



## Compact, Low-Power DC-DC Converters

- ◆ Compact Footprint / Low- Profile
- ◆ 5V, 12V, 24V & 48V Inputs
- ◆ 3.3 - 15V Single +/-12V Dual Outputs
- ◆ Output Voltage Adjustment
- ◆ Input-Output Isolation
- ◆ Integral Input Fuse

### Key Market Segments

Telecommunication equipment  
 Datacom equipment  
 Instrumentation products  
 Microprocessor based systems

## PC Features and Benefits

| Feature                                 | Benefit                   |
|-----------------------------------------|---------------------------|
| ◆ Compact                               | ◆ Less pcb area           |
| ◆ Self contained                        | ◆ Requires no external co |
| ◆ Multiple Input Voltage configurations | ◆ Easier pcb layout       |
| ◆ Five sided metal case                 | ◆ Lower radiated no       |

## Specifications

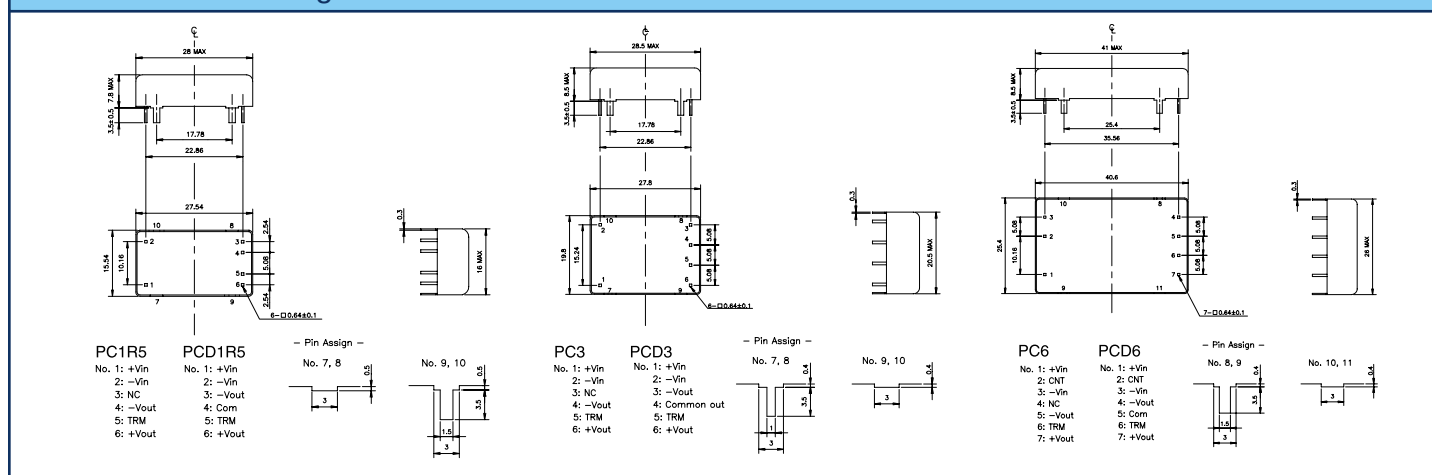
| Output Volt.              |    | 3.3V                                                                        | 5V      | 12V     |
|---------------------------|----|-----------------------------------------------------------------------------|---------|---------|
| ITEMS                     |    |                                                                             |         |         |
| DC Input                  | -  | 5V: 4.5-9.0V, 12V: 9-18V, 24V: 18-36V, 48V: 36-72V                          |         |         |
| Efficiency                | -  | 66 to 85% model dependant                                                   |         |         |
| Output Voltage Accuracy   | -  | ± 5%                                                                        |         |         |
| Isolation Voltage         | -  | 500VAC 1 min. Input-Output, Input-Chassis                                   |         |         |
| Output Adjustment         | -  | 2.84V-3.67V                                                                 | 4.3V-6V | 12V-15V |
| Line Regulation           | mV | 20                                                                          |         | 30      |
| Load Regulation           | mV | 40                                                                          |         | 100     |
| Preload                   | -  | No preload required                                                         |         |         |
| Output Ripple             | mV | 120                                                                         |         |         |
| Overcurrent Protection    | -  | Output current limiting with automatic recovery.                            |         |         |
| Overvoltage protection    | -  | No                                                                          |         |         |
| Remote On/Off             | -  | PC6 / PCD6 models only                                                      |         |         |
| Cooling                   | -  | Convection Cooled                                                           |         |         |
| Operating Temp. Range     | -  | -20 to 70°C, derate linearly to 40% load from 50 to 70°C                    |         |         |
| Storage Temperature       | -  | -40°C to 85°C                                                               |         |         |
| Humidity (Non condensing) | -  | 20 - 95% RH                                                                 |         |         |
| Temperature Drift         | mV | 50                                                                          |         | 100     |
| Isolation Resistance      | -  | >50M at 25°C and 70% RH 500 VDC Output-Chassis                              |         |         |
| Shock                     | -  | 100G                                                                        |         |         |
| Vibration (non operating) | -  | 10-55-10 Hz (sweep for 15 min.) amplitude 1.5mm                             |         |         |
| Weight                    | -  | PC1R5 - 6g, PC3 models - 10g, PC6 models - 17g                              |         |         |
| Size (L"x W"x H")         | in | PC1R5: 1.10 x 0.63 x 0.31; PC3: 1.12 x 0.81 x 0.33; PC6: 1.61 x 1.02 x 0.33 |         |         |
| Warranty                  | -  | 2 years                                                                     |         |         |

Note: See Installation Manual for full specifications, test methods of parameters and application notes.

## Model Selector

|                       | Output Voltage | Max Current (A) | Output Power (W) | 5V Input      | 12V Input      | 24V Input      | 48V Input      |
|-----------------------|----------------|-----------------|------------------|---------------|----------------|----------------|----------------|
| <b>Single Outputs</b> |                |                 |                  |               |                |                |                |
|                       | 3.3            | 0.4             | 1.32             | PC1R5-5-3.3   | PC1R5-12-3.3   | PC1R5-24-3.3   | PC1R5-48-3.3   |
|                       | 3.3            | 0.6             | 1.98             | PC3-5-3.3     | PC3-12-3.3     | PC3-24-3.3     | PC3-48-3.3     |
|                       | 3.3            | 1.2             | 3.96             | PC6-5-3.3     | -              | -              | -              |
|                       | 3.3            | 1.5             | 4.95             | -             | PC6-12-3.3     | PC6-24-3.3     | PC6-48-3.3     |
|                       | 5.0            | 0.3             | 1.5              | PC1R5-5-5     | PC1R5-12-5     | PC1R5-24-5     | PC1R5-48-5     |
|                       | 5.0            | 0.6             | 3.0              | PC3-5-5       | PC3-12-5       | PC3-24-5       | PC3-48-5       |
|                       | 5.0            | 1.0             | 5.0              | PC6-5-5       | -              | -              | -              |
|                       | 5.0            | 1.2             | 6.0              | -             | PC6-12-5       | PC6-24-5       | PC6-48-5       |
|                       | 12.0           | 0.125           | 1.5              | PC1R5-5-12    | PC1R5-12-12    | PC1R5-24-12    | PC1R5-48-12    |
|                       | 12.0           | 0.25            | 3.0              | PC3-5-12      | PC3-12-12      | PC3-24-12      | PC3-48-12      |
|                       | 12.0           | 0.5             | 6.0              | PC6-5-12      | PC6-12-12      | PC6-24-12      | PC6-48-12      |
| <b>Dual Outputs</b>   |                |                 |                  |               |                |                |                |
|                       | ±12.0          | 0.06            | 1.44             | PCD1R5-5-1212 | PCD1R5-12-1212 | PCD1R5-24-1212 | PCD1R5-48-1212 |
|                       | ±12.0          | 0.125           | 3.0              | PCD3-5-1212   | PCD3-12-1212   | PCD3-24-1212   | PCD3-48-1212   |
|                       | ±12.0          | 0.25            | 6.0              | PCD6-5-1212   | PCD6-12-1212   | PCD6-24-1212   | PCD6-48-1212   |

## Outline Drawing



## Pinout

| Pin Description | Function                   |
|-----------------|----------------------------|
| -Vin            | Negative Input Terminal    |
| +Vin            | Positive Input Terminal    |
| +V              | Positive Output Terminal   |
| -V              | Negative Output Terminal   |
| TRIM            | Output adjustment Trim pin |
| CNT             | Remote ON/OFF              |

## Other Lambda DC-DC Products

|    |                                                       |
|----|-------------------------------------------------------|
| X  | 10 - 20W, 24 & 48V input DC-DC converters             |
| SX | Surface Mount 20W, 24 & 48V input DC-DC converters    |
| PV | 1.5 - 3W, Single Inline Pkg. 5V, 12V, 24V & 48V input |

For Additional Information, please visit  
[www.lambdapower.com/products/pc-series.htm](http://www.lambdapower.com/products/pc-series.htm)