

U10 Series

10W, Dual/Single DC-DC Converter



Characteristics:

- CE/EMC Certificate
- Industrial / Military / Aerospace Products
- Rated Power: 10W (You may choose 12W)
- Wide Input: 5V, 12V, 24V, 48V, 110V
- Single/Dual Regulated Output
- Isolated Voltage: $\geq 1000\text{VDC}$, 3000VDC
- Short Circuit / Over Current Protection, Auto Recovery
- High Stability&Performance, MTBF ≥ 1 million Hours
- metal shielding, International Standard Pins, different Packages
- Dimensions: $50.8 \times 25.4 \times 11(\text{mm})$

Product List

Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%) (Typ.)	Part Number
xx means Input Voltage. 5VDC(4.5-9V) 12 VDC (9-18V) 18VDC(9-36V) 24VDC(18-36V) 48VDC(36-72V)	3.3	2000	80	U10- xxS3.3
	5	2000	80	U10- xxS05
	9	1100	81	U10- xxS09
	12	833	81	U10- xxS12
	15	666	83	U10- xxS15
	24	416	84	U10- xxS24
	48	200	85	U10- xxS48
	± 5	± 1000	82	U10- xxD05
	± 12	± 416	80	U10- xxD12
± 15	± 333	85	U10- xxD15	
110VDC (70V-140V)	5	2000	84	★U10-110S05
	12	800	85	★U10-110S12
	24	416	86	★U10-110S24
	48	200	86	★U10-110S48

Note: Output voltage could also be 18V, 28V, etc.

The highest power could be 12W.

3000VDC converters include S10G Series.

Specifications			
Note: all specifications measured at Ta=25°C, nominal input voltage and nominal load.			
Input			
Input Voltage	nominal 12V (9~18VDC)		nominal 24V (18~36VDC)
	nominal 18V (9~36VDC)(ultra wide input)		nominal 36V (18~72VDC) (ultra wide input)
	nominal 48V (36~72VDC)		nominal 110V (72~144VDC)
Startup Time	≤Rated Load, Nominal Input Voltage		≤10mS
Remote Control			No
Output			
Output Power	Ta ≤55°C	S10 Series	10W
Voltage Accuracy	rated load, nominal input voltage: 25°C	Vo1	≤±1.0%(nominal)
		Vo2	≤±3.0%(nominal)
Line Voltage Regulation	nominal input, rated load	Vo1	±0.2%(nominal)
		Vo2	±1.5%(nominal)
Load Regulation	nominal input, 10%~100% nominal load	Vo1	≤±0.5%(nominal)
		Vo2	≤±3.0%(nominal)
Over Current Protection	Input voltage Range, T _C < T _C max		≥120% Rated Load
OC Protection Mode			Short, AutoRecovery
Ripple & Noise	Rated Load		< 1%Vo
Dynamic Response	25% Rated Load	ΔVo1/Δt	200us
General			
Switching Frequency (Typ.)	Typ.	300KHz	
Insulation Resistance	Test at 500VDC	500MΩ	
Insulation Voltage	Input/Output	≥1000VDC, 3000VDC(S10G Series)	
Operating Temp.	≤Rated Load (Industrial Grade, with no suffix)	-25°C ~ +65°C	
	≤Rated Load (Military Grade, with “J” suffix)	-40°C ~ +71°C	
	≤Rated Load (Aerospace Grade, with “H” suffix)	-55°C ~ +85°C	
Storage Temp.	Humidity≤90%	-40°C ~ +105°C (Industrial Grade) -55°C ~ +125°C (Military&Aerospace Grade)	
Temperature Index		<0.02%/°C	
Ambient Temperature	Industrial Grade	+100°C	
	Military&Aerospace Grade	+125°C	
Anti Vibration		10~55Hz 5g	
MTBF	Ta=25°C	2×10 ⁶ h	
Cooling Method		Natural Cooling	