



RSW2000-MIL SINEWAVE INVERTER

The RSW2000-MIL Inverter offers pure sine output at very high efficiency and can operate stand alone or be mounted in 19" rack system.

The RS-485/CAN bus can be used for control, monitoring and setup. Detailed status and statistics can be retrieved.

The bus is available on the signal connectors and is used for interconnecting multiple units in a redundant or parallel system.

The signal connectors also provide alarm relay outputs.

The RSW2000-MIL can be software configured according to customer specification. The firmware is user upgradeable.

The RSW2000-MIL is protected from overvoltage, overcurrent, short circuit, reversed input polarity and over temperature.

FUNCTIONS

Over temperature

The unit is protected from over temperature by derating the output current. It shuts down if the temperature continues to rise. The unit automatically starts up again when the temperature drops.

Alarms

Status signals are fed to separate potential free outputs, and are indicated in separate LEDs for:

- Power OK
- Unit Alarm
- Overload

Display

The display can be toggled between output voltage, output current and alarm/error codes.

Input voltage

When the input voltage is below the safe operating range, the converter is shut off. When the voltage returns, the converter is turned on again.

Grounding

Available in the front and back

Acoustic noise

At ambient temperatures below 45°C the acoustic noise is 45dBA.

Cooling

Forced air by temperature controlled fan

FEATURES

- RS-485 and CAN J1939 bus
- Active load sharing
- Alarm relay outputs
- Environmentally Tolerant
- IP67
- RoHS compliant



Pure Sinewave



Programmable



Waterproof



Digital display



Remote control port



Extended temperature range



Multiple electronic protection

SPECIFICATIONS

Electrical data	
Input voltage	20-34 VDC
DC input current Load: 2000 W @ PF > 0.95	≤ 115 A @ Vout: 120 VAC ≤ 68 A @ Vout: 230 VAC
Efficiency Input: 28 VDC	≥ 88 % @ Vout: 120 VAC ≥ 90 % @ Vout: 230 VAC
Default output voltage	230 VAC, 50 Hz
Adjustable output voltage	200-240 VAC, 50 Hz 100-120 VAC, 60 Hz
Output current limit	17 A @ Vout: 120 VAC 9 A @ Vout: 230 VAC
Adjustable output voltage	17 A @ Vout: 120 VAC 9 A @ Vout: 230 VAC
Frequency	50/60 Hz ±0.1 Hz
Overload	105-115 %, 120 sec 115-150 %, 10 sec Shut down, re-power to recover
Short circuit current	≤ selected current limit +70 % Shut down, re-power to recover
Load sharing	≤ 2 A deviation
Total Harmonic Distortion 2000W @ PF > 0.95	≤ 3 % @ 115 VAC, 60 Hz ≤ 3 % @ 230 VAC, 50 Hz
Output voltage ripple and noise	≤ 2 Vp-p, 20 MHz bandwidth
Load regulation	±3 %
Line regulation	Negligible

Standards	
Electromagnetic Interference	The power supply meets the requirements of MIL-STD-461F; Ground Army; CE101, CE102, RE101, RE102, RS103, CS101, CS114, CS115 and CS116
Electrical systems in vehicles	The power supply meets the requirements MIL-STD-1275E
Electrostatic discharge	The power supply meets the requirements of EN 61000-4-2 for ESD
Safety	CE marked

Environmental	
High temperature	Operation MIL-STD-810G: Method 501.5, Procedure II, +60°C Storage MIL-STD-810G: Method 501.5, Procedure I, +71°C
Low temperature	Operation MIL-STD-810G: Method 502.5, Procedure II, - 40°C Storage MIL-STD-810G: Method 502.5, Procedure I, -51°C
Temperature shock	MIL-STD-810G: Method 503.5, -51°C - +71°C non-operational
Humidity	MIL-STD-810G: Method 507.5, Procedure II, operational
Vibration	MIL-STD-810G, Method 514.6C Table 514.6C-VI. Composite wheeled vehicle vibration exposures figure 514.6C-3 . MIL-STD-810G: Method 514.6D, Category 20, Ground Vehicles, Wheeled/Tracked/Trailer, Procedure I
Shock	MIL-STD-810G, Method 516.6, Procedure I, functional Shock, 40g 11ms
Fungus	MIL-HDBK-454: Analysis of the degree of inertness to fungus growth of the components
Salt Fog	MIL-STD 810G: Method 509.5, 24 h spray, 24 h dry, 2 times
Altitude	Operational MIL-STD-810G: Method 500.5, Procedure II, 4572 m (15000 ft) at 57.2 kPa Storage MIL-STD-810G: Method 500.5, Procedure I, 12192 m (40000 ft) at 18.8 kPa
Encapsulation	The power supply is designed to meet the requirements of IP67 and has been tested by immersion in 1 m water for 30 minutes.

Dimensions, Weight and Connectors	
W x D x H Weight	220 x 420 x 132 mm 16kg
Mounting	Any direction
DC input neg DC input pos AC output Alarm 1 Alarm 2 COM	MG 02R 20-2P-SQF 36 126 LT-003E-RT. Bayonet MG 02R 20-2P-SQF 36 123 LT-003E-RT. Bayonet 97B-3102E-16-10S or equivalent. Bayonet, RoHS Binder 09-0404-30-02 Binder 09-0412-30-04 2 pieces Binder 09-0416-30-05

