# LP Series 4.5 Watt Single and Dual Output DC-DC Power Converters



T-57-11

#### **FEATURES**

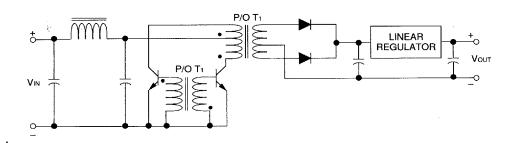
- Fixed input range; 5V, 24V, 28V (±14%, maximum)
- Fixed output; ±15V dc (at 150 mA)
- Chassis or PC board mount (2" x 2" x 0.40")
- · 300V dc input to output isolation
- Very wide operating temperature (-25 °C to +71 °C)
- · Output ripple of 1 mV (RMS, maximum)
- · Delivery from stock!



The LP Series of high performance, mid-range power 4.5 Watt DC-to-DC converters provide the accuracy and reliability you've come to expect from DATEL. All three models are available in a standard 2" x 2" x 0.40" package to cover virtually any application from special in-house designs to high volume OEM use. Their compact size, low price, and rugged reliability means years of cost effective, trouble-free operation under virtually any environmental or electrical condition. Outstanding output accuracy combined with overall temperature coefficient of 0.005% per °C, and very low noise and ripple make these power converters ideal for sensitive circuits.



The 4.5 Watt LP Series are available with fixed input voltages of 5V, 24V, and 28V with voltage tolerances of ±0.25V, ±3.5V, and ±4.0V, respectively. Output voltage is a highly regulated ±15V at ±150 mA. Their industry standard package (2" x 2" x 0.40") and convenient heat sinking capability via two threaded 2-56 studs combined with their low price and off-the-shelf delivery make this series of mid-power DC/DC power converters ideal for a wide range of applications. Just a few of the more common application areas are; Industrial Control Systems, Telecommunications Equipment, Analog Systems, Digital Circuits, Field/Mobile Instrumentation, or wherever high reliability at the lowest possible cost is demanded.



#### **APPLICATIONS**

- Telecommunications Equipment
- Local Power Distribution Systems
- PC Board Subsystems
- Avionics Subsystems/ Instrumentation
- Portable Computer and Computer Controlled Equipment
- · Marine Systems and Equipment

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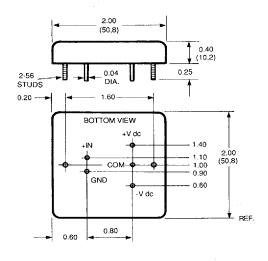
# SPECIFICATIONS

	SINGLE OUTPUT MODELS		
	BPM-15/150-D5	BPM-15/150-D24	BPM-15/150-D28
Output Voltage	±15V dc	±15V dc	±15V dc
Output Voltage Accuracy	±`%	±1%	±1%
Rated Output Current®	±150 mA	±150 mA	±150 mA
Input Voltage	5V dc	24V dc	28V dc
Input Voltage Tolerance	±0.25V	±3.5V	±4V
Maximum Input Current	1.75A	0.35A	0.3A
Efficiency, Full Load	51%	54%	54%
Line Regulation	0.05%	0.05%	0.05%
Load Regulation	0.05%	0.05%	0.05%
Temperature Coefficient, max.	0.005%/°C	0.005%/°C	0.005%/°C
Output Ripple, RMS max.	1 mV	1 mV	1 mV
Output Impedance, max.	0.05Ω	0.05Ω	0.05Ω
Transient Recovery Time, max.	50 μSec	50 μSec	50 μSec
Case Material	Aluminum	Aluminum	Aluminum
Module Size, Inches	2.0 x 2.0 x 0.4	2.0 x 2.0 x 0.4	2.0 x 2.0 x 0.4
Module Size, Millimeters	50.8 x 50.8 x 10.2	50.8 x 50.8 x 10.2	50.8 x 50.8 x 10.2
Module Weight	3.0 ounces (85 grams)	3.0 ounces (85 grams)	3.0 ounces (85 grams)
Case/Pin Configuration	В	В	В
Mating Socket	MS-6	MS-6	MS-6

# THESE POWER SUPPLIES ARE COVERED BY GSA CONTRACT

① Above 35 °C (95 °F) mounting surface temperature, derated 1.3 mA/°C.

## **MECHANICAL DIMENSIONS AND I/O CONNECTIONS**

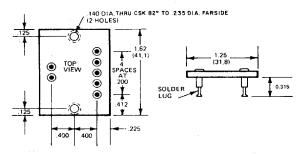


## **GENERAL SPECIFICATIONS**

Isolation Resistance, minimum	100 Megohms
Isolation Capacitance, maximum	100 pF
BreakdownVoltage, minimum	300V dc
Operating Temperature Range	-25 °C to +71 °C
Storage Temperature Range	-55 °C to +85 °C

The 4.5 watt Series uses 2 DILS-1 or DILS-2 terminal strips for sockets.

## SOCKET MS-6



For Immediate Assistance, Dial 1-800-233-2765