



# ETA-USA

The Power Professionals

## TSS150 Series

## 150W



### TS S 150 — ○○SC △△

Series Name	Single Output	Output Power	Output Voltage			Input Voltage	
			03:3.3V 15:15V	05:5V 24:24V	12:12V 48:48V	12:12V 24:24V	48:48V 110:110V

#### Features

- Wide Range DC Input
- Small Size 1U height
- **5 Yr warranty**
- 10 year operation at 40°C
- Low Power Consumption < 1W
- Remote ON/OFF
- Constant Current Protection



MODEL/CHANNEL		Unit	TSS150-03SC	TSS150-05SC	TSS150-12SC	TSS150-15SC	TSS150-24SC	TSS150-48SC
<b>OUTPUT</b>	Nominal Voltage	V	3.3	5	12	15	24	48
	Rated Output Current	A	30	30	14	11	7	3.5
	Dynamic Load	mV	±100	±150	±240	±300	±480	±960
	Output Adjustment Range	V	2.97~3.63	4.5~5.5	10.8~13.2	13.5~16.5	21.6~26.4	43.2~52.8
	Drift	mV	40	40	75	90	135	255
	Line Regulations	mV	25	25	60	75	120	240
	Load Regulations	mV	30	45	72	90	144	288
	Temperature Effect	mV	25	25	60	75	120	240
	Ripple & Noise	mVp	150	180	200	200	300	530
	Max. Output Power	W	99	150	168	165	168	168
Start-up	ms	300						
Recovery Time	ms	0.5						
<b>Function</b>	Over Current Protection	A	Auto recover. Constant current limit type (Short Mode not Acceptable)					
	Over Voltage Protection	-	Shut down (Recover by AC reclosing after 30 seconds)					
	Output Indicator	-	Exist					
	Remote Sensing	-	Available					
	Remote ON.OFF	-	Available					
	Parallel Operations	-	Not available (1+1 redundant with using OR-ing diode is acceptable)					
<b>Electrical Isolation</b>	Withstand Voltage	-	Primary/Secondary AC2000V Cutoff Current 20mA 1 min (Normal temperature & humidity)					
	Primary Chassis	-	AC2000V Cutoff Current 20mA 1 min (Normal temperature & humidity)					
	Secondary Chassis	-	AC1000V Cutoff Current 20mA 1 min (Normal temperature & humidity)					
	Insulation Resistance	-	Primary/Secondary Chassis 50MΩ min. (500V DC)					
<b>Environment</b>	Operating temp. & Humidity	-	Refer to the Derating Condition. -40~+70°C -20~85% (Without condensation)					
	Storage temp & Humidity	-	-40°C to +85°C (Except thermal shock); -10~85%(Without condensation)					
	Vibration	-	5-10Hz/ XYZ axis 10mm, 10-55Hz / 19.6m/s <sup>2</sup>					
	Switching Frequency	kHz	65-85 Fix.					
	Safety Standards	-	UL60950-1 2nd Edition 2014-10-14 / CE Marking by CB Report					
	Cooling/OTP	-	Convection Cooling					
	Shock	-	Impact 294m/s <sup>2</sup> /XYZ axis					
<b>Railways Std.</b>	Vibration	-	IEC61373(JIS E4031) Class 1-Grade B, JIS E3014 Class 2 (Railway Signal) Design to Meet					
	Shock	-	IEC61373(JIS E4031) Class 1-Grade B, JIS E3015 Class 2 (Railway Signal) Design to Meet					
<b>Shipbuilding</b>	Envir. Performance	-	IEC61000-4-11, IEC60092-504, IEC60068-2-6, IEC60068-2-78 Designed to meet					
	EMC Immunity	-	IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6 Designed to meet					
	EMC Emission	-	CISPR16-1-4, CISPR16-1-2 Designed to meet					
<b>Dimension</b>	LxWxH/Weight	mm/g	168Lx85Wx38H/650 max.					



# ETA-USA

16170 Vineyard Blvd. Suite 180 Morgan Hill, CA 95037 <http://www.eta-usa.com>

Toll-free (US only): 800-ETA-POWR (800-382-7697) Telephone: 408 778-2793 FAX: 408-779-2753

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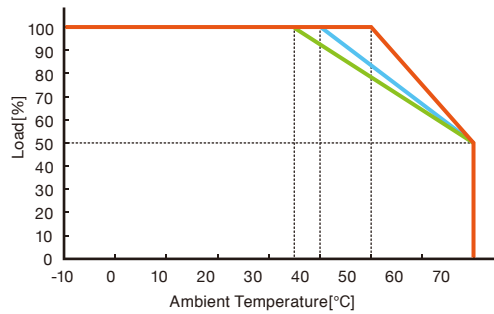
## TSS150 Continued

150W

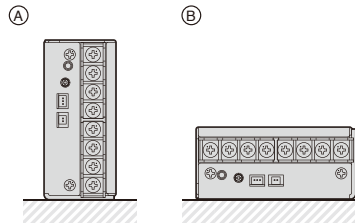
	MODEL/CHANNEL	Unit	TSS150- **SC12	TSS150- **SC24	TSS150- **SC48	TSS150- **SC110
INPUT	Input Range	Vdc	8~20	14.4~32	30~63	60~144
	Rated Input Current	A	17	8.4	4.3	2
	Efficiency	%	85	88		
	Zero Load Power	W	1 Max.			

## Derating Curve

150W



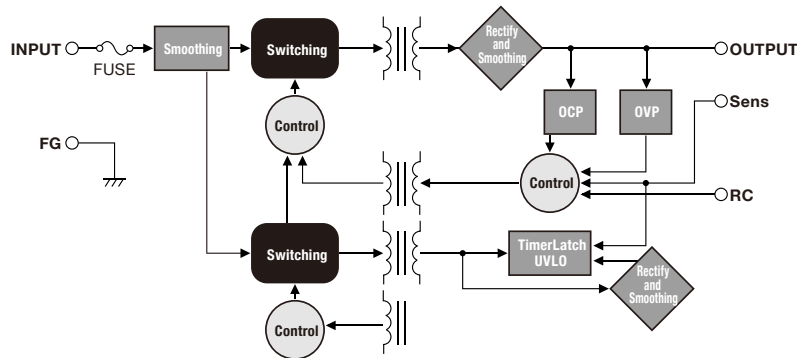
Mounting Condition



- SC12
  - Ⓐ 3/12/15/24/48V
- SC12
  - Ⓐ 5V
  - Ⓑ 3/12/15/24/48V
- SC12
  - Ⓑ 5V
- SC24
  - Ⓐ 3/5/12/15/24/48V
  - Ⓑ 3/15/24/48V
- SC24
  - Ⓑ 5/12V

## Block Diagram

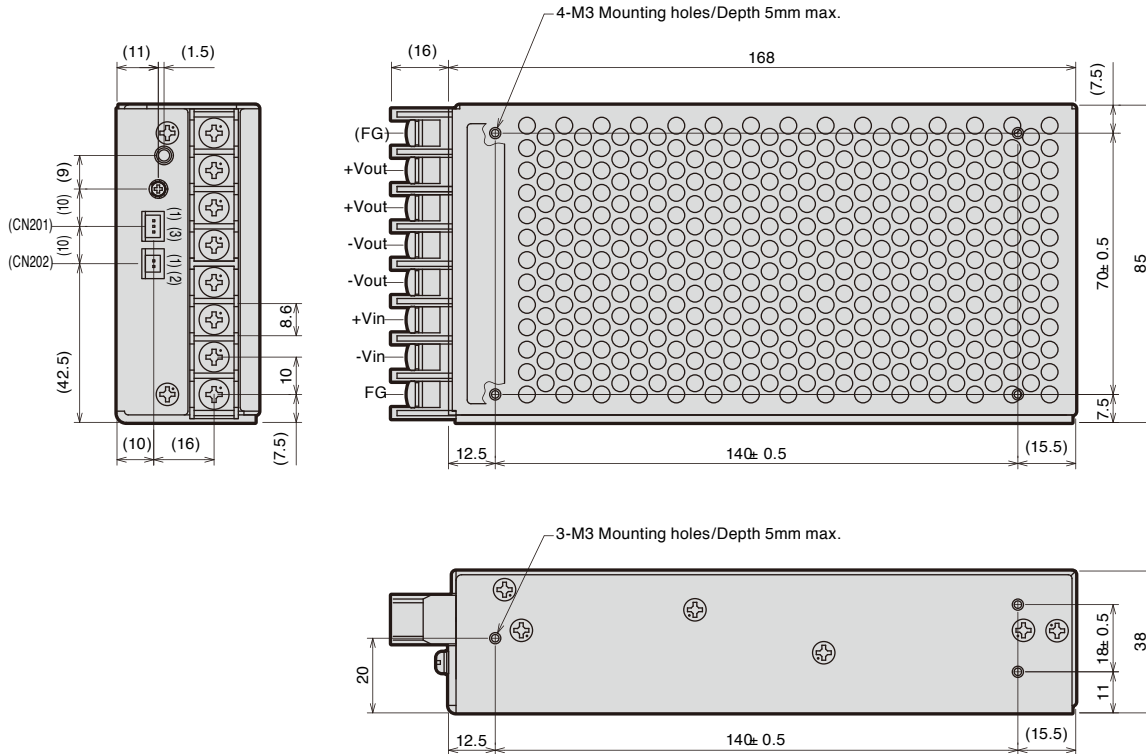
150W





## Dimensions

150W



Unit:mm  
 General tolerance:±0.1  
 Weight:550g max. / MODEL TSS150  
 Power supply mounting torque/M3:0.5N · m max.  
 Terminal block tightening torque/M4:1.2N · m max.

## Customize

150W

### Timer Latch Protection

Able to Change to  
 Timer Latch (3 Sec.) Protection in  
 Over Current Mode  
 \*100W/150W Only

### Battery Charge

Change the Over Current Protection  
 Function to Constant Current Charging

