



SK710P

250W MILITARY STANDARD DC/DC CONVERTER MODULE
WITH GAIA SOLUTION:
9V TO 36V INPUT/12V OUTPUT,
EXTENDED TEMP. -40 TO 85 °C



MAIN FEATURES

- Wide Input Range: 9V to 36V DC
- 12V DC Output up to 20.8 Amp
- Over voltage protection
- Over current protection
- MIL-STD-461/704/1275
- High efficiency (typ. 91%)
- Extended Temperature -40°C to 85 °C
(with conduction cooling)

Specifications

Input Voltage	9V to 36V (2P Terminal block)
Output	250W, 12V(2P Terminal block)
Power Efficiency	91%
Ripple and Noise	100mVp-p
Reverse Voltage Protect	Yes
Operation Temperature	-40 to 85°C
Storage Temperature	-40 to 85°C
Dimension	186(L) x 76.4(W) x 31.6(H) mm

Certification

Certification

MIL-STD-461	CE102 basic curve, 10kHz - 30 MHz RE102, 10KHz to 18GHz RS103, 1.5 MHz - 200MHz, 200MHz~3.2GHz, 3.0GHz~5GHz
MIL-STD-1275	5.1.2 Start Operation 5.1.3.1.2 Emitted voltage spikes +/-250V to 100V at 1msec. 5.1.3.2.2 Emitted voltage spikes +100V at 50ms to +33V at 500ms to 1000ms 5.1.3.1.1 Voltage Spike +/-250V/100KHz to 500KHz 5.1.3.2.1 Voltage Surges 100V/ 50ms 5.1.1.2 Voltage Ripple MIL-STD-461/CS461/CS101 Extended to 250KHz
MIL-STD-704	Load Measurements (LDC101) Steady State Limits for Voltage (LDC102) Voltage Distortion Spectrum (LDC103) Total Ripple (LDC104) Normal Voltage Transients (LDC105) Power Interrupt (LDC201) Abnormal Steady State Limits for Voltage (LDC301) Abnormal Voltage Transients (LDC302) Emergency Steady State Limits for Voltage (LDC401) Starting Voltage Transients (LDC501) Power Failure (LDC601) Phase Reversal (LDC602)

CE/FCC compliant EN 61000-4-2: Air discharge: 8 kV, Contact discharge: 6kV
 EN 61000-4-4: Signal and DC-Net: 1 kV
 EN 61000-4-5: Leads vs. ground potential 1kV, Signal und DC-Net: 0.5 kV
 EN 55022, class A
 EN 61000-4-3: 10V/m

MIL-STD-810 Method 500.5, Procedures I and II (Altitude, Operation):
 12,192M, (40,000 ft) for the initial cabin altitude (18.8Kpa or 2.73 Psia)
 Method 500.5, Procedures III and IV (Altitude, Non-Operation):
 15,240, (50,000 ft) for the initial cabin altitude (14.9Kpa or 2.16 Psia)
 Method 501.5, Procedure I (Storage/High Temperature)
 Method 501.5, Procedure II (Operation/High Temperature)
 Method 502.5, Procedure I (Storage/Low Temperature)
 Method 502.5, Procedure II (Operation/Low Temperature)
 Method 503.5, Procedure I (Temperature shock)
 Method 507.5, Procedure II (Temperature & Humidity)
 Method 509.7 Salt Spray (50±5)g/L
 Method 514.6, Vibration Category 24/Non-Operating (Category 20 & 24,Vibration)
 Method 514.6, Vibration Category 20/Operating (Category 20 & 24,Vibration)
 Method 516.5-1, frequencies: 10-2000 Hz, cross-over frequency 45 Hz
 shock: peak acceleration 20g,+/- 10 shocks per axis (3x)
 Method 516.6, Shock-Procedure V Non-Operating (Mechanical Shock)
 Method 516.6, Shock-Procedure I Operating (Mechanical Shock)

Input/Output Connector

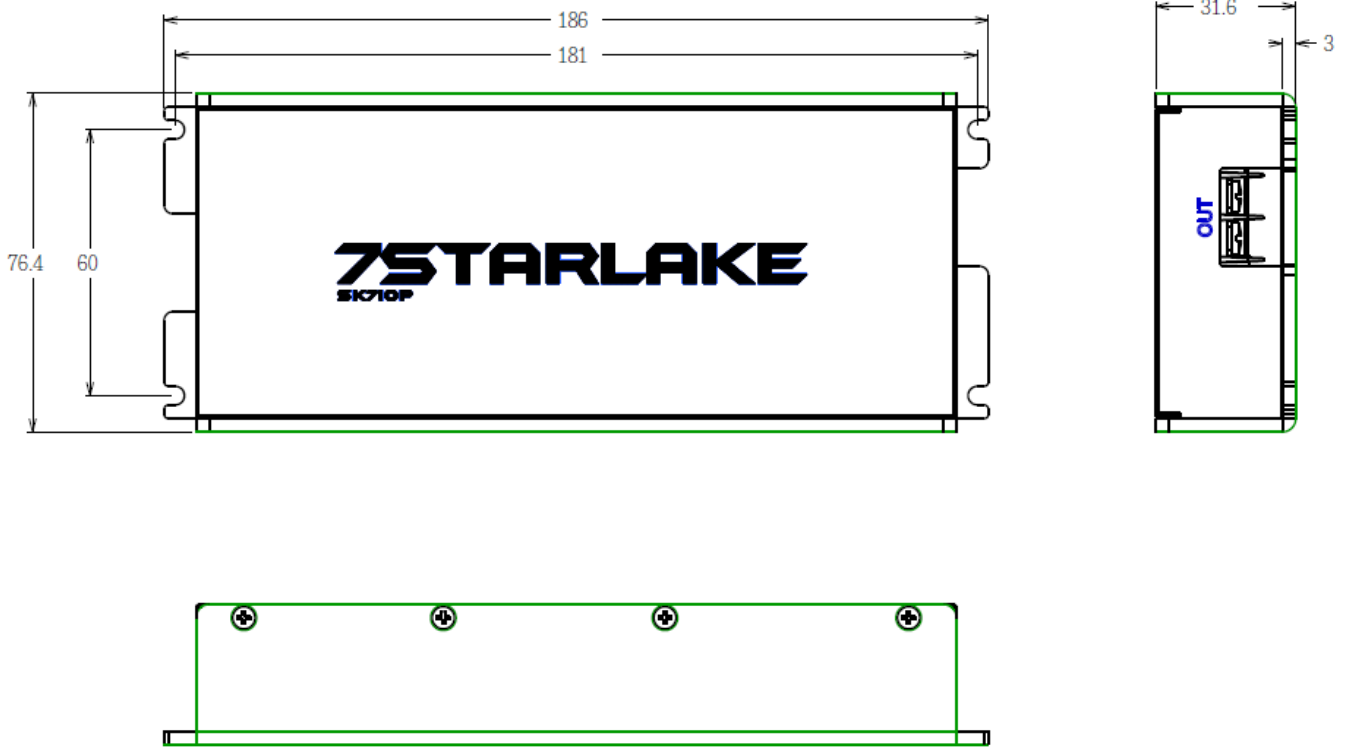
Voltage Input

Pin Number	Assignment
+	9V to 36V
GND	GND

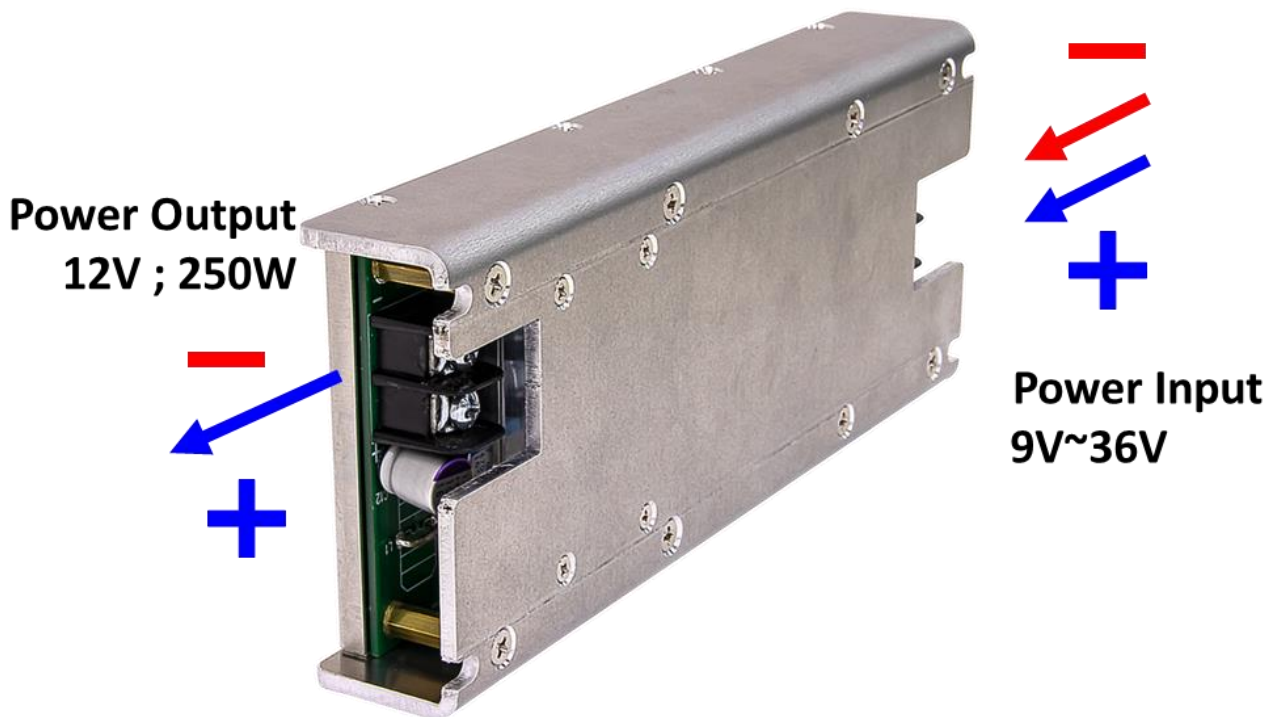
Voltage Output

Pin Number	Assignment
+	12V
GND	GND

Dimension



Pin Define



Ordering Information

SK710P 250W DC/DC Converter Module with Input 9V to 36V , Output 12V, operation temperature -40°C ~ 85°C