

# YK-AD24S1202 AC-DC Converter User Manual

# **GZ YUCOO Network Equipment Co., Limited**

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### Part 1: Product Introduce

YK-AD24S12\*\*series is a compact size high reliability power converter offered by YUCOO, It features wide input voltage, low power consumption, high efficiency, high reliability. It can work safely and reliability in -25°C ~ 60°C. It widely used in industrial, automotive, instruments, telecommunication and civil applications.

### Part 2: DC-DC Converter Features

- 1. 100% full power & stable current output
- 2. 100% Imported components
- 3. Wide input voltage from 17-26Vac
- 4. 100% waterproof & anti-shock protection, Ultra compact size, light weight
- 5. Industry grade step-down converter, efficiency up to 95%
- 6. Waterproof level: IP67
- 7. According CE / RoHS design
- 8. Die-cast aluminum shell, epoxy potting, Cooling by free air convection
- 9. Non-Isolated Module
- 10.1 year warranty

# Part 3: DC-DC Converter Application

- 1. Electric motors, Electric fans, Trucks, Golf Carts, Forklifts
- 2. Navigation, surveillance, Air conditioning
- 3. LED car display, DVD, LED lights, Audio
- 4. Wind Power System, Solar Power System, Photo voltaic energy
- 5. Electrical appliances, industrial equipment, telecommunications and so on.

# Part 4: Working schematic



### Part 5: Customize range

Model/ Series	DC-DC Conversion	Output Current (Be option)				
Boost DC-DC Converter						
YK-DD12S13.8**	12v to 13.8v	1/2/3/5/8/10/18A				
YK-DD12S15**	12v to 15v	1/2/3/5/8/10/15A				
YK-DD12S19**	12v to 19v	5/8/10/15/20A				
YK-DD12S24**	12v to 24v	1/2/3/5/8/10/15/20/25/30/40/50A				
YK-DD12S28**	12v to 28v	3/5/8/10/15/20/25/30/40A				
YK-DD12S32/36**	12v to 32v/36v	1/2/3/5/6/10/12/15/20/30/40A				
YK-DD12S48**	12v to 48v	1/2/3/4/5/8/10/15/20A				
YK-DD24S48**	24v to 48v	3/5/10/20/32/42A				
Buck DC-DC Converter						
YK-DD1224S3.3-9**	12v/24v to 3.3-9v	1/2/3/5/10/15/20/30/50/60A				

YK-DD24S12**	24v to 12v	1/2/3/5/8/10/15/20/30/40/50/60/85A				
YK-DD3648S5**	36v/48v to 5v	5/10/15/20A				
YK-DD3648S12**	36v/48v to 12vdc	5/10/15/20/25/30/50/60A				
YK-DD3648S24**	36v/48v to 24v	8/10/15/18/21/30/40/50A				
YK-DD48S36**	48v to36v	5/10A				
YK-DD60S5**	60v to5v	5/10/15/20A				
YK-DD60S12**	60v to12v	5/10/15A				
YK-DD60S24**	60v to24v	5/10/15A				
YK-DD60S36	60v to 36v	5/8A				
Auto Buck and Boost DC-DC Converter						
YK-DD12S12	12v to 12v	1/2/3/4/6/8/10/12/15/20/25A				
YK-DD12S13.8	12v to 13.8v	3/5/10/15/20/25A				
YK-DD24S24	24v to 24v	1/2/3/5/8/10/15A				
Isolated DC-DC Converter						
YK-DD48S12	35-100v to 12v	8A/10A				
YK-DD48S5	36-75v to 5v	15A/20A				
YK-DD48S24	36-75v to 24v	5A				
AC-DC Converter						
YK-AD24S12	17-26v to 12v	1A/2A/3A/4A/5A				
YK-AD24S5	17-26v to 5v	1A/2A/3A/4A/5A				

# Note:

- A. Output current be option only but not constant adjustable
- B. Other Specification can customize base on user request. Please contact with YUCOO Sale team
- C. Non-Isolated and Isolated design
- D. Constant voltage design
- E. Waterproof
- F. High efficiency

# Part 6: Model definition

Model: YK-AD[VV]S[vvaa]

★ YK-----YUCOO (YOUKE) BRAND

★ AD----AC to DC

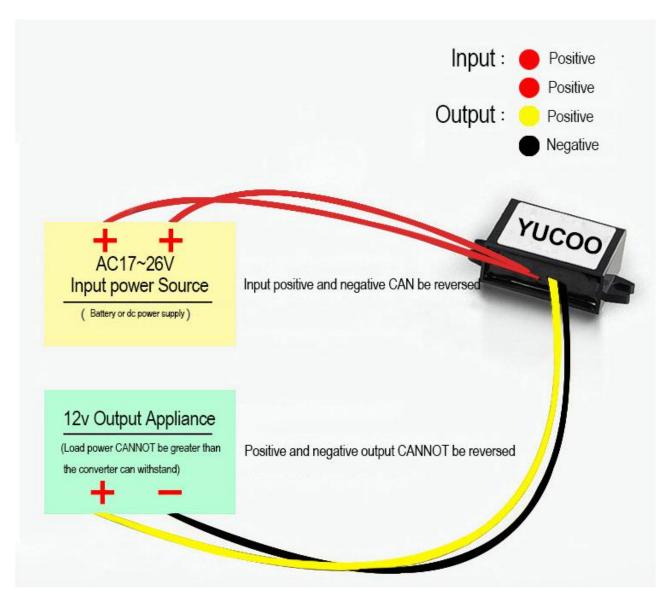
★ VV-----Rated AC input voltage; S-Conversion;

★ vv- ----Rated DC Output Voltage, aa -----Rated DC Output Current;

Part 7: Specification

Model	YK-AD24S1202					
Input						
Rate voltage	24Vac					
Input voltage	17~26Vac					
Output						
Rate voltage	12vdc±0.25vdc					
Rate current	2A					
Rate power	24W					
Efficiency(type)	95% @ 24V input					
Voltage regulation(%)	±1					
Load regulation(%)	2					
No load loss(mA)	60					
Ripple & Noise(mV)	160					
Environment						
Working temperature(℃)	-25 ~ +60					
Working Humidity(RH)	10% ~ 90%					
Storage temperature( $^{\circ}$ C)	-35 ~ +85					
Function						
Protection	Without					
Waterproof	IP67					
Dimension						
Weight(g)	100					
Size(mm)	58*40.5*22					
Other						
Cooling	Free air convection					
Packaging	Electrostatic Bag					

**Part 8: Connection** 



- 1. Input positive and negative CAN be reversed
- 2. The voltage range of input power source(such battery bank/Switching power supply) cannot exceed the voltage range that the converter can withstand
- 3. The power of input power source(such battery bank/switching power supply) must be more than the power required by the appliance
- 4. Positive and negative output CANNOT be reversed
- 5. How much voltage is needed for the appliance then you should be configure the same voltage DC-DC Converter
- 6. Load power CANNOT be greater than the converter can withstand

## Notice:

- 1. 12V battery bank in full charger, max voltage can reach to 16V
- 2. 24V battery bank in full charger, max voltage can reach to 31V
- 3. 48V battery bank in full charger, max voltage can reach to 60V
- 4. Inductive load Instantaneous start-up current is generally 3-5 times the rated current.
- 5. The positive input suggest be protected by a fuse

# Part 9. Guarantee

After the day of buying the equipment, non man-made failure, there is 1 year warranty

If there is failure please contact with the sellers

The following no included in the warranty:

- \* Man-made failure or out of guarantee period or disassemble the cabinet or cover of converter without permission
- \* The failure or broken cause by Force Majeure or external reason
- \* Misapplication, accident, neglect, amendment or repair without permission
- \* Use goes beyond the limit
- \* Break the operation instruction

Guarantee Card						
Product name			Product NO.			
Product model			Purchase time			
Remark :						
Purchase company						
Contact person			Telephone			
Distributor						
Maintain Record						
Date	Maintain type	Summery	Maintenance man signature	User signature		