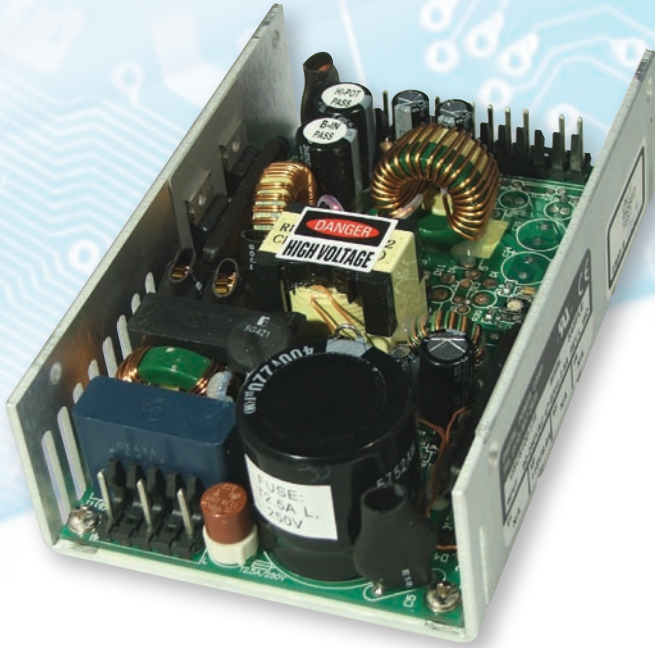


**US Series**

**100 Watt Flexible Power Supply Platform**



**PRODUCT DESCRIPTION**

The US Series of Switching power supplies offer Flexible Input and Output Options to satisfy a wide range of applications. The options include Universal AC / 48 VDC Input / 24 VDC Input ranges and up to four output voltages that can be set from 2.0 - 48 VDC depending upon the customer requirement. Features include:

- 100W with up to 4 outputs
- Ruggedized U-channel construction
- Universal AC Input
- RoHS compliant
- 24V and 48V DC Input models available
- International regulatory approvals
- Medical versions available

**INPUT**

Input - AC Models (US100)	90-264VAC, 47-63 Hz
Hold-Up Time	6msec minimum (Full Load)
Inrush Current	25 Amp Maximum
Input - 48 Vin Models (DP100)	36-72 VDC Input Range
Input - 24Vin Models (DM100)	18-36 VDC Input Range

**OUTPUT**

Line Regulation	$\pm 0.2\%$ for $V_{in}$ (min.) to $V_{in}$ (max.)
Transient Response	$< 5\%$ and recovers in 0.5msec
Over-Voltage Protection	130% Typical (Latched Shut-down)
Overload Protection	130% Total Power Limited
Load Regulation	$V1 = \pm 3\%$ Max $V2, V3 \& V4 = \pm 5\%$ Max
Min. Load Requirement	None
Turn-On Delay	2 Sec. Max.
Initial Setting Accuracy	$\pm 1\%$
Ripple (pk-pk max)	$\pm 1\%$

**ELECTROMAGNETIC COMPATIBILITY**

Electrostatic Discharge	EN61000-4-2, $\pm 4KV$ Contact / $\pm 8KV$ Air Discharge
Radiated Susceptibility	EN61000-4-3, 26-1000MHz, 10V/M, 80% AM
EFT / Bursts	EN61000-4-4, $\pm 2KV$
Surges	EN61000-4-5, $\pm 2KV$ Line-Earth, $\pm 1KV$ Line-Line
Conducted Immunity	EN61000-4-6, 0.15-800MHz, 10V, 80% AM
Voltage Dips	EN61000-4-11, 95% Dip & 10ms, 30% Dip & 500ms

*Electromagnetic compatibility specs apply to AC-DC Models only, please consult Digital Power for DC-DC specs.*

**SAFETY & EMISSIONS**

Safety Approvals	UL/cUL60950, TUV EN60950 & CE Marking
Emissions	EN55022 Level A

**ENVIRONMENTAL**

Operation Temperature	-0 ~ +50C. De-rate 2.5%/C up to +71C
Storage Temperature	-40C to +85C
Cooling	28 CFM for full load (70W Convection)
Humidity	Up to 95% RH Non-condensing
Shock & Vibration	0.75G Peak 5Hz - 500Hz
MTBF	$> 280,000$ Hours per Belcore 332 issue 6

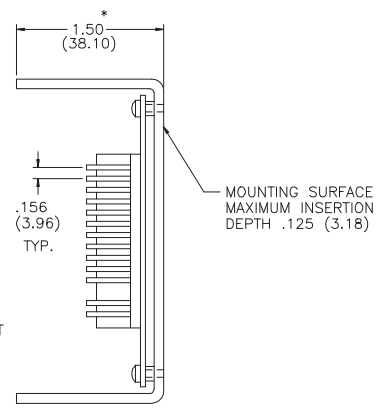
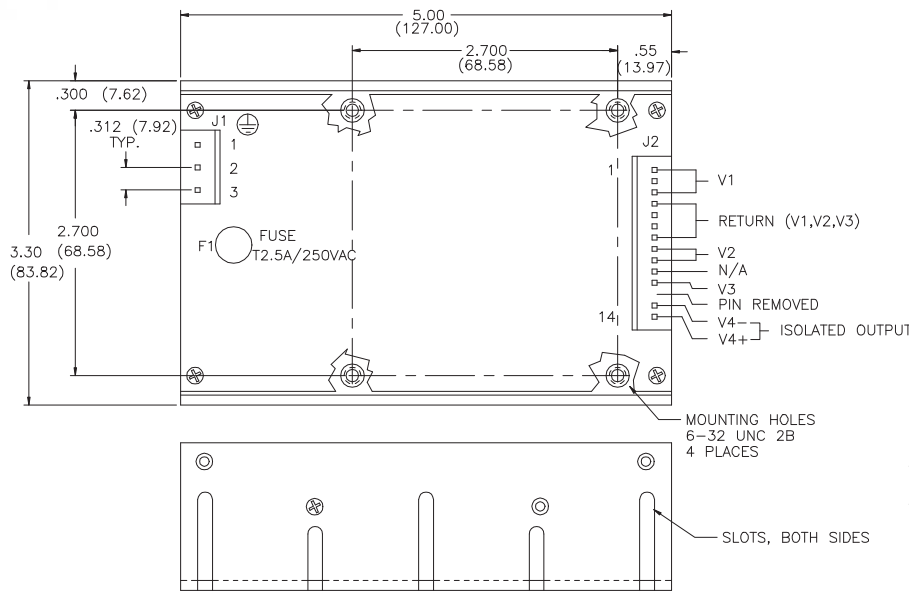


**Single Output Model Selection Guide**

AC Model	48VDC Model	24VDC Model	Output Power	Output Voltage	Output Current
US100-105	DP100-105	DM100-105	100 Watts	5V	14A
US100-112	DP100-112	DM100-112	100 Watts	12V	8.3A
US100-124	DP100-124	DM100-124	100 Watts	24V	4A

**Multiple Output Model Selection Guide**

Model	Input	Output Power	V1 Output	V2 Output	V3 Output	V4 Output
US100-201	90-264VAC	100 Watts	+5V/14A	+12V/6A	-	-
US100-301	90-264VAC	100 Watts	+5V/10A	+12V/6A	-12V/2A	-
US100-303	90-264VAC	100 Watts	+5V/10A	+15V/6A	-15V/2A	-
US100-401	90-264VAC	100 Watts	+5V/10A	+12V/6A	-12V/2A	-5V/2A



J1 CONNECTOR = MOLEX INC., 41671 SERIES, P/N: 26-48-1055.  
 (MATING CONNECTOR = MOLEX INC., 6442 SERIES (OR 41695 SERIES), P/N: 26-03-4050 (OR 09-50-8051))  
 J2 CONNECTOR = MOLEX INC., 41671 SERIES, P/N: 26-48-1145.  
 (MATING CONNECTOR = MOLEX INC., 6442 SERIES (OR 41695 SERIES), P/N: 26-03-4141 (OR 09-50-8081))  
 (MATING CRIMP TERMINALS = MOLEX INC., 6838 SERIES, P/N: 08-52-0113 OR 08-52-0112)  
 \* OPTIONAL COVER ADDS 0.035 (.89) TO HEIGHT.

**J1 Connector Pinout**

Connector	AC-DC	DC-DC
1	Ground	Ground
2	Neutral	+Input
3	Line	-Input

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