

Military Power Conversion Solutions



- AC/DC Power Supplies
- DC/DC Converters
- Battery Chargers
- UPS, PDU, and PCS
- DC/AC Inverters*



Features and options:

- Single and three phase inputs
- High voltage DC inputs
- 12 to 52Vdc output range (**NEW**)
- Wide frequency input range of 45-440Hz
- Wedge lock and mounting holes
- PFC (low THD) inputs
- CARC (Chemical Agent Resistant Coating)
- Digital Meters for output current and voltage
- LEDs (input, output, alarm)
- Black-out switch for LEDs or covers
- Quick connectors for output
- Input breaker switch
- Weep holes for condensation drip or fully sealed unit
- Mil connectors (standard, bayonet style, other type)
- Alarm outputs (separate connector or on input/output connectors)
- Remote control (separate connector or on input/output connectors)
- Parallel DC output units for higher output power requirements

The Raptor series is a family of Military AC/DC power supplies, DC/DC converters, Battery chargers, Power control systems, Power distribution units, and soon* to be DC/AC Inverters.

Its robust housing, solid design, high performance, superb reliability as well as the build to order flexibility, makes the Raptor series the ideal source for use in shelters, vehicles, avionics, radar, Naval and many other open air applications.

We offer a number of options and can optimize or customize for mission critical applications.

Raptor Series
(COTS / MOTS)

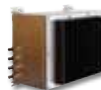


SCHAEFER
Robust - Reliable Power Solutions

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| Models Available | | |
|------------------|--------------|----------------------|
| Model | Output Power | Output Voltage Range |
| RAP-1200-xx-Uyyy | 1200W | xx = 12VDC - 52.5VDC |
| RAP-1500-xx-Uyyy | 1500W | |
| RAP-1800-xx-Uyyy | 1800W | |

Example: RAP-1800-28-U242 = 1800W Raptor with 28V output yyy = (Final configuration assigned at time of order)

| Input Options | | |
|---------------|-------------|-------------------------------|
| Option | Input | Input Range of Operation |
| V0 | 230 | 179VAC to 265VAC |
| V1* | 120 | 88VAC to 142VAC |
| V3* | 115 3-Phase | 88VAC to 142VAC |
| V4 | 208 3-Phase | 155VAC to 245VAC |
| V6* | 120/230VAC | 88VAC to 142/179VAC to 265VAC |
| V7* | DC | 125VDC to 400VDC |

* Other variations available upon request

| Input Specifications | |
|----------------------|--|
| Operating Frequency: | 45-440Hz |
| Efficiency: | 85% nominal |
| Power Factor: | >0.99 at nominal load for V0, V4 <0.95 at nominal load for V1, V3, V6 |
| Soft Start: | Initial inrush current limit |
| Current THD: | <7% (V0, V4) |

| Output Specifications | |
|---|---|
| Operating Mode: | Constant voltage or constant current with automatic crossover |
| Polarity: | Floating output: either positive or negative pole may be grounded |
| Output Stabilization with Input Fluctuations: | 50mV for specified extremes of input voltage |
| Output Stabilization with Load Fluctuations: | +/-0.3V Over no-load/full-load range |
| Ripple and Noise: | 300 mVp-p MAX., 30mV RMS max. |
| Operational Temperature: | -40°C to +70°C (derating above 40°C) |
| Cooling: | Natural Convection |

| Protection Features |
|---|
| <ul style="list-style-type: none"> • Input power circuit breaker • Output Current Limit • Output Over Voltage Protection • Low output voltage alarm • Over temperature • Out-of-Specs input voltage • Voltage sense line • Reversed battery polarity protection • Leakage current from the battery to the power supply when grid supply is off, it's <10mA • Low voltage disconnect option |

| Mechanical Specification Dimensions | | |
|-------------------------------------|--------|-----------|
| | 1200W | 1800W |
| | 1500W | |
| Width | 180mm | 200mm |
| Height | 270mm | 280mm |
| Depth | 370mm | 370mm |
| Weight | 12.5kg | 15kg max. |

Color Case Standard: FEDERAL STD-595 Green No#34083, Desert Tan 686 and CARC. Other colors available upon request.

| Operational Conditions | |
|--------------------------|---|
| Temperature - Operating: | MIL-STD-810D, Method 502.2 - Low MIL-STD-810D, Method 501.2 - High |
| Vibration Method: | MIL-STD-810D Method 514.3, Cat 1 |
| Mechanical Shock Method: | MIL-STD-810D Method 516.3 Proc 1 |
| Humidity: | 95% RH At 40°C |

| Meets MIL Standards |
|--|
| <ul style="list-style-type: none"> • MIL-STD-461C EMI (CE01, CE03, CS02, CS06, RE02, RS02, RS03) • MIL-STD-704D Aircraft Electrical Power • MIL-STD-1399 Navy Electrical Power • MIL-STD-810C, D, E Environmental Test Method • MIL-HDBK-217F Reliability Stress and Failure Rate |



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