

Enclosed or L Bracket
PCB Mount
Non Isolated

DC-DC Selector

Nominal Input Voltage	# of Outputs	Output Power (W)								
		3	10	30	50	100	150	300	600	
5V	Single	CC-E								
		iAC, iBA								
5V	Dual	CC-E								
	12V	Single	CC-E							
iA, iBC										
PXD,PXE,PF										
12V	Dual	CC-E								
		PXD,PXE,PF								
12V	Triple			PXF						
	24V	Single	CC-E							
PXD,PXE,PF										
PH-F										
PH-S										
iQ								PAH300		
PAF										
24V	Dual	CC-E								
		PXD,PXE,PF								
		PAH75D*								
24V	Triple			PXF						
		48V	Single	CC-E						
PXD,PXE,PF										
iSA, PAE*, iE, iP*										
iQ, PAQ*										
PH-F										
PH-S										
iH, PAH										
PAF										
48V	Dual			CC-E						
				PXD,PXE,PF						
		PAQ*								
		PAH75D*								
48V	Triple			PXF						
	Multiple							Vega*		
82-185VDC	Single									
200-400VDC	Single									

* See website

Ultra Compact, 1.5W to 25W Single and Dual DC-DC Converters



Manufactured by TDK

TDK-Lambda is a collaborative product brand between TDK and the Lambda group.

- ◆ Compact Footprint / Low Profile
- ◆ Through Hole or SMT Versions
- ◆ 5V, 12V, 24V & 48V Inputs
- ◆ 3.3 to 30V¹ Single, ±12 to 15V Dual Outputs
- ◆ Output Voltage Adjustment
- ◆ Input - Output Isolation
- ◆ RoHS Compliant
- ◆ 5 Year Warranty



Key Market Segments & Applications

Telecommunications	Datacom
Instrumentation	

Features & Benefits

Feature	Benefit
◆ Compact	◆ Less pcb area used
◆ Self contained	◆ Requires no external components
◆ Multiple Input Voltage configurations	◆ Easier system configuration
◆ Open frame (no potting)	◆ Lighter in weight, suitable for surface mount (R version)

Specifications

	V	3.3V	5V	12/15V	±12/15 (24/30) ¹
Nominal Output Voltage	V	3.3V	5V	12/15V	±12/15 (24/30) ¹
DC Input	V	5V: 4.5-9.0V, 12V: 9-18V, 24V: 18-36V, 48V: 36-76V			
Efficiency	%	71 to 90% model dependant			
Output Voltage Tolerance	%	1.5-10W: ±3%, 15-25W: ±5%			±5%
Output Adjustment (via trim pin)	V	3.15-3.6V	4.75-6.0V	11.4-15V	22.8 - 30V
Line Regulation	mV	20 (40 CC15; 30 CC25)	40	80	80
Load Regulation	mV	40 (120 CC15; 200 CC25)	100	600 ²	600 ²
Temperature Coefficient	%	< ± 0.02%/°C			
Preload	-	No preload required			
Output Ripple (typ./max.BW 50MHz)	mV	40/120		30/120	
Overcurrent Protection	-	Output current limiting with automatic recovery, shutdown CC15, 25 type			
Overvoltage Protection	-	No			
Remote On/ Off	-	CC1R5, 3, 6, & 10: RC terminal open, output is OFF; RC terminal to -Vin (0-0.4V), output is ON CC15 & CC25: RC terminal open, output is ON; RC terminal to +Vin, output is OFF			
Operating Temp.- Convection	°C	-40 to 85°C, derates linearly to 40% load from 50°C to 85°C			
Operating Temp.- Forced Air	°C	-40°C to 85°C with 1m/s air full load			
Storage Temperature	°C	-40°C to 85°C			
Humidity (non Condensing)	-	95% RH max.(maximum wet-bulb temperature: 38°C)			
Isolation Voltage	-	500VAC 1 min. Input to output, input to case, output to case			
Isolation Resistance	-	Input to output, input to case, output to case: 50M ohm min. (500VDC)			
Shock	m/s ²	980m/s ² (100G) 6ms (6 directions, each 3 times)			
Vibration (non Operating)	-	10 to 55Hz (sweep for 15min) 1.52mm constant, 3 directions X, Y, Z each 2 hours			
Safety Agency Approvals	-	UL60950-1, CSA60950-1, EN60950-1			
Weight	g	CC1R5: 3.2, CC3: 4.5, CC6: 5.8, CC10:10.0, CC15: 12.5, CC25: 20.0			
Size (L x W x H) (DIP Through Hole and SMD package) (SIP Through Hole only)	in	CC1R5: 0.650 x 0.654 x 0.335; CC3: 0.900 x 0.654 x 0.335; CC6: 0.900 x 0.831 x 0.335 CC10: 1.400 x 0.890 x 0.335; CC15: 1.500 x 1.264 x 0.295; CC25: 1.701 x 1.768 x 0.295 CC3 (SIP): 1.09 x 0.362 x 0.705			
Warranty	-	5 years			

1. For 24V/30V output - connect across +Vout & -Vout and leave "common out" pin not connected
2. Based upon equal load current from both outputs

3. For 15V output connect trim to -Vout
4. See Installation Manual for full specifications, test methods of parameters and application notes

