

NEW • AUTO-RANGING INPUT

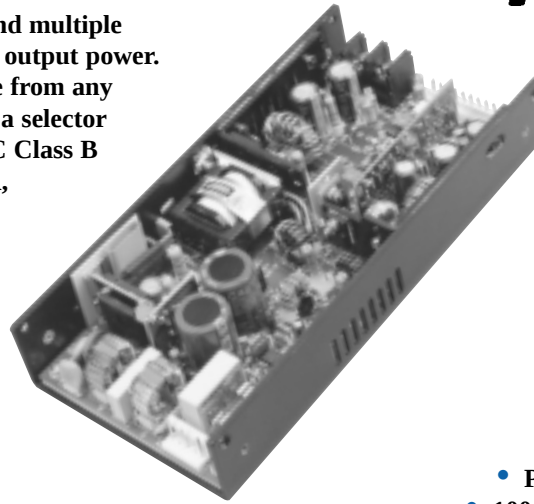
150 WATT

SWITCHING POWER SUPPLY



DESCRIPTION

The PU150 Series is comprised of single and multiple output models for 150 watts of continuous output power. Auto ranging input allows them to operate from any line voltage throughout the world without a selector strap. All models meet CISPR 22 and FCC Class B emission limits, and comply with UL, CSA, IEC safety and have the CE Mark to satisfy international requirements.



FEATURES

- Auto-ranging universal input
- Built-in EMI filter
- Overvoltage protection
- Short-circuit protection with auto-recovery
- Power fail detection
- 100% burn-in at full rated load

OUTPUT VOLTAGE/CURRENT RATINGS CHART

Models	Output #1					Output #2					Output #3				Output #4				
	Vnom	Imin	Imax	Ipeak	Tol.	Vnom	Imin	Imax	Ipeak	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Ipeak	Tol.
PU150-10	5V	0A	30A	35A	2%			N/A					N/A				N/A		
PU150-12	12V	0A	12.5A	14.5A	2%			N/A					N/A				N/A		
PU150-13	15V	0A	10A	11.6A	2%			N/A					N/A				N/A		
PU150-13-1	18V	0A	8.3A	9.7A	2%			N/A					N/A				N/A		
PU150-14	24V	0A	6.3A	7.3A	2%			N/A					N/A				N/A		
PU150-16	30V	0A	5.0A	6.0A	2%			N/A					N/A				N/A		
PU150-17	36V	0A	4.2A	4.8A	2%			N/A					N/A				N/A		
PU150-18	48V	0A	3.1A	3.6A	2%			N/A					N/A				N/A		
PU150-23	+5V	2.0A	22A	30A	2%	+12V	0A	8A	10A	3%			N/A				N/A		
PU150-24	+5V	2.0A	22A	30A	2%	+15V	0A	6.4A	8A	3%			N/A				N/A		
PU150-25	+5V	2.0A	22A	30A	2%	+24V	0A	4.5A	5A	3%			N/A				N/A		
PU150-30	+5V	2.0A	22A	30A	2%	+12V	0A	8A	10A	3%	-5V	0A	2.5A	3%			N/A		
PU150-31	+5V	2.0A	22A	30A	2%	+12V	0A	8A	10A	3%	-12V	0A	2.5A	3%			N/A		
PU150-32	+5V	2.0A	22A	30A	2%	+15V	0A	6.4A	8A	3%	-15V	0A	2A	3%			N/A		
PU150-33	+5V	2.0A	22A	30A	2%	+15V	0A	6.4A	8A	3%	-12V	0A	2.5A	3%			N/A		
PU150-40	+5V	2.0A	22A	30A	2%	+12V	0A	8A	10A	3%	-12V	0A	2.5A	3%	F 5V	0A	5.0A	5A	3%
PU150-41	+5V	2.0A	22A	30A	2%	+15V	0A	6.4A	8A	3%	-15V	0A	2A	3%	F24V	0A	4.5A	5A	3%
PU150-42	+5V	2.0A	22A	30A	2%	+12V	0A	8A	10A	3%	-12V	0A	2.5A	3%	F12V	0A	4.5A	5A	3%
PU150-44	+5V	2.0A	22A	30A	2%	+12V	0A	8A	10A	3%	-15V	0A	2A	3%	F15V	0A	4.5A	5A	3%
PU150-45	+5V	2.0A	22A	30A	2%	+12V	0A	8A	10A	3%	-12V	0A	2.5A	3%	F24V	0A	4.5A	5A	3%

- NOTE:** (1) Add suffix "B" for U-bracket.
 (2) Output #4 is floating. It can be connected externally for positive or negative output.
 (3) All models, maximum power is derated to 110W with no forced air provided by user.
 (4) All multi-output models, maximum current per output is derated to 75% with no forced air provided by user.
 (5) Total output power: 110W convection, 150W with 30 cfm forced air. For covered version, 75W convection, 130W with 30cfm of forced air.

GENERAL SPECIFICATIONS

All specifications are typical at nominal line, full load, and 25°C.

Efficiency:	70% typical on all models
Hold-up time:	15 msec minimum at 115VAC
Line regulation:	±0.5% maximum at full load
Inrush current:	20 amps @115VAC or 40 amps @230VAC at 25°C cold start
Withstand voltage:	3000 VAC from input to output 1500 VAC from input to ground 500 VAC from output to ground
Operating temperature:	0 to +70°C*
Storage temperature:	-40 to +85°C
Relative humidity:	5% to 95% non-condensing
MTBF:	100,000 hours at full load at 25°C ambient
EMI requirements:	Meets conduction limits of CISPR 22 Class B and FCC Class B
Safety requirements:	Approved to: a) UL1950 b) CSA C22.2 No. 234 c) IEC 950 (EN60950)
Switching frequency:	100 kHz - 130 kHz

INPUT SPECIFICATIONS

Input voltage:	85 to 132 VAC, 170 to 264 VAC
Input frequency:	47 to 63 Hz
Input current:	3.4A (rms) for 115 VAC 2.0A (rms) for 230 VAC
Leakage current:	0.4mA max at 110VAC 60 hz 0.8mA max at 240VAC 50 hz

OUTPUT SPECIFICATIONS

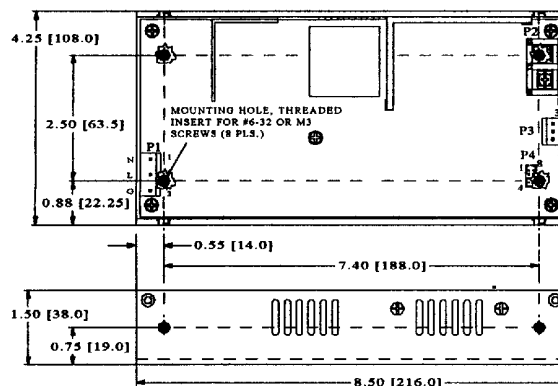
Output voltage:	See Rating Chart
Output current:	See Rating Chart
Ripple and noise:	1% peak to peak maximum
Overvoltage protection:	Set at 112-132% of maximum output voltage (on output #1 only)
Overcurrent protection:	All outputs protected to short circuit conditions
Temperature coefficient:	±0.04%/°C maximum
Transient response:	Maximum excursion of 4% or better on all models, recovering to 1% of final value 500us after a 25% step load change.

* Derate linearly from 100% load at 50°C to 50% load at 70°C

MECHANICAL SPECIFICATIONS

NOTES:

- Dimensions shown in inches (mm).
- Tolerance 0.02 (0.5) maximum.
- Input connector P1 mates with Molex housing 09-50-3051 and Moles 2878 series crimp terminal.
- Output connector P3 mates with Molex housing 09-50-3031 or 09-50-3091 for multiple outputs and Molex 2878 series crimp terminal.
- Connector P4 mates with Molex housing 5110-0851 and pins 50394-8100
- Weight: 0.84 Kgs (1.86 Lbs) approx. for "B" version



PIN CHART

Model	PIN	P1			P2		P3			P4							
		1	2	3	1	2	1	2	3	1	2	3	4	5	6	7	8
PU150-10		AC Neutral	AC Line	AC Ground	Return	Output +V	Return	N.C.	PFD	Inhibit -Ve	Inhibit +Ve	N.C.	N.C.	Return	-Sense	+Sense	Current Share
PU150-12 PU150-13-1 PU150-16 PU150-18	PU150-13 PU150-14 PU150-17	AC Neutral	AC Line	AC Ground	Return	Output +V	Return	N.C.	N.C.	Inhibit -Ve	Inhibit +Ve	N.C.	N.C.	Return	-Sense	+Sense	Current Share

Model	PIN	P1			P2		P3						P4							
		1	2	3	1	2	1,2	3,4,5	6	7	8	9	1	2	3	4	5	6	7	8
PU150-23 PU150-25	PU150-24	AC Neutral	AC Line	AC Ground	Comm Return	Output #1	Output #2	Comm Return	N.C.	PFD	N.C.	N.C.	Inhibit -Ve	Inhibit +Ve	Fan*	N.C.	Comm Rtn	-Sense	+Sense	Current Share
PU150-30 PU150-32	PU150-31 PU150-33	AC Neutral	AC Line	AC Ground	Comm Return	Output #1	Output #2	Comm Return	Output #3	PFD	N.C.	N.C.	Inhibit -Ve	Inhibit +Ve	Fan*	N.C.	Comm Rtn	-Sense	+Sense	Current Share
PU150-40 PU150-42 PU150-45	PU150-41 PU150-44	AC Neutral	AC Line	AC Ground	Comm Return	Output #1	Output #2	Comm Return	Output #3	PFD	Output #4	Output #4 Rtn	Inhibit -Ve	Inhibit +Ve	Fan*	N.C.	Comm Rtn	-Sense	+Sense	Current Share

* Fan Voltage is equal to output #2 voltage (ex. PU150-23 has +12V fan)