

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

**Artisan Technology Group**
(217) 352-9330 | sales@artisantg.com | artisantg.com

**Full-service, independent repair center**
with experienced engineers and technicians on staff.

**We buy your excess, underutilized, and idle equipment**
along with credit for buybacks and trade-ins.

**Custom engineering**
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

**Expert team | Trust guarantee | 100% satisfaction**

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

**Visit our website - *Click HERE***

Digital Power®
Flexible Power Solutions

(877) 634-0982
www.digipwr.com

# Product Specification

Universal Input Switchers

# US100 Series

100 Watt



## Key Product Features

- 75% efficiency
- FCC class B EMI filter
- Up to 4 outputs
- 5" x 3.3" x 1.5" size
- CSA and CE approved
- Optional Cover
- Optional power good signal

## Description

The US100 series are economical, open frame switchers that deliver up to 100W of continuous or 120W peak power from one to four outputs. The 90-264VAC universal input allows them to be used worldwide.

The US100 is one of the *flexibility* series. In addition to the popular models listed on this sheet, thousands of potential other modified standard models are available that include full safety agency approval and do not require any non-recurring engineering (NRE) charge. Prototype delivery is typically just a few weeks.

*Flexibility* options include cover, adjustable post regulators on V3 and/or V4 outputs. Output voltage options are given in the table below. Fully custom models are also available. Please contact the factory for information on EN55022-B filtering, and power fail/power good detect.

## Model Options

| Model Number | Output | Output Voltage | Output Current Ratings Min[1] | Max[2] | Max[3] | Peak[4] |
|---|---|---|---|---|---|---|
| US100-105 | V1 | +5V | 0A | 10.0A | 14.0A | 20.0A |
| US100-112 | V1 | +12V | 0A | 6.5A | 8.0A | 10.0A |
| US100-124 | V1 | +24V | 0A | 3.0A | 4.0A | 4.5A |
| US100-201 | V1 | +5V | 0.5A | 8.0A | 14.0A | 16.0A |
| | V2 | +12V | 0A | 4.0A | 6.0A | 7.0A |
| US100-301 | V1 | +5V | 0.5A | 8.0A | 10.0A | 12.0A |
| | V2 | +12V | 0A | 4.0A | 6.0A | 7.0A |
| | V3 | -12V | 0A | 1.0A | 2.0A | 2.5A |
| US100-303 | V1 | +5V | 0.5A | 8.0A | 10.0A | 12.0A |
| | V2 | +15V | 0A | 4.0A | 6.0A | 7.0A |
| | V3 | -15V | 0A | 1.0A | 2.0A | 2.5A |
| US100-401 | V1 | +5V | 0.5A | 8.0A | 10.0A | 12.0A |
| | V2 | +12V | 0A | 4.0A | 6.0A | 7.0A |
| | V3 | -12V | 0A | 1.0A | 2.0A | 2.5A |
| | V4[5] | -5V | 0A | 1.0A | 2.0A | 2.5A |
| Modified standard | V1 | ±3.3V to ±48V[7] | 0.5A | | 15.0A | |
| *flexibility* output options[6] | V2 | ±2.0V to ±48V[8] | 0A | | 6.0A | |
| | V3 | ±2.0V to ±48V[8] | 0A | | 2.0A | |
| | V4[5] | ±2.0V to ±48V[8] | 0A | | 2.0A | |

1- At least 20% of max output current is required to maintain stated regulation
2- Convection cooling
3- Forced air cooling
4- Peak output, 30 sec max, 50% load required on V1
5-Isolated output

6- The US100 series allows very fast flexible modified standard designs within these paramaters without non-recurring engineering charge and while retaining safety agency approval. Please contact the factory for details.
7- Can be specified in 0.1V increments
8- Can be specified in 0.75V increments

Note: Specifications are typical at 25°C unless otherwise stated

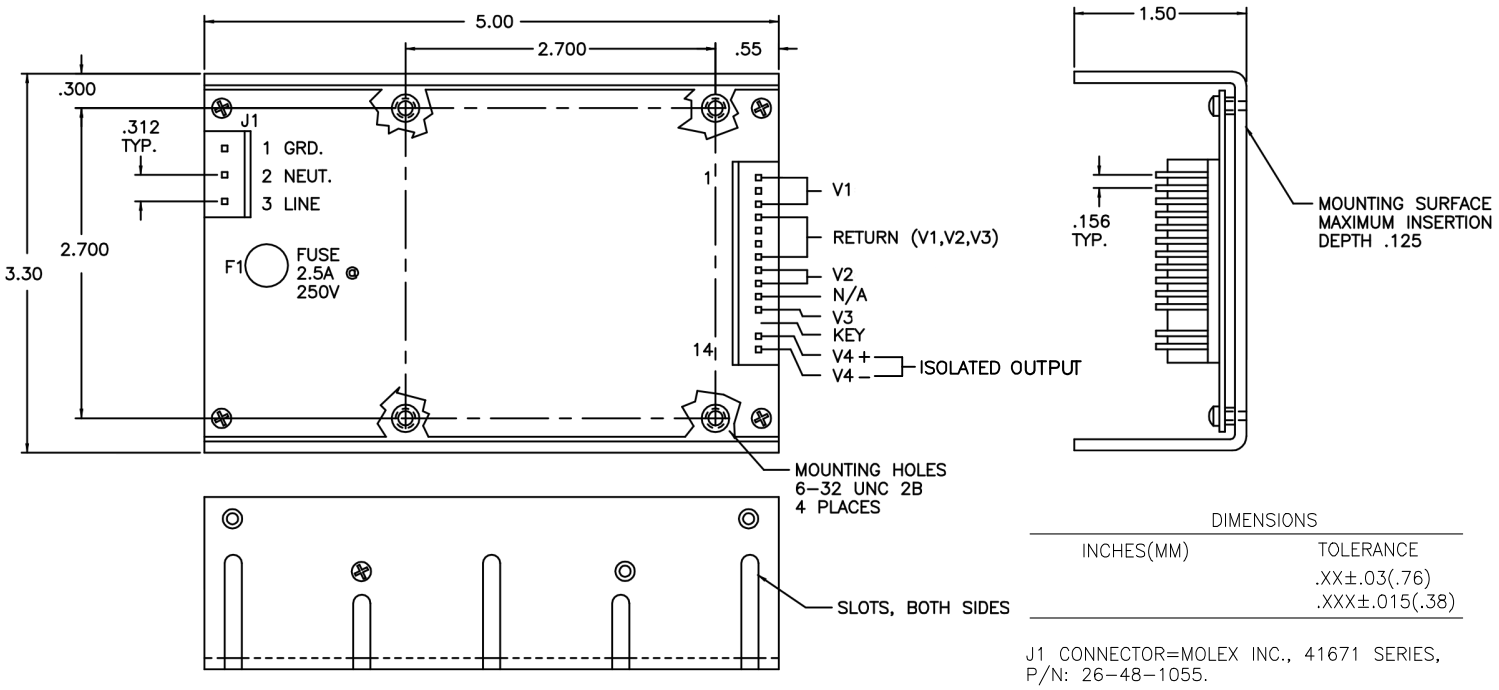
## Specifications

| | |
|---|---|
| **Input** | |
| Input Voltage Range | 90-250VAC |
| Input Frequency | 47 to 63Hz |
| Input Surge Current | 25A max, cold start |
| Efficiency | 75% typ at nominal line, full power |
| **Output** | |
| Output Power | 80W natural convection cooling ; 100W 28CFM forced air ; 120W peak |
| Line Regulation | ±0.2%, $V_{in}$ (min) to $V_{in}$ (max) |
| Load Regulation | ±3% (V1, 20% to 100% $I_0$) ; ±5% (V2-V4, 20% to 100% $I_0$) |
| Cross Regulation | ±0.5% (V1, 20% to 100% $I_0$ on V2-V4) ; ±5% (V2-V4, 50% to 100% $I_0$ on V1) |
| Noise and Ripple | 25mV max RMS, 100mV max P-P on V1 with full load. 95-264VAC ; 0.5% max RMS, 1% max P-P, on V2-V4 with full load. 95-264VAC |
| Overshoot | 5% max, all outputs |
| Transient Response | for 25% to 75% $I_0$ change, 5% max deviation, with recovery to 1% within 500µS |
| Hold-Up Time | 6mS, 115VAC input, full output power |
| Overvoltage Protection Threshold | 30% $V_0$, all outputs |
| Power Foldback Point | 120% of max rated power |

## Environment

| | |
|---|---|
| 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 | 5% to 95%, non-condensing |
| Vibration | 0.75G peak, 5Hz to 500 Hz. Test three orthogonal axes at 1 octave/min, 5 min dwell at four major resonances |

## Mechanical Drawing




| DIMENSIONS | |
|---|---|
| INCHES(MM) | TOLERANCE |
| | .XX±.03(.76) |
| | .XXX±.015(.38) |

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 09–50–8141))

(MATING CRIMP TERMINALS=MOLEX INC., 6838 SERIES,
P/N: 08–52–0113 OR 08–52–0112)

* OPTIONAL COVER ADDS 0.035 (.89) TO HEIGHT.

Digital Power®
Flexible Power Solutions

T: (877) 634-0982 | F: (510) 657-6634
sales@digipwr.com

**Digital Power Corporation** | USA
48430 Lakeview Blvd., Fremont, CA 94538, USA
www.digipwr.com | (877) 634-0982

**Gresham Power Electronics** | UK/Europe Telford Rd, Salisbury, Wiltshire SP2 7PH, UK
www.greshampower.com | +44 (0)1722 413 060

Digital Power Corporation designs and manufactures flex ble power supply solutions for the most demanding applications in the defense, healthcare, telecom, and industrial markets. With headquarters in Fremont, California, Digital Power is publically traded on the NYSE (symbol: DPW). The company was founded in 1969 incorporated in California.

**Artisan Technology Group** is an independent supplier of quality pre-owned equipment

## Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

## We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

## Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP