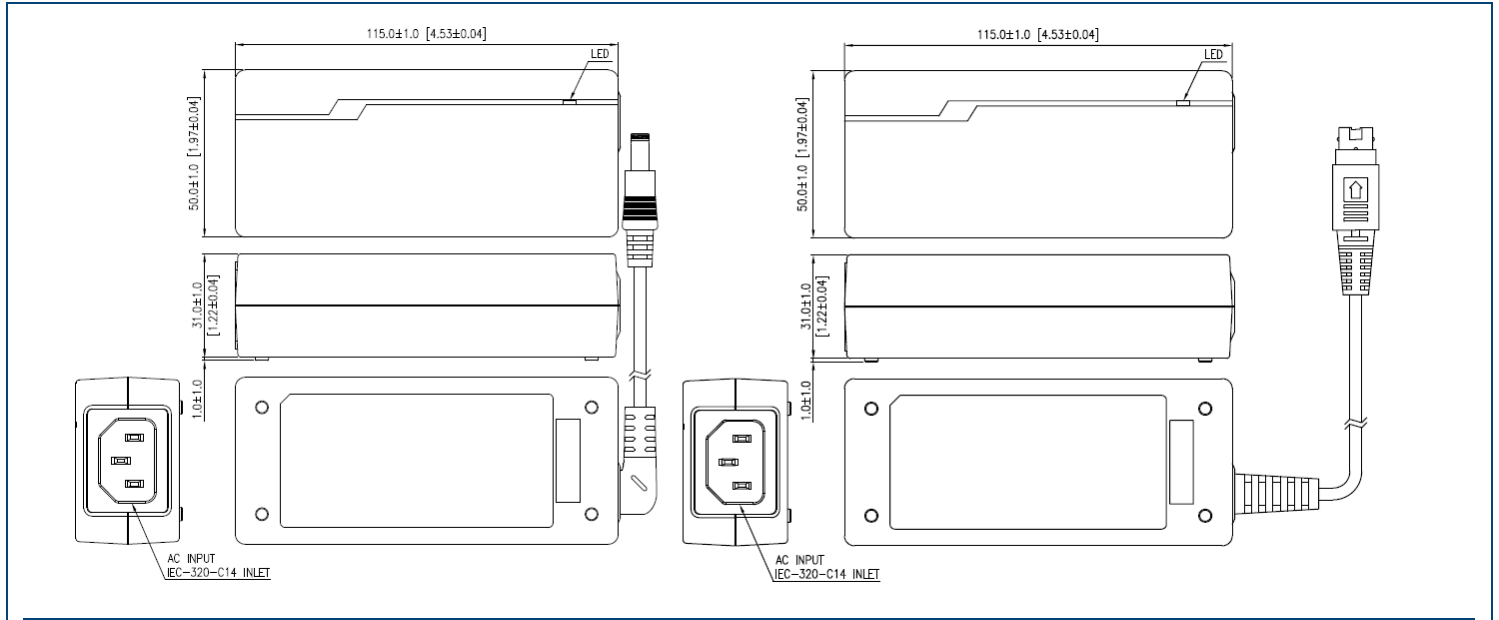
SPECIFICATION		TEST CONDITIONS		Min	Typ	Max	Unit
SAFETY, EMC, & COMPLIANCE							
Safety Approvals ⁽²⁾				IEC 62368-1 Edition 2.0 IEC 62368-1 Edition 3.0 EN62368-1 UL62368-1 CAN/CSA-C22.2 No. 62368-1-14 IEC 60601-1 Edition 3.2 EN60601-1 ANSI/AAMI ES60601-1:2005 (R2012) CSA C22.2 No. 60601-1:14			
EMC Emission ⁽³⁾	Medical	Conducted	EN55011	Class B			
		Radiated	EN55011	Class B			
		Harmonics	EN61000-3-2	-			
		Flicker	EN61000-3-3	-			
	ITE	Conducted	EN55032	Class B			
		Radiated	EN55032	Class B			
Harmonics		EN61000-3-2	N/A				
EMC Immunity							
EMC Immunity	Medical	ESD	EN61000-4-2	15kV Air Discharge, 8KV Discharge Coupling Plane		A	
		RS	EN61000-4-3	-		A	
		EFT	EN61000-4-4	2kV		A	
		Surge	EN61000-4-5	2kV Line to Line, 4kV Line to Ground		A	
		CS	EN61000-4-6	0.15-80(MHz)		A	
		PFMF	EN61000-4-8	-		A	
		Voltage Dips	EN61000-4-11	i) 30% Reduction for 25 cycles at 50Hz ii) 95% reduction for 0.5 cycle at 50Hz		A (230VAC)	
		Voltage Interruptions	EN61000-4-11	95% reduction for 250 cycles at 50Hz		B	
	Radiated Fields in Close Proximity	EN61000-4-39	-		A		
	ITE	ESD	EN61000-4-2	8kV Air Discharge, 4kV Contact Discharge		A	
		RS	EN61000-4-3	80 – 1000 (MHz) 1800, 2600, 3500, 5000 (MHz) (±1%)		A	
		EFT	EN61000-4-4	2kV		A	
		Surge	EN61000-4-5	2kV Line to Line, 4kV Line to Ground		A	
		CS	EN61000-4-6	0.15 – 80 (MHz)		A	
PFMF		EN61000-4-8	-		A		
Voltage Dips		EN61000-4-11	i) 30% Reduction for 25 cycles at 50Hz ii) 95% reduction for 0.5 cycle at 50Hz		A (240VAC)		
Voltage Interruptions	EN61000-4-11	95% reduction for 250 cycles at 50Hz		B			
Protection Classes				Class I			

NOTES

- Models are required to use these output cables.
- This product is Listed to applicable standards and requirements by UL.
- The EMC test requires the integration of the switching power supply with the load of an end system. Consequently, variations in the in the application or assembly of the end system will influence the test results.

Due to advances in technology, specifications are subject to change without notice.

MECHANICAL DRAWING



Connectors

Standard Connectors:

Barrel Female Plug	Plug PN	OD	ID	L	Standard Connection	Wire Material	Wire Type
	P01N	5.5	2.5	11	Center = OUT(+) Sleeve = RTN(-) (Tuning Fork Type)	UL1571 UL1185	12V, 15V~16V: 16AWG/4FT 18V~24V: 18AWG/4FT 28V~48V: 20AWG/4FT
POWER DIN-4 + Lock	Plug PN	Standard Connection			Wire Material	Wire Type	
	P09B	P1, P2 = OUT P3, P4 = RTN			UL11353	8V~9V: 14AWG*2C/2FT	

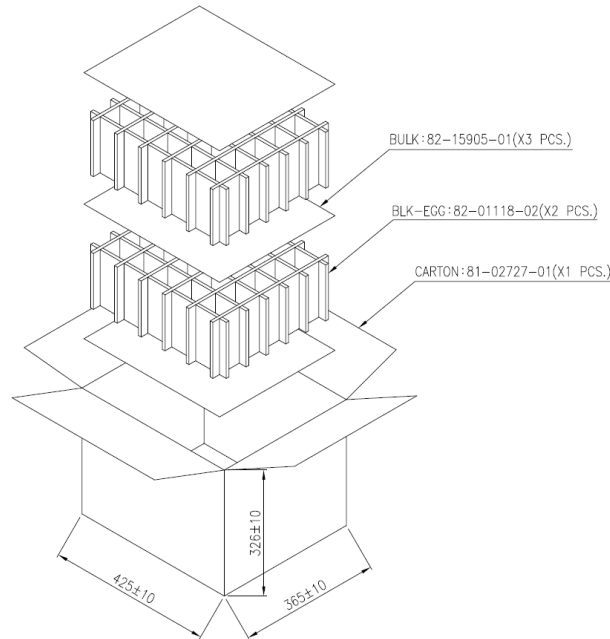
Optional Connectors:

Barrel Female Plug	Plug PN	OD	ID	L	Standard Connection	Wire Material	Wire Type
	P01M	5.5	2.5	9.5	Center = OUT(+) Sleeve = RTN (-) (Tuning Fork Type)	UL1571 UL1185	12V, 15V~16V: 16AWG/4FT 18V~24V: 18AWG/4FT 28V~48V: 20AWG/4FT
	P01S	5.5	2.5	12			
Barrel Angle Female Plug	Plug PN	OD	ID	L	Standard Connection	Wire Material	Wire Type
	P02M	5.5	2.5	9.5	Center = OUT(+) Sleeve = RTN (-) (Tuning Fork Type)	UL1571 UL1185	12V, 15V~16V: 16AWG/4FT 18V~24V: 18AWG/4FT 28V~48V: 20AWG/4FT
	P02N	5.5	2.5	11			
DIN-5 Male Plug	Plug PN	Standard Connection			Wire Material	Wire Type	
	P05B	P1, P2, P4=RTN P3, P5=OUT SHIELD=GND			UL2464	12V, 15V~16V: 16AWG/4FT 18V~24V: 18AWG/4FT 28V~48V: 20AWG/4FT	

*Please contact factory for more detailed information regarding optional output connectors.

PACKAGING

Standard Packaging: (UNIT: mm)
Power Supplies per Box (Full Box): 50pcs
Box Dimensions: L42*W36*H32cm



*The packing information is for reference purposes only.
Please reach out to our sales team for confirmation of the packing details.

COMPANY INFORMATION

Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001: 2015 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

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