

**HVDC SERIES**  
**270 VDC SINGLE OUTPUT**  
**DC TO DC CONVERTER**  
**1000 WATTS 2.60" x 5.00" x 10.00"**  
**RUGGED, DC AIRCRAFT POWER**

**APPLICATIONS**

The HVDC family of DC-DC Converters was designed to satisfy airborne and ground support equipment for military aircraft applications. The HVDC series is especially suitable for critical system support testing where 270 VDC output voltage is required. Available also in standard 19" rack mount designs and individual units can be paralleled for increased power levels.



**SPECIFICATIONS**

**INPUT SPECIFICATIONS:**

Input: 22-32 VDC (Prefix P) 42 - 56 VDC (Prefix Q)  
Efficiency: 85% Typical

**OUTPUT SPECIFICATIONS**

Voltage Adjustment: Fixed Output  
Line Regulation: 1%  
Load Regulation: 3%  
Set Point Accuracy:  $\pm 1\%$   
Protections: Overcurrent, Overvoltage, Overtemperature  
Overvoltage Protection: 115-150% of V1 nominal

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature:  $-20^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$  Derate to 50% @  $+70^{\circ}\text{C}$   
Storage Temperature:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$  max Relative Humidity  
Cooling: Internal ball bearing DC fan  
Humidity: 20-90% RH non condensing  
Shock/Vibration: 20G, designed to meet MIL-STD-810  
Shock: 20G Peak Acceleration  
Weight: Approx: 4 lbs  
Size: 2.60" x 5.00" x 10.00"

**STANDARD FEATURES**

- Compact Design
- Tightly Regulated
- OV/OL/OT Protected
- LED Indicator (Input Good & Output Good)
- MTBF > 100,000
- Internal Fan
- "Rugged" Construction
- Terminal Block Input
- Sub-D Connector for Output

**AVAILABLE OPTIONS**

- Redundant Operation (N+1)
- Ruggedized For Severe Environment
- Parallel Operation
- Rack Mount / Panel Mount
- Conformal Coating (High Humidity)

## MODEL SELECTION

1000 WATTS					
MODEL	NOMINAL VOLTAGE (VDC)	MAXIMUM CURRENT (ADC)	MODEL	NOMINAL VOLTAGE (VDC)	MAXIMUM CURRENT (ADC)
PHVDC-270-3	270	3.7A	QHVDC-270-3	270	3.7A
24 VDC INPUT			48 VDC INPUT		

NOTE: THIS UNIT MAY BE USED AS A FRONT END MODULE TO RUN A POWER FACTOR CORRECTED AC POWER SUPPLY FROM 24 V OR 48 V INPUT.

## OPTION DESIGNATIONS

SFX.	Options Designations
-ORD	Redundant Operation
-MIL	Ruggedized/Militarized
-HSP	Hot Swap
-PAR	Parallel Operation
-CC	Conformal Coating
-RK	Rack Mount

## MECHANICAL OUTLINE

