

Step-Down 48V to 12V 10A DC-DC Converters 120W

Features:

1. 100% full power & stable current output
2. 100% Imported components
3. Wide input voltage from 30-63Vdc
4. 100% waterproof & anti-shock protection, Ultra compact size, light weight
5. Industry grade step-down converter, efficiency up to 94%
6. Waterproof level: IP68
7. According CE(EN61000) / RoHS design
8. Die-cast aluminum shell, epoxy potting, Cooling by free air convection,
9. Protections: Over-current, Over-voltage, Over-temperature, and Short-circuit, Auto-recovery when device is back to normal operating
10. Non-Isolated Module
11. 1 year warranty



WG-48S12 series is a compact size high reliability power converter offered by ATO, It features wide input voltage, low power consumption, high efficiency, high reliability. It can work safely and reliability in -40°C ~ 80°C. It widely used in industrial, automotive, instruments, telecommunication and civil applications.

Input Specifications

Item	Operating Conditions	Min.	Typ.	Max.	Unit
Input voltage range	--	30	48	63	VDC
Input current	--	4.3	2.66	2	A
No-load loss	--	28	30	40	mA
Input filter	--	Without capacitances			
Hot plug	--	Unavailable			
Recommended input fuse	--	External connect 10A fuse			

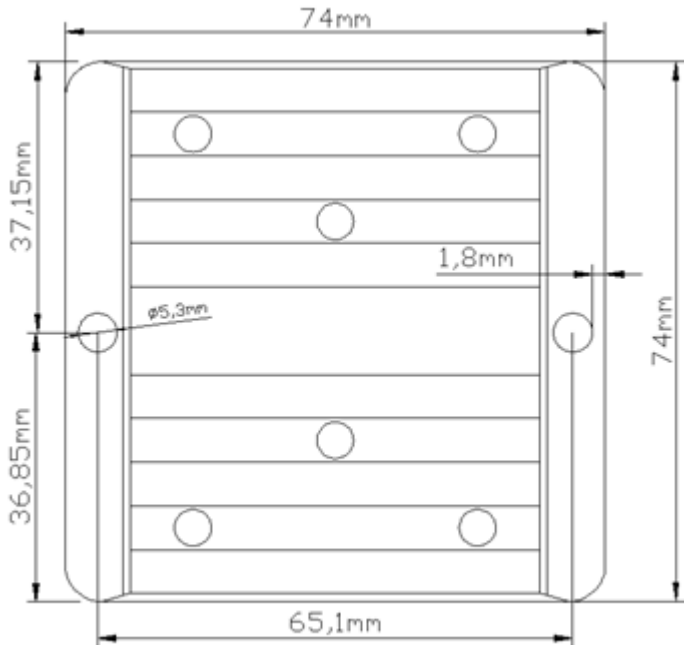
Output Specifications

Item	Operating Conditions	Min.	Typ.	Max.	Unit
Output voltage accuracy	Full load test, input volt range	--	±1	±2	%
Line regulation	Full load	--	±0.5	±1	%
Load regulation	10%~100% load	--	±0.5	±1	%
Ripple & Noise*	20 MHz bandwidth	--	85	100	mVp-p
Temperature coefficient	-40°C ~ +80°C	--	--	±0.03	%/°C
Over temperature protection	Chip (built-in protection)	--	130	--	°C
Short-circuit protection	--	Self-recovery, when device is back to normal operating			
Over current protection	--	≥130% load, self-recovery			
Transient response deviation	Input 48V, 25% load step change	--	160	180	mV
Transient recovery time	Input 48V, 25% load step change	--	0.5	1	mS
Thermal impedance	--	--	5	--	°C/W

General Specifications

Item	Operating Conditions	Min.	Typ.	Max.	Unit
Working temperature	--	-40	--	80	°C
Storage temperature	--	-55	--	125	°C
Storage humidity	--	--	--	95	%RH
Switching frequency	100% load, input voltage range	195	200	205	KHz
Lifetime		--	--	100,000	Hours

Physical Specifications

Casing material	Die-cast aluminum shell
Dimensions	 Thickness: 32mm
Input cable (positive "+")	Red ; 16AWG; 16.5cm length
Input cable (negative "-")	Black ; 16AWG; 16.5cm length
Output cable (positive "+")	Yellow ; 16AWG; 16.5cm length
Output cable (negative "-")	Black ; 16AWG; 16.5cm length
Weight	262g
Cooling method	Free convection
Packing	White box