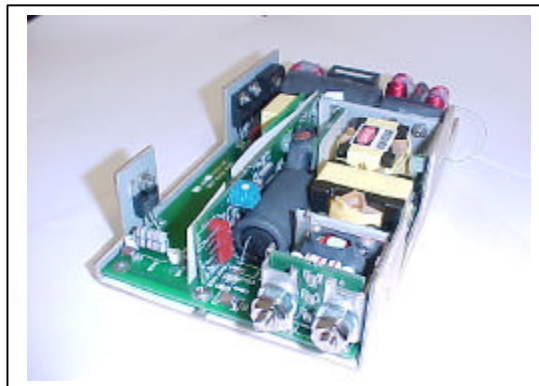


## RELEASED DATA SHEET

### ePS300-125 Universal Input Power Factor Corrected 350 Watt Switcher

Features:

- Ultra-small 6.8" x 3.86" x 1.4" size - the smallest in the industry
- 85% typical efficiency
- Active power factor correction (PFC)
- EN55022-B conducted
- UL, cUL, TUV, CE
- Remote sense (V1)
- Single-Wire Forced Current Sharing (V1)
- Or'ing Diode
- PG (Power Good) output
- Fits 1U applications



The ePS300-125 is the industry's smallest open frame switcher that delivers up to 350W continuous or 375W peak output. The supply includes active power factor correction and 90-250Vac universal input, making it ideal for use worldwide.

The very high efficiency and power density results from the use of advanced component and circuit technologies, low profile transformers and SMT components.

The ePS300-125 is one of the *flexibility* series. In addition to the model listed on this sheet, many

potential models are available that include full safety agency approval and do not require any non-recurring engineering (NRE) charge; please see eP300 Series data sheet for details. Consult factory for prototype delivery time.

*Flexibility* options include remote sense (V1, V2), single-wire forced current sharing (V1, V2) and isolated outputs (V1, V2, V3, V4). Fully custom models are also available. Contact the factory for details.

Specifications are subject to change without prior notice.

#### Available models

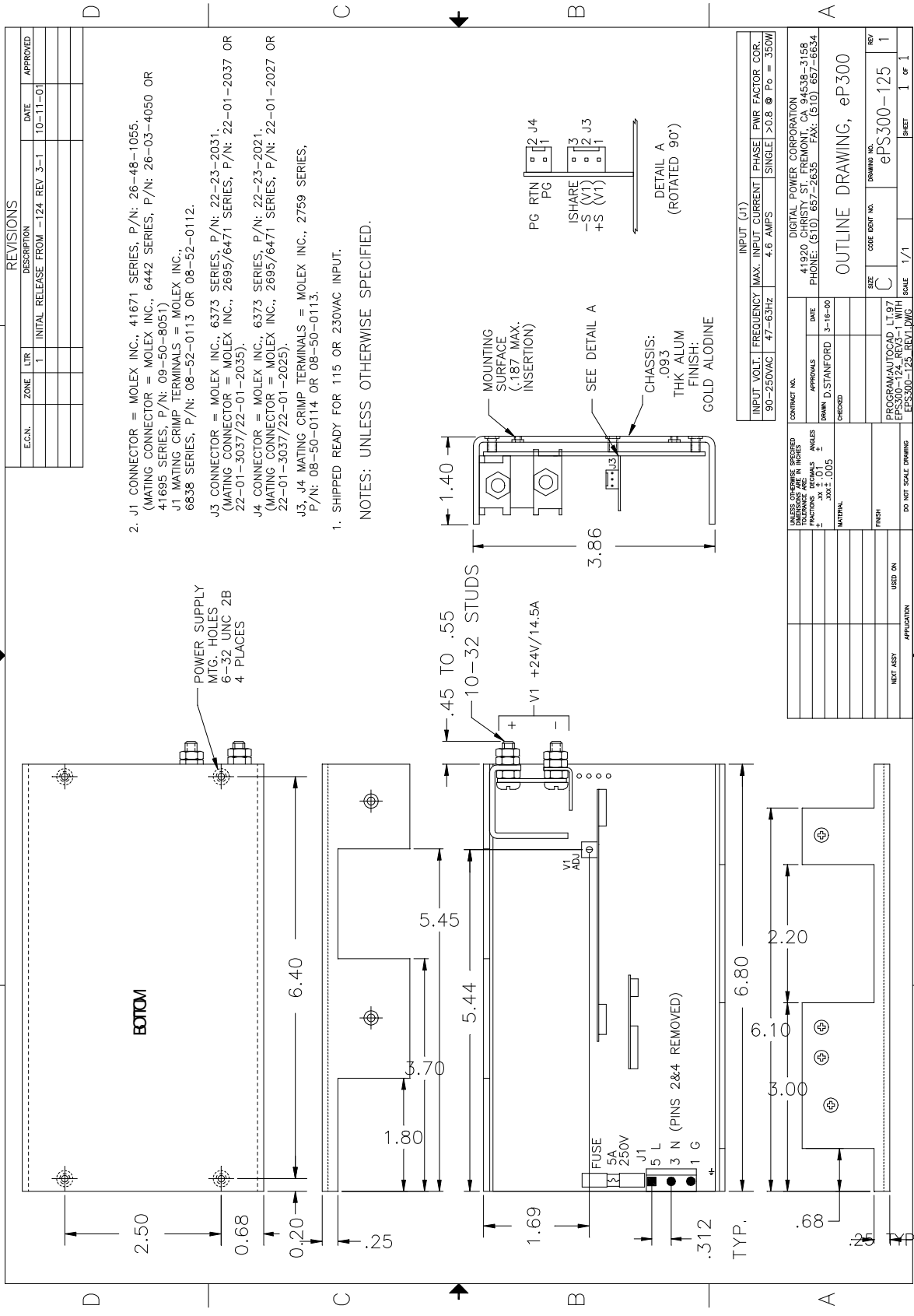
Model Number	Output	Output Voltage	Output Current Ratings			Peak <sup>4</sup>
			Min <sup>1</sup>	Max <sup>2</sup>	Max <sup>3</sup> (I <sub>m</sub> )	
ePS300-125	V1	+24V	0A	6.25A	14.5A	15.5A

1. At least 20% of maximum output current (I<sub>m</sub>) is required on V1 to maintain stated regulation.
2. Convection cooling, 150W max.
3. Forced air cooling, 350W max.
4. Peak output, for 30 seconds max.
5. Operational extremes per safety agency testing

## Specifications

Specifications are typical at 25°C unless otherwise designated.

Parameter	Limits
<b>Input</b>	
Input Voltage Range	90-250Vac rated 81-265Vac operation <sup>5</sup>
Input Frequency	47 to 63Hz
Input Operating Current	4.7A rms @ 90Vac, 350W output
Input Surge Current	35A max, cold start @ 25°C, 250Vac
Efficiency	85% typ at 115Vac input, full power
Power Factor	0.98 typ @ 230Vac input, 350W output
<b>Output</b>	
Output Power	150W, natural convection cooling 350W, forced air cooling (min 250LFM) 375W peak
Line Regulation	±0.5%, $V_{in}$ (min) to $V_{in}$ (max)
Load Regulation	±0.5% (20% to 100% $I_m$ )
PG (Power Good)	TTL output, Normal=high
Noise and Ripple	120mV max. RMS, 240mV max. P-P with full load
Power-up Overshoot	5% max.
Transient Response	$V_1$ , for 25% to 75% $I_m$ change, 5% maximum deviation with recovery to 1% within 500µS
Hold-up Time	16mS min @ 115/230Vac input, 350W output
Overvoltage Protection Threshold	110% typical of $V_{out}$
Power Limit Point	110% typical of max rated power
<b>Control</b>	
Remote Sense Voltage Drop	$V_1$ , 0.25V max (each lead)
<b>Environmental</b>	
Operating Temperature Range (full power)	0°C to +50°C
Operating Temperature Range (extended range)	0°C to +70°C, derate linearly from full power at +50°C to half power at +70°C
Storage Temperature Range	-25°C to +85°C
Relative Humidity Range	5% to 95%, non-condensing
Vibration	0.75G peak, 5Hz to 500Hz. Test three orthogonal axis at 1 octave/min, 5 min dwell at four major resonances
MTBF	(TBD) hours typical calculated per MIL STD 217 F @ 30°C ambient
Weight	1.39 lbs. (0.63 kg)



REVISIONS			
ECN.	ZONE	LTR	DESCRIPTION
		1	INITIAL RELEASE FROM -124 REV 3-1

2. J1 CONNECTOR = MOLEX INC., 41671 SERIES, P/N: 26-48-1055.  
 (MATING CONNECTOR = MOLEX INC., 6442 SERIES, P/N: 26-03-4050 OR 41695 SERIES, P/N: 09-50-8051)  
 J1 MATING CRIMP TERMINALS = MOLEX INC., 6838 SERIES, P/N: 08-52-0113 OR 08-52-0112.  
 J3 CONNECTOR = MOLEX INC., 6373 SERIES, P/N: 22-23-2031.  
 (MATING CONNECTOR = MOLEX INC., 2695/6471 SERIES, P/N: 22-01-2037 OR 22-01-3037/22-01-2035).  
 J4 CONNECTOR = MOLEX INC., 6373 SERIES, P/N: 22-23-2021.  
 (MATING CONNECTOR = MOLEX INC., 2695/6471 SERIES, P/N: 22-01-2037 OR 22-01-3037/22-01-2025).  
 J3, J4 MATING CRIMP TERMINALS = MOLEX INC., 2759 SERIES, P/N: 08-50-0114 OR 08-50-0113.
1. SHIPPED READY FOR 115 OR 230VAC INPUT.

NOTES: UNLESS OTHERWISE SPECIFIED.

INPUT VOLT: 90-250VAC	FREQUENCY: 47-63HZ	MAX. INPUT CURRENT: 4.6 AMPS	PHASE: SINGLE	PMR FACTOR COR.: >0.8 @ Po = 350W
CONTRACT NO. DIGITAL POWER CORPORATION 41920 CHRISTY ST. FREMONT, CA 94538-3158 PHONE: (510) 657-2635 FAX: (510) 657-6634				
APPROVALS:	DATE:			
DESIGNED BY: D. STANFORD	3-16-00			
CHECKED:				
MATERIAL: .005				
FINISH:				
DO NOT SCALE DRAWING				
PROGRAM/AUTOCAD: L1157	DATE: 11/27/00			
FILE: EPS300-125_REV1.DWG	SCALE: 1/1			
DRAWING NO. ePS300-125	REV: 1			
SHEET 1 OF 1				

OUTLINE DRAWING, eP300