

Less than .35" Profile

Industry Standard Footprints

Wide Input Range 2:1

Wave Solderable

Agency Approved

High Density

12, 24 & 48V Inputs

2 Year Warranty

Telecom Compliant

Lambda's isolated PM Series single, dual and triple output DC-DC converters are designed specifically for telecom, datacom and computer applications, with 12V, 24V and 48V inputs. They are the only converters which meet all the safety agency requirements for these markets, including Bellcore and ETSI.

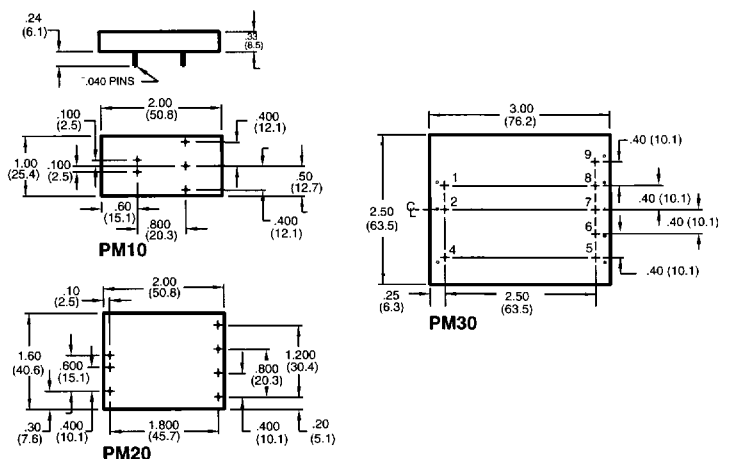
The PM Series uses 100% SMT technology, eliminating point to point wiring - the largest source of potential quality problems in DC-DC converters. Their highly automated continuous flow production line is located in North America, providing the industry's fastest delivery for production quantities - only 4 weeks from confirmed order to shipment.

When you compare features, specifications and reliability, the PM Series is the clear choice for distributed power applications.

Similar products		Page
SM Series	Surface Mountable	78
RM Series	Ultra High Efficiency	80
PP Series	Less than 10W, 5V Input	74

DC Input	9-18V on 12V models; 18-36V on 24V models. 36-75V on 48V models.
Transient Response	2.0% deviation, recovery to 1.0% of final value in 1ms. Refers to 25% load step.
Input Line Disturbances	12V input models 25V for 100ms. 24V input models 50V for 100ms. 48V input models 100V for 100ms and ETSI Standard ETS 300132 (100V, 10 joules pulse).
No Load Input Power	0.4W.
Inrush Current Limiting	All models meet the ETSI-300-132 requirements for inrush current less than 50A peak.
EMI	24/48V input models meet EN55022 (Level B), FCC Part 15 (Level B), ANSI 63.12-1987 (as called out in Bellcore TA-NWT-001089 Issue 2) with an external filter.
Output Voltage Accuracy ...	±1% single output. ±1.5% dual output.
Output Voltage Adj Range ..	PM15, 20 & 30 main outputs ±10% via TRM terminal.
Line Regulation	0.2% for single and dual output, 3.0% (typical) on auxiliary outputs of triple output.
Load Regulation	1.0% (typical) for single and main outputs, 8% (typical) aux. output of triple output models from 25% to 100% load, and with greater than 5W main output load.
Ripple and Noise	75mV pk-pk on 3V & 5V units. 100mV pk-pk on 12V, 15V single & dual output units. 120mV pk-pk on auxiliary outputs of triple output units.
Start Up	Within 200ms after application of nominal input voltage.
Overshoot	No output overshoot at turn-on, turn-off or power failure.
Overvoltage Protection	Overvoltage protection clamps the output to a predetermined level.
Short Circuit Protection	Continuous on main output only of all models. Aux. outputs: 30 ms. max.
Cooling	Convection allows full O/P rating.
Operating Temperature Range	-40°C to +70°C.
Altitude	10,000 ft. – maximum operating. 45,000 ft. – storage.
Storage Temperature	-40°C to +105°C.
Fungus Proofing	Units are inherently fungus inert.
Temperature Coefficient	±0.015% per °C. ±0.03% per °C. on auxiliary output of triple output models
Humidity	5% to 95% (non-condensing).
Isolation Resistance	10MOhm.
Isolation Voltage	Input to Output: 900VAC, 1500VDC on 48V models. 500VAC, 700VDC on 12V and 24V models.
Thermal Cycling	1hr. @ -25°C ramped to 1hr. @ +25°C, ramped to 1hr. @ +100° C.
Vibration and Shock	2.5G RMS, 10Hz-50Hz, random vibration, 10 minutes per axis.
Remote On/Off	PM15, 20 & 30: High (open) enables unit, Low (short) shuts operation down.
Safety Agency Approval	UL, CSA, EN60950 and CE Mark.
Warranty	2 years.

VOLTAGE (V)	CURRENT (A)	POWER (W)	12V INPUT	MODEL 24V INPUT	48V INPUT
Single Outputs					
3.3	1.27	4.2	PM05-12S03	PM05-24S03	PM05-48S03
3.3	2.55	8.4	PM10-12S03	PM10-24S03	PM10-48S03
3.3	3.75	12.4	PM15-12S03	PM15-24S03	PM15-48S03
3.3	5.00	16.5	PM20-12S03	PM20-24S03	PM20-48S03
3.3	7.50	24.75	PM30-12S03	PM30-24S03	PM30-48S03
5.0	1.00	5	PM05-12S05	PM05-24S05	PM05-48S05
5.0	2.00	10	PM10-12S05	PM10-24S05	PM10-48S05
5.0	3.00	15	PM15-12S05	PM15-24S05	PM15-48S05
5.0	4.00	20	PM20-12S05	PM20-24S05	PM20-48S05
5.0	6.00	30	PM30-12S05	PM30-24S05	PM30-48S05
12.0	0.42	5	PM05-12S12	PM05-24S12	PM05-48S12
12.0	0.83	10	PM10-12S12	PM10-24S12	PM10-48S12
12.0	1.25	15	PM15-12S12	PM15-24S12	PM15-48S12
12.0	1.67	20	PM20-12S12	PM20-24S12	PM20-48S12
12.0	2.50	30	PM30-12S12	PM30-24S12	PM30-48S12
15.0	0.33	5	PM05-12S15	PM05-24S15	PM05-48S15
15.0	0.67	10	PM10-12S15	PM10-24S15	PM10-48S15
15.0	1.00	15	PM15-12S15	PM15-24S15	PM15-48S15
15.0	1.33	20	PM20-12S15	PM20-24S15	PM20-48S15
15.0	2.00	30	PM30-12S15	PM30-24S15	PM30-48S15
Dual Outputs					
±12	0.21	5	PM05-12D12	PM05-24D12	PM05-48D12
±12	0.42	10	PM10-12D12	PM10-24D12	PM10-48D12
±12	0.63	15	PM15-12D12	PM15-24D12	PM15-48D12
±12	0.83	20	PM20-12D12	PM20-24D12	PM20-48D12
±12	1.25	30	PM30-12D12	PM30-24D12	PM30-48D12
±15	0.167	5	PM05-12D15	PM05-24D15	PM05-48D15
±15	0.33	10	PM10-12D15	PM10-24D15	PM10-48D15
±15	0.50	15	PM15-12D15	PM15-24D15	PM15-48D15
±15	0.67	20	PM20-12D15	PM20-24D15	PM20-48D15
±15	1.00	30	PM30-12D15	PM30-24D15	PM30-48D15
Triple Outputs					
3.3, ±12	7, ±1	30	PM30-12T03-12	PM30-24T03-12	PM30-48T03-12
5, ±12	5, ±1	30	PM30-12T05-12	PM30-24T05-12	PM30-48T05-12



NOTE: DIMENSIONS ARE IN INCHES EXCEPT DIMENSIONS () ARE IN MM.