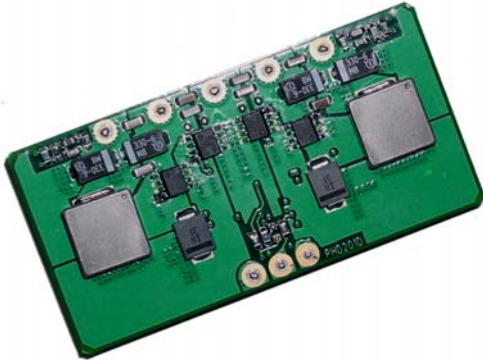


**PHD32 Series – 32A Non-Isolated DC/DC Converter**  
**5V, 3.3V Input**  
**Dual Output**

**Features**

- Two independently regulated outputs
- Efficiency in excess of 90%
- 32A of combined output current at 65°C and 200LFM
- Flexible output load distribution
- Output overcurrent protection
- Remote ON/OFF
- Output voltage trim adjust for each output
- Through hole and SMT configurations

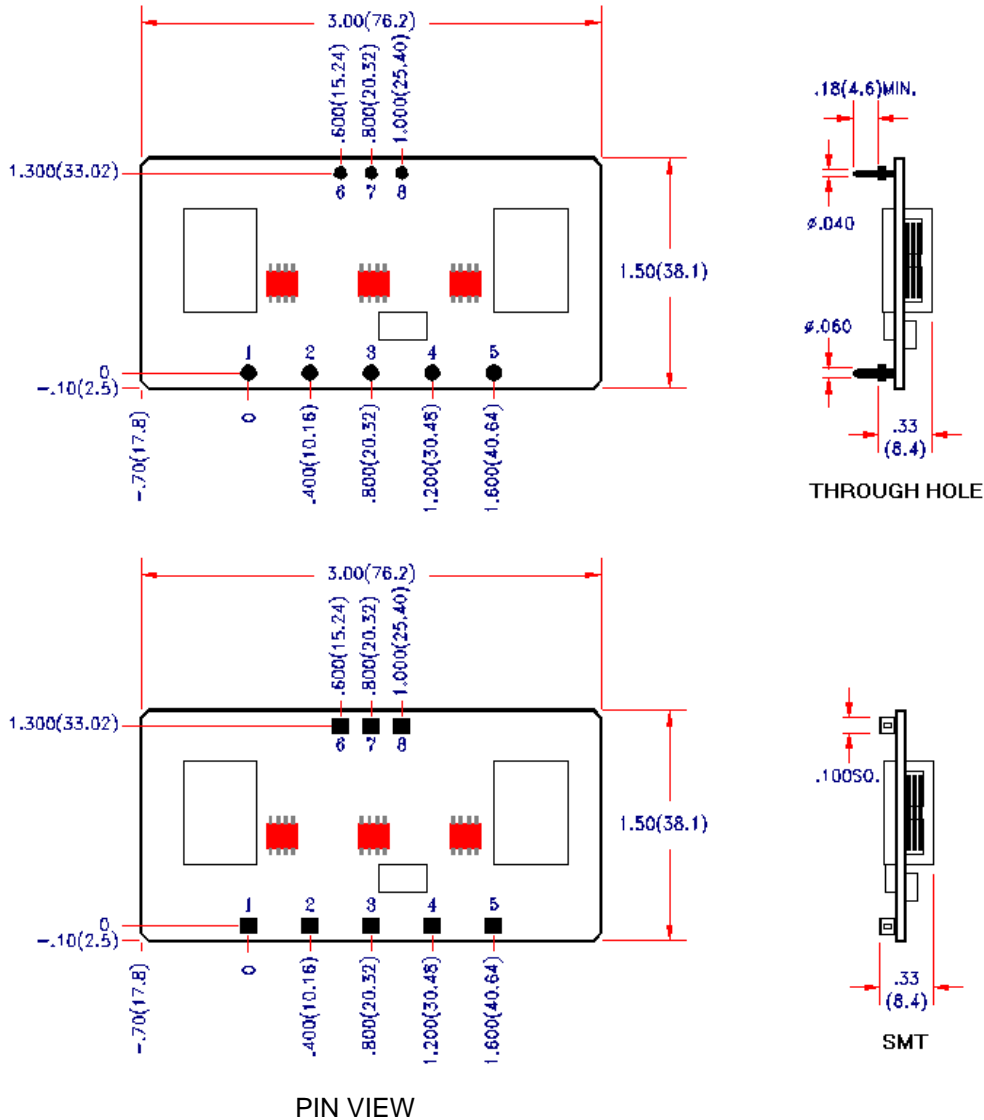
**Description**

The **PHD32** series converters are non-isolated dual output DC/DC converters available in through hole and surface mount configurations. The products provide point of load conversion of a single 3.3V or 5V input voltage to two independently regulated low output voltages. Each output can provide up to 20A of output current, has independent feedback loop and independent trim function. Two power trains operate out of phase thus significantly reducing ripple current requirements and simplifying external filtering. High efficiency, low space requirements, and flexible loading characteristics make the converters an ideal choice for powering of high performance multivoltage ASICs.

3.3V Input					5V Input				
3.3V input Model	Input voltage range, VDC	Vout1, VDC	Vout2, VDC	Eff. %	5V input Model	Input voltage range, VDC	Vout1, VDC	Vout2, VDC	Eff. %
PHD32UDD	3.0-3.6	2.5	2.5	91	PHD32VEE	4.5-5.5	3.3	3.3	92
PHD32UDC	3.0-3.6	2.5	2.0	90	PHD32VED	4.5-5.5	3.3	2.5	92
PHD32UDB	3.0-3.6	2.5	1.8	89	PHD32VEC	4.5-5.5	3.3	2.0	91
PHD32UDA	3.0-3.6	2.5	1.5	89	PHD32VEB	4.5-5.5	3.3	1.8	91
PHD32UDY	3.0-3.6	2.5	1.2	88	PHD32VEA	4.5-5.5	3.3	1.5	90
PHD32UCC	3.0-3.6	2.0	2.0	89	PHD32VEY	4.5-5.5	3.3	1.2	90
PHD32UCB	3.0-3.6	2.0	1.8	88	PHD32VDD	4.5-5.5	2.5	2.5	91
PHD32UCA	3.0-3.6	2.0	1.5	88	PHD32VDC	4.5-5.5	2.5	2.0	91
PHD32UCY	3.0-3.6	2.0	1.2	87	PHD32VDB	4.5-5.5	2.5	1.8	89
PHD32UBB	3.0-3.6	1.8	1.8	88	PHD32VDA	4.5-5.5	2.5	1.5	89
PHD32UBA	3.0-3.6	1.8	1.5	87	PHD32VDY	4.5-5.5	2.5	1.2	88
PHD32UBY	3.0-3.6	1.8	1.2	86	PHD32VCC	4.5-5.5	2.0	2.0	89
PHD32UAA	3.0-3.6	1.5	1.5	86	PHD32VCB	4.5-5.5	2.0	1.8	89
PHD32UAY	3.0-3.6	1.5	1.2	85	PHD32VCA	4.5-5.5	2.0	1.5	88
PHD32UYY	3.0-3.6	1.2	1.2	84	PHD32VCY	4.5-5.5	2.0	1.2	87
<p><i>Both outputs of the PHD32U and PHD32V can be loaded up to twenty (20) amps each.</i></p> <p><i>Note: The maximum combined output is thirty-two (32) amps.</i></p>					PHD32VBB	4.5-5.5	1.8	1.8	88
					PHD32VBA	4.5-5.5	1.8	1.5	87
					PHD32VBY	4.5-5.5	1.8	1.2	86
					PHD32VAA	4.5-5.5	1.5	1.5	86
					PHD32VAY	4.5-5.5	1.5	1.2	85
					PHD32VYY	4.5-5.5	1.2	1.2	84

**PHD32 Series – 32A Non-Isolated DC/DC Converter**  
**5V, 3.3V Input**  
**Dual Output**

**Mechanical Drawing** *Dimensions Shown in Inches (millimeters)*



Pin	Function
1	Vout1
2	GND
3	Vin
4	GND
5	Vout2
6	Trim1
7	ON/OFF
8	Trim2

Tolerances:  
 .xx ± 0.020" (0.5mm)  
 .xxx ± 0.010" (0.25mm)

**Notes**

1. Consult factory for the complete list of available options.
2. Power-One products are not authorized for use as critical components in life support systems, equipment used in hazardous environments, or nuclear control systems without the express written consent of the President of Power-One, Inc.
3. Specifications are subject to change without notice.