

# 24V to 13.8V15V19V DC Step-Down Converter Specification

### **Revision Record**

Version	Description	Effective Date	Edited by
00	First release	20150810	Edward
01	Remove iron shell series products	20170411	Edward

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### 1. Product Overview

### 1.1 Description

Model No.	Description	Interface material	Remark
ADS24T13R8-01AL	24Vdc to 13.8Vdc 1A	Small Aluminum alloy shell	43x25x22mm
ADS24T13R8-02AL	24Vdc to 13.8Vdc 2A	Small Aluminum alloy shell	43x25x22mm
ADS24T13R8-03AL	24Vdc to 13.8Vdc 3A	Small Aluminum alloy shell	43x25x22mm
ADS24T13R8-04AL	24Vdc to 13.8Vdc 4A	Small Aluminum alloy shell	43x25x22mm
ADS24T13R8-10AL	24Vdc to 13.8Vdc 10A	Aluminum alloy shell	74x74x32mm
ADS24T13R8-15AL	24Vdc to 13.8Vdc 15A	Aluminum alloy shell	74x74x32mm
ADS24T13R8-20AL	24Vdc to 13.8Vdc 20A	Aluminum alloy shell	74x74x32mm
ADS24T13R8-25AL	24Vdc to 13.8Vdc 25A	Aluminum alloy shell	74x74x32mm
ADS24T13R8-30AL	24Vdc to 13.8Vdc 30A	Aluminum alloy shell	74x74x32mm
ADS24T15-01AL	24Vdc to 15Vdc 1A	Small Aluminum alloy shell	43x25x22mm
ADS24T15-02AL	24Vdc to 15Vdc 2A	Small Aluminum alloy shell	43x25x22mm
ADS24T15-03AL	24Vdc to 15Vdc 3A	Small Aluminum alloy shell	43x25x22mm
ADS24T15-04AL	24Vdc to 15Vdc 4A	Small Aluminum alloy shell	43x25x22mm
ADS24T15-10AL	24Vdc to 15Vdc 10A	Aluminum alloy shell	74x74x32mm
ADS24T15-15AL	24Vdc to 15Vdc 15A	Aluminum alloy shell	74x74x32mm
ADS24T15-20AL	24Vdc to 15Vdc 20A	Aluminum alloy shell	74x74x32mm
ADS24T15-25AL	24Vdc to 15Vdc 25A	Aluminum alloy shell	74x74x32mm
ADS24T19-01AL	24Vdc to 19Vdc 1A	Small Aluminum alloy shell	43x25x22mm
ADS24T19-02AL	24Vdc to 19Vdc 2A	Small Aluminum alloy shell	43x25x22mm
ADS24T19-03AL	24Vdc to 19Vdc 3A	Small Aluminum alloy shell	43x25x22mm
ADS24T19-05AL	24Vdc to 19Vdc 5A	Aluminum alloy shell	74x74x32mm
ADS24T19-06AL	24Vdc to 19Vdc 6A	Aluminum alloy shell	74x74x32mm
ADS24T19-10AL	24Vdc to 19Vdc 10A	Aluminum alloy shell	74x74x32mm
ADS24T19-15AL	24Vdc to 19Vdc 15A	Aluminum alloy shell	74x74x32mm
ADS24T19-20AL	24Vdc to 19Vdc 20A	Aluminum alloy shell	74x74x32mm

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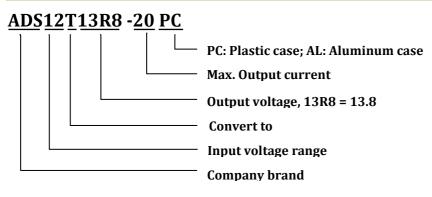
The ADS series dc converter (dc power supply) is consist of Bridge drive switch, PWM pulse circuit, power transformer and rectifier filter circuit, topological structure design guarantee a safety application and high transfer efficiency.

The DC converters are widely used in Military, Avionics, Boat, Yacht, Bus, Vehicles, Golf Cart, Forklift, esweeper, all kind of automotive, posts and telecommunications, communications, electricity, solar system, coal, aerospace, defense, surveillance systems, railway signals, medical equipment, instruments and meters, LED displays, cable TV, AGV, Robot, IoT and other fields. If you can not find a suitable model, we can customize it for you

### 1.2 Features

- 1. Conversion efficiency > 93%
- 2. Pouring Sealed inside, Die-cast aluminum shell
- 3. Non-isolated between input and output
- 4. Anti-Quakeand dust
- 5. Protection level: IP67
- 6. Famous key components brand
- 7. PWM technology and IRF high power transistor
- 8. Sufficient power with synchronous rectification technology.
- 9. Over-voltage, over current, short-circuits, over-temperature protection and auto recovery function.
- 10. Easy installation, Convenient for using and transportation
- 11. Warranty: 2 Year

### 1.3 Product Name Definition





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# 2. Technical Specifications

Model	ADS24T13R8-01AL				
	Rated voltage	V	24		
	Voltage range	V	17-40		
Input	Conversion efficiency	%	93		
	Positive cable	cm	Red @ 22 or DC connector		
	Negative cable	cm	Black @22 or DC connector		
	Voltage	V	13.8		
	Voltage range	V	13.75~13.85		
	Working current	Α	1		
	Peak current	Α	6		
Output	Rated power	W	13.8		
	Power consumption	mA	5.0		
	Ripple & noise	mV	40		
	Positive cable	cm	Yellow @ 22 or DC connector		
	Negative cable	cm	Black @ 22 or DC connector		
	Input instant over voltage		Yes		
	Output over current		Yes		
	Output short-circuit		Yes		
	Chip over temperature		Yes		
	Input reverse connect		No, can customize		
Protection function	Output reverse connect		No, can customize		
	Automatic recovery		Yes		
	Water-proof		Yes		
	Quake-proof		Yes		
	Dust-proof		Yes		
	Protection level		IP67		
	Working Temperature	°c	-40 ~+85		
Environment	Working humidity	RH	< 90		
	Storage temperature	°c	-50~+ 90		
	Shell material		Aluminum alloy case		
Conoral	Sealed material	_	Heat organic silicone filled and sealed		
General	Dimension	mm	43*25*22		
	Weight	g	45		

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Model	ADS24T13R8-02AL				
	Rated voltage	V	24		
	Voltage range	V	17-40		
Input	Conversion efficiency	%	93		
	Positive cable	cm	Red @ 22 or DC connector		
	Negative cable	cm	Black @22 or DC connector		
	Voltage	٧	13.8		
	Voltage range	V	13.75~13.85		
	Working current	Α	2		
	Peak current	Α	6		
Output	Rated power	W	27		
	Power consumption	mA	5.0		
	Ripple & noise	mV	40		
	Positive cable	cm	Yellow @ 22 or DC connector		
	Negative cable	cm	Black @ 22 or DC connector		
	Input instant over voltage		Yes		
	Output over current		Yes		
	Output short-circuit		Yes		
	Chip over temperature		Yes		
	Input reverse connect		No, can customize		
Protection function	Output reverse connect		No, can customize		
	Automatic recovery		Yes		
	Water-proof		Yes		
	Quake-proof		Yes		
	Dust-proof		Yes		
	Protection level		IP67		
	Working Temperature	°c	-40 ~+85		
Environment	Working humidity	RH	< 90		
	Storage temperature	°c	-50~+ 90		
	Shell material		Aluminum alloy case		
Conoral	Sealed material		Heat organic silicone filled and sealed		
General	Dimension	mm	43*25*22		
	Weight	g	45		

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Model	ADS24T13R8-03AL				
	Rated voltage	V	24		
	Voltage range	V	17-40		
Input	Conversion efficiency	%	93		
	Positive cable	cm	Red @ 22 or DC connector		
	Negative cable	cm	Black @22 or DC connector		
	Voltage	V	13.8		
	Voltage range	V	13.75~13.85		
	Working current	Α	3		
	Peak current	Α	6		
Output	Rated power	W	40		
	Power consumption	mA	5.0		
	Ripple & noise	mV	40		
	Positive cable	cm	Yellow @ 22 or DC connector		
	Negative cable	cm	Black @ 22 or DC connector		
	Input instant over voltage		Yes		
	Output over current		Yes		
	Output short-circuit		Yes		
	Chip over temperature		Yes		
	Input reverse connect		No, can customize		
Protection function	Output reverse connect		No, can customize		
	Automatic recovery		Yes		
	Water-proof		Yes		
	Quake-proof		Yes		
	Dust-proof		Yes		
	Protection level		IP67		
	Working Temperature	°C	-40 ~+85		
Environment	Working humidity	RH	< 90		
	Storage temperature	°C	-50~+ 90		
	Shell material		Aluminum alloy case		
General	Sealed material		Heat organic silicone filled and sealed		
General	Dimension	mm	43*25*22		
	Weight	g	45		

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Model		ADS	24T13R8-04AL
	Rated voltage	V	24
	Voltage range	V	17-40
Input	Conversion efficiency	%	93
	Positive cable	cm	Red @ 22 or DC connector
	Negative cable	cm	Black @22 or DC connector
	Voltage	V	13.8
	Voltage range	V	13.75~13.85
	Working current	Α	4
	Peak current	Α	6
Output	Rated power	W	55
	Power consumption	mA	5.0
	Ripple & noise	mV	40
	Positive cable	cm	Yellow @ 22 or DC connector
	Negative cable	cm	Black @ 22 or DC connector
	Input instant over voltage		Yes
	Output over current		Yes
	Output short-circuit		Yes
	Chip over temperature		Yes
	Input reverse connect		No, can customize
Protection function	Output reverse connect		No, can customize
	Automatic recovery		Yes
	Water-proof		Yes
	Quake-proof		Yes
	Dust-proof		Yes
	Protection level		IP67
	Working Temperature	°C	-40 ~+85
Environment	Working humidity	RH	< 90
	Storage temperature	°C	-50~+ 90
	Shell material		Aluminum alloy case
General	Sealed material		Heat organic silicone filled and sealed
General	Dimension	mm	43*25*22
	Weight	g	45

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Model	ADS24T13R8-10AL				
	Rated voltage	V	24		
	Voltage range	٧	17-40		
Input	Conversion efficiency	%	93		
	Positive polarity		Red @ 18		
	Negative polarity		Black @18		
	Voltage	V	13.8		
	Voltage range	V	13.75~13.85		
	Working current	Α	10		
	Peak current	Α	16		
Output	Rated power	W	138		
	Power consumption	mA	25		
	Ripple & noise	mV	40		
	Positive polarity		Yellow @ 18		
	Negative polarity		Black @18		
	Input instant over voltage		Yes		
	Output over current		Yes		
	Output short-circuit		Yes		
	Chip over temperature		Yes		
	Input reverse connect		No, can customize		
Protection function	Output reverse connect		No, can customize		
	Automatic recovery		Yes		
	Water-proof		Yes		
	Quake-proof		Yes		
	Dust-proof		Yes		
	Protection level		IP67		
	Working Temperature	°c	-40 ~+85		
Environment	Working humidity	RH	< 90		
	Storage temperature	°C	-50~+ 90		
	Shell material		Aluminum alloy case		
Company	Sealed material		Heat organic silicone filled and sealed		
General	Dimension	mm	74*74*32		
	Weight	g	300		

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Model	ADS24T13R8-15AL				
	Rated voltage	V	24		
	Voltage range	٧	17-40		
Input	Conversion efficiency	%	93		
·	Positive polarity		Red @ 18		
	Negative polarity		Black @18		
	Voltage	V	13.8		
	Voltage range	V	13.75~13.85		
	Working current	А	15		
	Peak current	Α	20		
Output	Rated power	W	207		
	Power consumption	mA	25		
	Ripple & noise	mV	40		
	Positive polarity		Yellow @ 18		
	Negative polarity		Black @18		
	Input instant over voltage		Yes		
	Output over current		Yes		
	Output short-circuit		Yes		
	Chip over temperature		Yes		
	Input reverse connect		No, can customize		
Protection function	Output reverse connect		No, can customize		
	Automatic recovery		Yes		
	Water-proof		Yes		
	Quake-proof		Yes		
	Dust-proof		Yes		
	Protection level		IP67		
	Working Temperature	°c	-40 <b>~</b> +85		
Environment	Working humidity	RH	< 90		
	Storage temperature	°c	-50~+ 90		
	Shell material		Aluminum alloy case		
General	Sealed material		Heat organic silicone filled and sealed		
General	Dimension	mm	74*74*32		
	Weight	g	300		

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Model		ADS	24T13R8-20AL
	Rated voltage	V	24
	Voltage range	V	17-40
Input	Conversion efficiency	%	93
	Positive polarity		Red @ 18
	Negative polarity		Black @18
	Voltage	V	13.8
	Voltage range	V	13.75~13.85
	Working current	Α	20
	Peak current	Α	25
Output	Rated power	W	276
	Power consumption	mA	25
	Ripple & noise	mV	40
	Positive polarity		Yellow @ 18
	Negative polarity		Black @18
	Input instant over voltage		Yes
	Output over current		Yes
	Output short-circuit		Yes
	Chip over temperature		Yes
	Input reverse connect		No, can customize
Protection function	Output reverse connect		No, can customize
	Automatic recovery		Yes
	Water-proof		Yes
	Quake-proof		Yes
	Dust-proof		Yes
	Protection level		IP67
	Working Temperature	°C	-40 ~+85
Environment	Working humidity	RH	< 90
	Storage temperature	°c	-50~+ 90
	Shell material		Aluminum alloy case
General	Sealed material		Heat organic silicone filled and sealed
General	Dimension	mm	74*74*32
	Weight	g	300

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Model	ADS24T13R8-25AL				
	Rated voltage	V	24		
	Voltage range	٧	17-40		
Input	Conversion efficiency	%	93		
·	Positive polarity		Red @ 18		
	Negative polarity		Black @18		
	Voltage	V	13.8		
	Voltage range	V	13.75~13.85		
	Working current	А	25		
	Peak current	А	28		
Output	Rated power	W	345		
	Power consumption	mA	25		
	Ripple & noise	mV	40		
	Positive polarity		Yellow @ 18		
	Negative polarity		Black @18		
	Input instant over voltage		Yes		
	Output over current		Yes		
	Output short-circuit		Yes		
	Chip over temperature		Yes		
	Input reverse connect		No, can customize		
Protection function	Output reverse connect		No, can customize		
	Automatic recovery		Yes		
	Water-proof		Yes		
	Quake-proof		Yes		
	Dust-proof		Yes		
	Protection level		IP67		
	Working Temperature	°c	-40 ~+85		
Environment	Working humidity	RH	< 90		
	Storage temperature	°c	-50~+ 90		
	Shell material		Aluminum alloy case		
General	Sealed material		Heat organic silicone filled and sealed		
General	Dimension	mm	74*74*32		
	Weight	g	300		

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Model	ADS24T13R8-30AL				
	Rated voltage	V	24		
	Voltage range	٧	17-40		
Input	Conversion efficiency	%	93		
·	Positive polarity		Red @ 18		
	Negative polarity		Black @18		
	Voltage	V	13.8		
	Voltage range	V	13.75~13.85		
	Working current	А	30		
	Peak current	А	32		
Output	Rated power	W	414		
	Power consumption	mA	25		
	Ripple & noise	mV	40		
	Positive polarity		Yellow @ 18		
	Negative polarity		Black @18		
	Input instant over voltage		Yes		
	Output over current		Yes		
	Output short-circuit		Yes		
	Chip over temperature		Yes		
	Input reverse connect		No, can customize		
Protection function	Output reverse connect		No, can customize		
	Automatic recovery		Yes		
	Water-proof		Yes		
	Quake-proof		Yes		
	Dust-proof		Yes		
	Protection level		IP67		
	Working Temperature	°c	-40 ~+85		
Environment	Working humidity	RH	< 90		
	Storage temperature	°c	-50~+ 90		
	Shell material		Aluminum alloy case		
General	Sealed material		Heat organic silicone filled and sealed		
General	Dimension	mm	74*74*32		
	Weight	g	300		

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Model		AD	S24T15-01AL
	Rated voltage	V	24
	Voltage range	٧	18-40
Input	Conversion efficiency	%	93
	Positive polarity		Red @ 22 or DC connector
	Negative polarity		Black @22 or DC connector
	Voltage	V	15
	Voltage range	V	14.95~15.05
	Working current	А	1
	Peak current	А	6
Output	Rated power	W	15
	Power consumption	mA	5
	Ripple & noise	mV	40
	Positive polarity		Yellow @ 22 or DC connector
	Negative polarity		Black @ 22 or DC connector
	Input instant over voltage		Yes
	Output over current		Yes
	Output short-circuit		Yes
	Chip over temperature		Yes
	Input reverse connect		No, can customize
Protection function	Output reverse connect		No, can customize
	Automatic recovery		Yes
	Water-proof		Yes
	Quake-proof		Yes
	Dust-proof		Yes
	Protection level		IP67
	Working Temperature	°c	-40 ~+85
Environment	Working humidity	RH	< 90
	Storage temperature	°c	-50~+ 90
	Shell material		Aluminum alloy case
General	Sealed material		Heat organic silicone filled and sealed
General	Dimension	mm	43*25*22
	Weight	g	45

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Model		AD	S24T15-02AL
	Rated voltage	V	24
	Voltage range	٧	18-40
Input	Conversion efficiency	%	93
·	Positive polarity		Red @ 22 or DC connector
	Negative polarity		Black @22 or DC connector
	Voltage	V	15
	Voltage range	V	14.95~15.05
	Working current	А	2
	Peak current	Α	6
Output	Rated power	W	30
	Power consumption	mA	5
	Ripple & noise	mV	40
	Positive polarity		Yellow @ 22 or DC connector
	Negative polarity		Black @ 22 or DC connector
	Input instant over voltage		Yes
	Output over current		Yes
	Output short-circuit		Yes
	Chip over temperature		Yes
	Input reverse connect		No, can customize
Protection function	Output reverse connect		No, can customize
	Automatic recovery		Yes
	Water-proof		Yes
	Quake-proof		Yes
	Dust-proof		Yes
	Protection level		IP67
	Working Temperature	°c	-40 ~+85
Environment	Working humidity	RH	< 90
	Storage temperature	°c	-50~+ 90
	Shell material		Aluminum alloy case
General	Sealed material		Heat organic silicone filled and sealed
General	Dimension	mm	43*25*22
	Weight	g	45

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Model		AD	S24T15-03AL
	Rated voltage	V	24
	Voltage range	V	18-40
Input	Conversion efficiency	%	93
·	Positive polarity		Red @ 22 or DC connector
	Negative polarity		Black @22 or DC connector
	Voltage	V	15
	Voltage range	V	14.95~15.05
	Working current	А	3
	Peak current	А	6
Output	Rated power	W	45
	Power consumption	mA	5
	Ripple & noise	mV	40
	Positive polarity		Yellow @ 22 or DC connector
	Negative polarity		Black @ 22 or DC connector
	Input instant over voltage		Yes
	Output over current		Yes
	Output short-circuit		Yes
	Chip over temperature		Yes
	Input reverse connect		No, can customize
Protection function	Output reverse connect		No, can customize
	Automatic recovery		Yes
	Water-proof		Yes
	Quake-proof		Yes
	Dust-proof		Yes
	Protection level		IP67
	Working Temperature	°c	-40 ~+85
Environment	Working humidity	RH	< 90
	Storage temperature	°c	-50~+ 90
	Shell material		Aluminum alloy case
General	Sealed material		Heat organic silicone filled and sealed
General	Dimension	mm	43*25*22
	Weight	g	45

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Model		AD	S24T15-04AL
	Rated voltage	V	24
	Voltage range	V	18-40
Input	Conversion efficiency	%	93
·	Positive polarity		Red @ 22 or DC connector
	Negative polarity		Black @22 or DC connector
	Voltage	V	15
	Voltage range	V	14.95~15.05
	Working current	А	4
	Peak current	А	6
Output	Rated power	W	60
	Power consumption	mA	5
	Ripple & noise	mV	40
	Positive polarity		Yellow @ 22 or DC connector
	Negative polarity		Black @ 22 or DC connector
	Input instant over voltage		Yes
	Output over current		Yes
	Output short-circuit		Yes
	Chip over temperature		Yes
	Input reverse connect		No, can customize
Protection function	Output reverse connect		No, can customize
	Automatic recovery		Yes
	Water-proof		Yes
	Quake-proof		Yes
	Dust-proof		Yes
	Protection level		IP67
	Working Temperature	°c	-40 <b>~</b> +85
Environment	Working humidity	RH	< 90
	Storage temperature	°c	-50~+ 90
	Shell material		Aluminum alloy case
General	Sealed material		Heat organic silicone filled and sealed
General	Dimension	mm	43*25*22
	Weight	g	45

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Model		AD	S24T15-10AL
	Rated voltage	V	24
	Voltage range	٧	18-40
Input	Conversion efficiency	%	93
·	Positive polarity		Red @ 18
	Negative polarity		Black @18
	Voltage	V	15
	Voltage range	V	14.9~15.1
	Working current	А	10
	Peak current	А	15
Output	Rated power	W	150
	Power consumption	mA	25
	Ripple & noise	mV	40
	Positive polarity		Yellow @ 18
	Negative polarity		Black @18
	Input instant over voltage		Yes
	Output over current		Yes
	Output short-circuit		Yes
	Chip over temperature		Yes
	Input reverse connect		No, can customize
Protection function	Output reverse connect		No, can customize
	Automatic recovery		Yes
	Water-proof		Yes
	Quake-proof		Yes
	Dust-proof		Yes
	Protection level		IP67
	Working Temperature	°c	-40 ~+85
Environment	Working humidity	RH	< 90
	Storage temperature	°c	-50~+ 90
	Shell material		Aluminum alloy case
General	Sealed material		Heat organic silicone filled and sealed
General	Dimension	mm	74*74*32
	Weight	g	300

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Model		AD	S24T15-15AL
	Rated voltage	V	24
	Voltage range	٧	18-40
Input	Conversion efficiency	%	93
·	Positive polarity		Red @ 18
	Negative polarity		Black @18
	Voltage	V	15
	Voltage range	V	14.9~15.1
	Working current	А	15
	Peak current	Α	18
Output	Rated power	W	225
	Power consumption	mA	25
	Ripple & noise	mV	40
	Positive polarity		Yellow @ 18
	Negative polarity		Black @18
	Input instant over voltage		Yes
	Output over current		Yes
	Output short-circuit		Yes
	Chip over temperature		Yes
	Input reverse connect		No, can customize
Protection function	Output reverse connect		No, can customize
	Automatic recovery		Yes
	Water-proof		Yes
	Quake-proof		Yes
	Dust-proof		Yes
	Protection level		IP67
	Working Temperature	°c	-40 ~+85
Environment	Working humidity	RH	< 90
	Storage temperature	°c	-50~+ 90
	Shell material		Aluminum alloy case
General	Sealed material		Heat organic silicone filled and sealed
General	Dimension	mm	74*74*32
	Weight	g	300

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Model		AD	S24T15-20AL
	Rated voltage	V	24
	Voltage range	٧	18-40
Input	Conversion efficiency	%	93
·	Positive polarity		Red @ 18
	Negative polarity		Black @18
	Voltage	V	15
	Voltage range	V	14.9~15.1
	Working current	А	20
	Peak current	Α	22
Output	Rated power	W	300
	Power consumption	mA	25
	Ripple & noise	mV	40
	Positive polarity		Yellow @ 18
	Negative polarity		Black @18
	Input instant over voltage		Yes
	Output over current		Yes
	Output short-circuit		Yes
	Chip over temperature		Yes
	Input reverse connect		No, can customize
Protection function	Output reverse connect		No, can customize
	Automatic recovery		Yes
	Water-proof		Yes
	Quake-proof		Yes
	Dust-proof		Yes
	Protection level		IP67
	Working Temperature	°c	-40 ~+85
Environment	Working humidity	RH	< 90
	Storage temperature	°c	-50~+ 90
	Shell material		Aluminum alloy case
General	Sealed material		Heat organic silicone filled and sealed
General	Dimension	mm	74*74*32
	Weight	g	300

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Model		AD	S24T15-25AL
	Rated voltage	V	24
	Voltage range	٧	18-40
Input	Conversion efficiency	%	93
·	Positive polarity		Red @ 18
	Negative polarity		Black @18
	Voltage	V	15
	Voltage range	V	14.9~15.1
	Working current	А	25
	Peak current	Α	28
Output	Rated power	W	375
	Power consumption	mA	25
	Ripple & noise	mV	40
	Positive polarity		Yellow @ 18
	Negative polarity		Black @18
	Input instant over voltage		Yes
	Output over current		Yes
	Output short-circuit		Yes
	Chip over temperature		Yes
	Input reverse connect		No, can customize
Protection function	Output reverse connect		No, can customize
	Automatic recovery		Yes
	Water-proof		Yes
	Quake-proof		Yes
	Dust-proof		Yes
	Protection level		IP67
	Working Temperature	°c	-40 ~+85
Environment	Working humidity	RH	< 90
	Storage temperature	°c	-50~+ 90
	Shell material		Aluminum alloy case
General	Sealed material		Heat organic silicone filled and sealed
General	Dimension	mm	74*74*32
	Weight	g	300

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Model		AD	S24T19-01AL
	Rated voltage	V	24
	Voltage range	V	21-40
Input	Conversion efficiency	%	93
	Positive polarity		Red @ 22 or DC connector
	Negative polarity		Black @22 or DC connector
	Voltage	V	19
	Voltage range	V	18.95~19.05
	Working current	А	1
	Peak current	Α	6
Output	Rated power	W	19
	Power consumption	mA	5
	Ripple & noise	mV	40
	Positive polarity		Yellow @ 22 or DC connector
	Negative polarity		Black @ 22 or DC connector
	Input instant over voltage		Yes
	Output over current		Yes
	Output short-circuit		Yes
	Chip over temperature		Yes
	Input reverse connect		No, can customize
Protection function	Output reverse connect		No, can customize
	Automatic recovery		Yes
	Water-proof		Yes
	Quake-proof		Yes
	Dust-proof		Yes
	Protection level		IP67
	Working Temperature	°c	-40 ~+85
Environment	Working humidity	RH	< 90
	Storage temperature	°c	-50~+ 90
	Shell material		Aluminum alloy case
General	Sealed material		Heat organic silicone filled and sealed
General	Dimension	mm	43*25*22
	Weight	g	45

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Model		ΑC	DS24T19-02AL
	Rated voltage	V	24
	Voltage range	V	21-40
Input	Conversion efficiency	%	93
·	Positive polarity		Red @ 22 or DC connector
	Negative polarity		Black @22 or DC connector
	Voltage	٧	19
	Voltage range	٧	18.95~19.05
	Working current	Α	2
	Peak current	Α	6
Output	Rated power	W	38
	Power consumption	mA	5
	Ripple & noise	mV	40
	Positive polarity		Yellow @ 22 or DC connector
	Negative polarity		Black @ 22 or DC connector
	Input instant over voltage		Yes
	Output over current		Yes
	Output short-circuit		Yes
	Chip over temperature		Yes
	Input reverse connect		No, can customize
Protection function	Output reverse connect		No, can customize
	Automatic recovery		Yes
	Water-proof		Yes
	Quake-proof		Yes
	Dust-proof		Yes
	Protection level		IP67
	Working Temperature	°c	-40 ~+85
Environment	Working humidity	RH	< 90
	Storage temperature	°c	-50~+ 90
	Shell material		Aluminum alloy case
General	Sealed material		Heat organic silicone filled and sealed
General	Dimension	mm	43*25*22
	Weight	g	45

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Model		AD	S24T19-03AL
	Rated voltage	V	24
	Voltage range	V	21-40
Input	Conversion efficiency	%	93
	Positive polarity		Red @ 22 or DC connector
	Negative polarity		Black @22 or DC connector
	Voltage	V	19
	Voltage range	V	18.95~19.05
	Working current	Α	3
	Peak current	А	6
Output	Rated power	W	57
	Power consumption	mA	5
	Ripple & noise	mV	40
	Positive polarity		Yellow @ 22 or DC connector
	Negative polarity		Black @ 22 or DC connector
	Input instant over voltage		Yes
	Output over current		Yes
	Output short-circuit		Yes
	Chip over temperature		Yes
	Input reverse connect		No, can customize
Protection function	Output reverse connect		No, can customize
	Automatic recovery		Yes
	Water-proof		Yes
	Quake-proof		Yes
	Dust-proof		Yes
	Protection level		IP67
	Working Temperature	°c	-40 ~+85
Environment	Working humidity	RH	< 90
	Storage temperature	°c	-50~+ 90
	Shell material		Aluminum alloy case
General	Sealed material		Heat organic silicone filled and sealed
General	Dimension	mm	43*25*22
	Weight	g	45

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Model		AD	S24T19-05AL
	Rated voltage	V	24
	Voltage range	٧	21-40
Input	Conversion efficiency	%	93
·	Positive polarity		Red @ 18
	Negative polarity		Black @18
	Voltage	V	19
	Voltage range	V	18.95~19.05
	Working current	А	5
	Peak current	А	8
Output	Rated power	W	95
	Power consumption	mA	25
	Ripple & noise	mV	40
	Positive polarity		Yellow @ 18
	Negative polarity		Black @18
	Input instant over voltage		Yes
	Output over current		Yes
	Output short-circuit		Yes
	Chip over temperature		Yes
	Input reverse connect		No, can customize
Protection function	Output reverse connect		No, can customize
	Automatic recovery		Yes
	Water-proof		Yes
	Quake-proof		Yes
	Dust-proof		Yes
	Protection level		IP67
	Working Temperature	°c	-40 ~+85
Environment	Working humidity	RH	< 90
	Storage temperature	°c	-50~+ 90
	Shell material		Aluminum alloy case
General	Sealed material		Heat organic silicone filled and sealed
General	Dimension	mm	74*74*32
	Weight	g	300

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Model	ADS24T19-06AL			
	Rated voltage	V	24	
Input	Voltage range	٧	21-40	
	Conversion efficiency	%	93	
	Positive polarity		Red @ 18	
	Negative polarity		Black @18	
Output	Voltage	V	19	
	Voltage range	V	18.95~19.05	
	Working current	А	6	
	Peak current	А	8	
	Rated power	W	114	
	Power consumption	mA	25	
	Ripple & noise	mV	40	
	Positive polarity		Yellow @ 18	
	Negative polarity		Black @18	
	Input instant over voltage		Yes	
	Output over current		Yes	
	Output short-circuit		Yes	
	Chip over temperature		Yes	
	Input reverse connect		No, can customize	
Protection function	Output reverse connect		No, can customize	
	Automatic recovery		Yes	
	Water-proof		Yes	
	Quake-proof		Yes	
	Dust-proof		Yes	
	Protection level		IP67	
Environment	Working Temperature	°c	-40 <b>~</b> +85	
	Working humidity	RH	< 90	
	Storage temperature	°c	-50~+ 90	
General	Shell material		Aluminum alloy case	
	Sealed material		Heat organic silicone filled and sealed	
	Dimension	mm	74*74*32	
	Weight	g	300	

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Model	ADS24T19-10AL			
Input	Rated voltage	V	24	
	Voltage range	V	21-40	
	Conversion efficiency	%	93	
	Positive polarity		Red @ 18	
	Negative polarity		Black @18	
	Voltage	V	19	
	Voltage range	V	18.95~19.05	
	Working current	Α	10	
	Peak current	Α	12	
Output	Rated power	W	190	
	Power consumption	mA	25	
	Ripple & noise	mV	40	
	Positive polarity		Yellow @ 18	
	Negative polarity		Black @18	
	Input instant over voltage		Yes	
	Output over current		Yes	
	Output short-circuit		Yes	
	Chip over temperature		Yes	
	Input reverse connect		No, can customize	
Protection function	Output reverse connect		No, can customize	
	Automatic recovery		Yes	
	Water-proof		Yes	
	Quake-proof		Yes	
	Dust-proof		Yes	
	Protection level		IP67	
Environment	Working Temperature	°c	-40 ~+85	
	Working humidity	RH	< 90	
	Storage temperature	°C	-50~+ 90	
General	Shell material		Aluminum alloy case	
	Sealed material		Heat organic silicone filled and sealed	
	Dimension	mm	74*74*32	
	Weight	g	300	

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Model	ADS24T19-15AL			
	Rated voltage	V	24	
Input	Voltage range	٧	21-40	
	Conversion efficiency	%	93	
·	Positive polarity		Red @ 18	
	Negative polarity		Black @18	
	Voltage	V	19	
	Voltage range	V	18.95~19.05	
	Working current	А	15	
	Peak current	А	18	
Output	Rated power	W	285	
	Power consumption	mA	25	
	Ripple & noise	mV	40	
	Positive polarity		Yellow @ 18	
	Negative polarity		Black @18	
	Input instant over voltage		Yes	
	Output over current		Yes	
	Output short-circuit		Yes	
	Chip over temperature		Yes	
	Input reverse connect		No, can customize	
Protection function	Output reverse connect		No, can customize	
	Automatic recovery		Yes	
	Water-proof		Yes	
	Quake-proof		Yes	
	Dust-proof		Yes	
	Protection level		IP67	
Environment	Working Temperature	°c	-40 ~+85	
	Working humidity	RH	< 90	
	Storage temperature	°c	-50~+ 90	
General	Shell material		Aluminum alloy case	
	Sealed material		Heat organic silicone filled and sealed	
	Dimension	mm	74*74*32	
	Weight	g	300	

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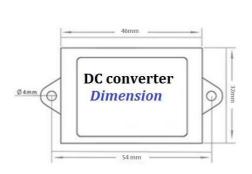
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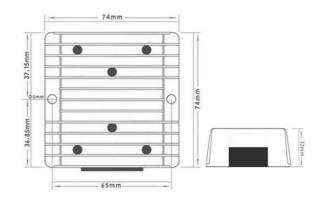
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Model	ADS24T19-20AL		
Input	Rated voltage	V	24
	Voltage range	V	21-40
	Conversion efficiency	%	93
	Positive polarity		Red @ 18
	Negative polarity		Black @18
	Voltage	V	19
	Voltage range	V	18.95~19.05
	Working current	Α	20
	Peak current	Α	22
Output	Rated power	W	380
	Power consumption	mA	25
	Ripple & noise	mV	40
	Positive polarity		Yellow @ 18
	Negative polarity		Black @18
	Input instant over voltage		Yes
	Output over current		Yes
	Output short-circuit		Yes
	Chip over temperature		Yes
	Input reverse connect		No, can customize
Protection function	Output reverse connect		No, can customize
	Automatic recovery		Yes
	Water-proof		Yes
	Quake-proof		Yes
	Dust-proof		Yes
	Protection level		IP67
Environment	Working Temperature	°c	-40 ~+85
	Working humidity	RH	< 90
	Storage temperature	°c	-50~+ 90
General	Shell material		Aluminum alloy case
	Sealed material	`	Heat organic silicone filled and sealed
	Dimension	mm	74*74*32
	Weight	g	300

## 3. Dimension





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#### 4. Use Attention

- 1. In strict accordance with the polarity to connect, input positive is Red (+), negative is Black (-), reverse connect will damage the converter, output positive is Yellow (+),negative is Black (-), reverse connect will will damage the using facility.
- 2. In order to ensure the converter can get high efficiency output voltage and power, please make sure the sufficient input current and voltage supply.
- 3. If the multi-output application, please balance each of the load, please don't tie the entire load together.
- 4. If the load long time work over 80% of rated power, need to lock the converter tightly with extend metal for heat dissipation, if the load power under or equal 80%, shall be more reliable and safe.
- 5. The converter is Non-isolated one, if you look for the converter input voltage higher than output 40V, please select the isolated converter.
  - 6. The converter can't use to charge battery

### 5. Customer services

Warranty is 2 year, free maintenance service will be offered when there is quality problem since the date of pur chase.

If maintenance or adjustment is needed within guarantee period and in the scope of our warranty, please contact our service center

The expense will be absorbed by customer side if any of the following situations happens:

- 1. Fault was due to maintenance or adjustment without checking or permission of our factory.
- 2. Fault was caused by manmade, or disassemble by customer side or use of overload, or other natural disasters within the warranty period.
  - 3. Converter was burnt because of incorrect usage of power supply or too high current.

All products have been checked and packaged with ESD bag in good condition before dispatch, in case the item was damaged, please feedback us within 30 days of receipt, we will provide the free replacement, no refunds are offered.

Please contact us through email: <a href="mailto:services@charger-connector.com">services@charger-connector.com</a>, we will response you within 24-48 hours.

### OEM:

- 1. LOGO and Label can be customized, please offer us the model number and logo original file.
- 2. Parameters and functions can be customized, please offer the details
- 4. Package can be customized, please provide us the original file.

### **Payment Terms:**

T/T in advance, PayPal, Alipay

#### **Lead Time:**

- 1. Customized samples will be delivered from our factory within 20 working days.
- 2. General orders will be delivered from our factory within 3~7 working days.
- 3. Big orders(over 10Kpcs) will be delivered from our factory within 10~25 working days

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