

Enclosed type switching power supplies

15W Single Output **Switching Power Supply**



GS-15...

Feature

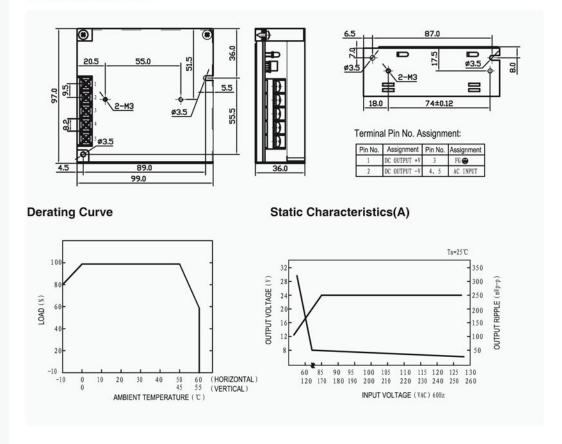
- · High efficiency, high reliability, lost cost
- AC input range selected by switch
 100% full load burn-in test
- Protections: Short circuit / Over load
- . Cooling by free air convection
- · Fixed switching frequency at 37KHz
- 1 year warranty
- Dimensions: 99*97*36mm(L*W*H)

Notes:

- · All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.
- · Ripple & noise are measurd at 20MHz of bandwidthby using a12" twisted pair wire terminated with a 0.1µf & 47µf parallel capacitor.
- · Tolerance:includes set up tolerance, line regulation and load regulation

Model		GS-15-5	GS-15-12	GS-15-24			
	DC Voltage	5V	12V	24V			
	Voltage Tolerance	±2%	±1%	±1%			
	Rated Current	3A	1.3A	0.7A			
Outout	Current Range	0-3A	0-1.3A	0-0.7A			
Output	Rated Power	15W	15.6W	16.8W			
	Ripple & Noise	50 mVp-p	50 mVp-p	100 mVp-p			
	DC Voltage adi. Range	-5%,+10%	±10%	±10%			
	Setup,Rise,Hold Time	200ms,100ms,30ms at full load					
	Voltage Range	85-132 VAC / 170-264 VAC 47-63 Hz; selected by switch 240-370					
	AC Current	0.5 A/115 V 0.25A/	230 V				
nput	Efficiency	65%	68%	72%			
	Inrush Current	Cold start 15A/115VAC 30A/230VAC					
	Leakage Current	<0.5 mA/240VAC					
		110%-160%					
Protection	Over Load	Protection type: Fol- after fault condition	d back current limiting, recovis removed	vers automatically			
	Working Temp., Humidity	-10 C~+60 C; 20%~90 %RH					
Environment	Storage Temp., Humidity	-20 C~+85 C; 10%~95 %RH					
	Vibration	10~500Hz, 2G 10min./1cycl, period for 60 min, each along X, Y, Z, axes					
Dafah.	Withstand Voltage	I/P-O/P: 1.5KVAC I/	P-FG: 1.5KVAC O/P-FG: 0.5	KVAC			
Safety	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG :100M /500VDC					
Ctandarda	Safety Standard	Design refer to UL1012					
Standards	EMC Standard	Design refer to FCC Part 15J Conduction Class B					
Others	Weight	0.31Kg					
	Packing	45pcs/15Kg/0.9CUFT					

Outline and dimension



ENSTICK

Switching mode power supply

Enclosed type switching power supplies

25W Single Output Switching Power Supply



GS-25...

Feature

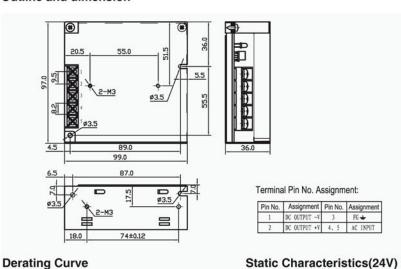
- High efficiency, high reliability
- Universal AC input / Full range
- 100% full load burn-in test
- Protection:
- Short circuit / Over load / Over voltage
- Fixed switching frequency at 37 KHz
- Cooling by free air convection
- · 2 years warranty
- Dimensions: 99*97*36mm(L*W*H)

Notes:

- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- \bullet Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µ & 47µf parallel capacitor.
- Each output can within current range. But total output power can't exceed rated load
- The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

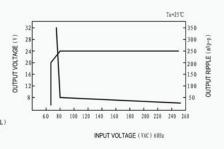
Model		GS-25-5	GS-25-12	GS-25-15	GS-25-24				
	DC Voltage	5V	12V	15V	24V				
0	Voltage Tolerance	±2%	±1%	±1%	±1%				
	Rated Current	5A	2.1A	1.7A	1.1A				
	Current Range	0-5A	0-2.1A	0-1.7A	0-1.1A				
Output	Rated Power	25W	25.2W	25.5W	26.4W				
	Ripple & Noise	50mVp-p	100mVp-p	100 mVp-p	100mVp-p				
	DC Voltage adi.Range	-5%, +10%	±10%	±10%	±10%				
	Setup,Rise,Hold Time	800ms,50ms,10ms/115VAC 300ms,50ms,80ms/230VAC at full load							
Input	Voltage Range	85~264 VAC 47~63 Hz, 120~370VDC							
	AC Current	0.6 A/115 V0.35A/ 230 V							
	Efficiency	72%/115VAC	76%/115VAC	77%/115VAC	80%/115VAC				
	Inrush Current	Cold start 15A/115V 30A/230V							
	Leakage Current	<0.75 mA/240VAC							
	Overland	110%~160%							
Destantion	Over Load	Protection type: Fold back current limiting, recovers automatically after fault condition is removed							
Protection	0 1/-11	115%~135%							
	Over Voltage	Protection type: hiccup mode, recovers automatically after fault condition is removed							
	Working Temp., Humidity	-10°C~+60°C; 20%~90 %RH							
Environment	Storage Temp., Humidity	-20°C~+85°C; 10%~95 %RH							
	Vibration	10~500Hz, 2G 10min./1cycle, period for 60min, X, Y, Z each along axes							
	Withstand Voltage	I/P-O/P: 3KVAC I/P-FG: 1.5KVACO/P-FG: 0.5KVAC							
Safety	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M /500VDC							
	Safety Standard	Design refer to UL1012, TUVEN60950							
Standards	EMC Standard	Design refer to EN55022, EN61000-3-2, -3, EN61000-4-2,3,4,5, ENV50204, EN55024							
0.1	Weight	0.39Kg							
Others	Packing	45pcs/18Kg/0.86CUFT							

Outline and dimension



100 80 60 40-20

AMBIENT TEMPERATURE (C)





Enclosed type switching power supplies

35W Single Output Switching Power Supply



GS-35...

Feature

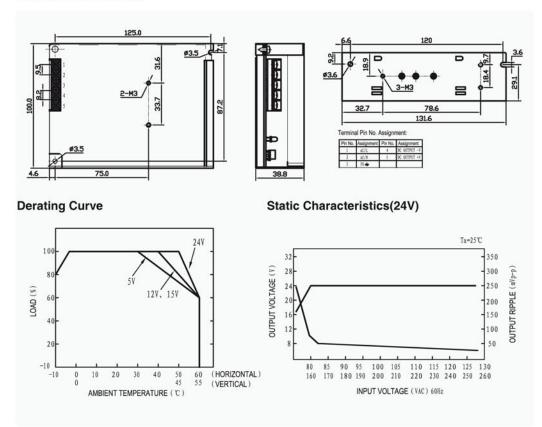
- High efficiency, high reliability, lost cost
- AC input range selected by switch
- Protections: Short circuit / Over load
- · LED indicator for powr on
- Fixed switching frequency at 37KHz
- Cooling by free air convection
- 1 year warranty
- Dimensions: 129*98*38mm (L*W*H)

Notes:

- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- Ripple & noise are measurd at 20MHz of bandwidthby using a12" twisted pair wire terminated with a 0.1µf & 47µf parallel capacitor.
- Tolerance:includes set up tolerance, line regulation and load regulation

Model		GS-35-5	GS-35-9	GS-35-12	GS-35-15	GS-35-24				
	DC Voltage	5V	9V	12V	15V	24V				
	Voltage Tolerance	±2%	±1%	±1%	±1%	±1%				
	Rated Current	7A	3.6A	3A	2.4A	1.5A				
	Current Range	0-7A	0-3.6A	0-3A	0-2.4A	0-1.5A				
Output	Rated Power	35W	32.4W	36W	36W	36W				
	Ripple & Noise	75 mVp-p	100 mVp-p	100 mVp-p	100 mVp-p	100 mVp-p				
	DC Voltage adi. Range	-5%,+10%	±10%	±10%	±10%	±10%				
	Setup,Rise,Hold Time	200ms,100ms,30ms at full load								
Input	Voltage Range	85-132 VAC/170-264VAC selected by switch, 240-370VDC; 47-63 Hz								
	AC Current	0.8 A/115 V 0.45A/ 230 V								
	Efficiency	70%	72%	76%	78%	78%				
	Inrush Current	Cold start 18A/115V 36A/230V								
	Leakage Current	< 2mA/240VAC								
Dretesties	Overland	110%~160%								
Protection	Over Load	Protection type: Fold back current limiting, recovers automatically after fault condition is removed								
	Working Temp., Humidity	-10°C~+60°C; 20%~90 %RH								
Environment	Storage Temp., Humidity	-20°C~+85°C; 10%~95 %RH								
	Vibration	10~500Hz, 2G 10min./1cycl, period for 60 min,each along X,Y, Z, axes								
Safety	Withstand Voltage	I/P-O/P: 1.5KVAC I/P-FG: 1.5KVAC O/P-FG: 0.5KVAC								
Salety	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: 100M /500VDC								
Ctandarda	Safety Standard	Design refer to UL1012								
Standards	EMC Standard	Design refer to FCC Part 15 J Conduction Class B								
Others	Weight	0.41Kg								
	Packing	45pcs/18.5Kg/1.22CUFT								

Outline and dimension



ENSTICK

Switching mode power supply

Enclosed type switching power supplies

50W Single Output Switching Power Supply



GS-50...

Feature

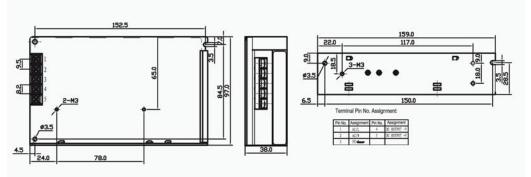
- High efficiency, high reliability, lost cost
- AC input range selected by switch
- Fixed switching frequency at 27KHz
- · Protections: Short circuit / Over load
- Cooling by free air convection
- LED indicator for power on
- 1 year warranty
- Dimensions: 159*97*38mm(L*W*H)

Notes:

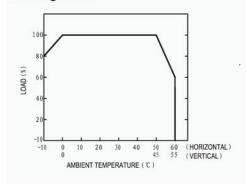
- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- Ripple & noise are measurd at 20MHz of bandwidthby using a12" twisted pair wire terminated with a 0.1µf & 47µf parallel capacitor.
- Tolerance:includes set up tolerance, line regulation and load regulation

Model		GS-50-5	GS-50-12	GS-50-15	GS-50-24	GS-50-48				
	DC Voltage	5V	12V	15V	24V	48V				
	Voltage Tolerance	±2% ±1%		±1%	±1%	±1%				
	Rated Current	10A	4.2A	3.4A	2.1A	1A				
	Current Range	0-10A	0-4.2A	0-3.4A	0-2.1A	0-1A				
Output	Rated Power	50W	50.4W	51W	50.4W	48W				
	Ripple & Noise	75mVp-p	100 mVp-p	100 mVp-p	100 mVp-p	100 mVp-p				
	DC Voltage adi. Range	-5%, +10%	±10%	±10%	±10%	±10%				
	Setup,Rise,Hold Time	200ms,100ms,20ms at full load								
Input	Voltage Range	85-132 VAC/170-264VAC 47-63 Hz; selected by switch240~370VDC								
	AC Current	1.3A/115 V 0.65A/ 230 V								
	Efficiency	71%	78%	78%	82%	84%				
	Inrush Current	Cold start18A/115V 36A/230V								
	Leakage Current	<1 mA/240VAC								
Destaction	0	110%~160%								
Protection	Over Load	Protection type: Fold back current limiting, recovers automatically after faultIt condition is removed								
	Working Temp., Humidity	-10°C~+60°C; 20%~90 %RH								
Environment	Storage Temp., Humidity	-20°C~+85°C; 10%~95 %RH								
	Vibration	10-500Hz, 2G 10min./1cycle, period for 60min, each along X, Y, Z axes								
0.7.1	Withstand Voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC								
Safety	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: 100M /500VDC								
Standards	Safety Standard	Design refer to UL1012								
	EMC Standard	Design refer to FCC Part15 J Conduction Class B								
Others	Weight	0.51Kg								
	Packing	24pcs/13.1Kg/0.7CUFT								

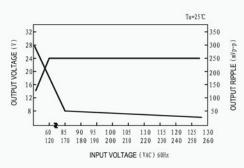
Outline and dimension



Derating Curve



Static Characteristics(24V)





Enclosed type switching power supplies

70W Single Output Switching Power Supply



GS-70...

Feature

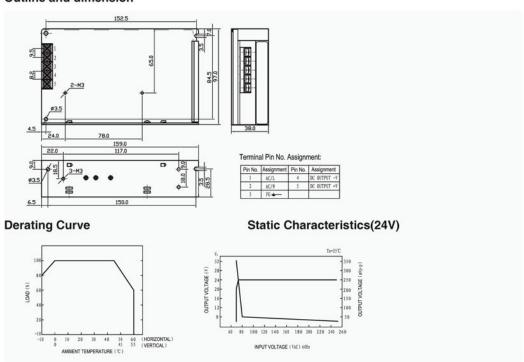
- High efficiency, high reliability
- · AC input range selected by switch
- 100% full load burn-in test
- Protection:
- Short circuit / Over load/ Over voltage
- Fixed switching frequency at 50 KHz
- Cooling by free air convection
- · 2 years warranty
- Dimensions: 159*97*38mm(L*W*H)

Notes:

- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µ & 47µf parallel capacitor.
- Each output can within current range. But total output power can't exceed rated load
- The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

Model		GS-70-12	GS-70-15	GS-70-24	GS-70-48			
Output	DC Voltage	12V	15V	24V	48V			
	Voltage Tolerance	±1%	±1%	±1%	±1%			
	Rated Current	6A	4.8A	3A	1.5A			
	Current Range	0-6A	0-4.8A	0-3A	0-1.5A			
	Rated Power	72W	72W	72W	72W			
	Ripple & Noise	120mVp-p	150mVp-p	150mVp-p	200mVp-p			
	DC Voltage adi. Range	+10%	±10%	±10%	±10%			
	Setup,Rise,Hold Time	800ms, 50ms,10ms/115VAC300ms,50ms, 80ms/230VAC at full load						
Input	Voltage Range	85-264 VAC47-63 Hz, 120-370VDC						
	AC Current	2A/115V 1A/ 230 V						
	Efficiency	76%/	77%	79%	80%			
	Inrush Current	Cold start 30A/115VAC 60A/230VAC						
	Leakage Current	<3.5 mA/240VAC						
Protection	Over Load	135%~165%						
		Protection type: Fold back current limiting, recovers automatically after fault condition is remove						
	Over Voltage	115%~135%						
		Protection type: hiccup mode, recovers automatically after fault condition is removed.						
Environment	Working Temp., Humidity	-10°C~+60°C; 20%~90 %RH						
	Storage Temp., Humidity	-20°C~+85°C; 10%~95 %RH						
	Vibration	10-500Hz, 2G 10min./1cycle, period for 60min, each along X, Y, Z axes						
Safety	Withstand Voltage	I/P-O/P: 3KVAC I/P-FG: 1.5KVAC O/P-FG: 0.5KVAC						
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M /500VDC						
Standards	Safety Standard	Design refer to UL1012, UL1950, TUV EN60950						
	EMC Standard	Design refer to EN55022, EN61000-3-2,-3, EN61000-4-2,3,4,5,6,8,11;ENV50204,EN55024						
Others	Weight	0.51Kg						
	Packing	30pcs/16Kg / 0.8	86CUFT					

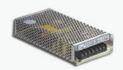
Outline and dimension





Enclosed type switching power supplies

100W Single Output Switching Power Supply



GS-100...

Feature

- High efficiency, high reliability, lost cost
- AC input range selected by switch
- Fixed switching frequency at 25KHz
- · Protections: Short circuit / Over load
- Cooling by free air convection
- 100% full load burn-in test
- 1 year warranty
- Dimensions: 199*98*38mm(L*W*H)

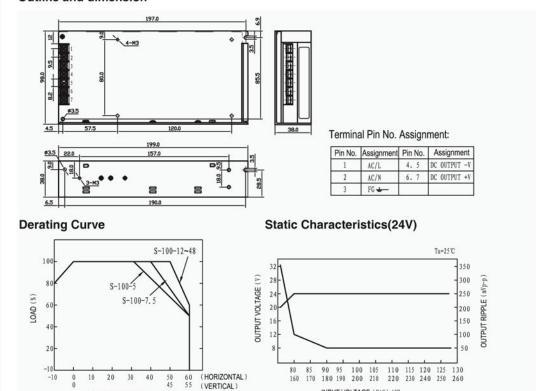
Notes:

- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- Ripple & noise are measurd at 20MHz of bandwidthby using a12" twisted pair wire terminated with a 0.1µf & 47µf parallel capacitor.
- Tolerance:includes set up tolerance, line regulation and load regulation

Model		GS- 100-3	GS- 100-5	GS- 100-7.5	GS- 100-12	GS- 100-15	GS- 100-18	GS- 100-24	GS- 100-27	GS- 100-48		
Output	DC Voltage	33V	5V	7.5V	12V	15V	18V	24V	27V	48V		
	Voltage Tolerance	±2%	±2%	±1%	±1%	±1%	±1%	±1%	±1%	±1%		
	Rated Current	20A	20A	13.6A	8.5A	6.7A	5.6A	4.5A	3.7	2A		
	Current Range	0-20A	0-20A	0-13.6A	0-8.5A	0-6.7A	0-5.6A	0-4.5A	0-3.7A	0-2A		
	Rated Power	6W	100W	102W	102W	100.5W	100.8W	108W	99.9W	96W		
	Ripple & Noise	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-		
	DC Voltage adi. Range	-5%+10%	-5%+10%	±10%	±10%	±10%	±10%	±10%	-4%±18%	±10%		
	Setup,Rise,Hold Time	200ms,80ms,20ms at full load										
	Voltage Range	85~132 VAC/180~264VAC 47~63 Hz; selected by switch 255~370VDC										
	AC Current	2.4A/115 V 1.2A/ 230 V										
Input	Efficiency	70%	78%	80%	81%	81%	82%	84%	84%	84%		
	Inrush Current	Cold start 30A/115V 60A/230V										
	Leakage Current	1 mA/240VAC										
Protection	Over Load	135%~165%										
Protection	Over Load	Protection type: Shut down o/p voltage, recovers automatically after fault condition is removed.										
	Working Temp& Humidity	-10°C~+60°C; 20%~90 %RH										
Environment	Storage Temp & Humidity	-20°C~+85°C; 10%~95 %RH										
	Vibration	10-500Hz, 2G 10min./1cycle, period for 60min, each along X, Y, Z axes										
0-4-1-	Withstand Voltage	I/P-O/P; 1.5KVAC I/P-FG; 1.5KVAC O/P-FG; 0.5KVAC										
Safety	Isolation Resistance	VP-O/P, VP-FG, O/P-FG 100M /500VDC										
Standards	Safety Standard	Design refer to UL1012										
	EMC Standard	Design refer to FCC Part 15 J Conduction Class B										
Others -	Weight	0.62Kg										
	Packing	30pcs/18Kg	/1.22CUFT									

Outline and dimension

AMBIENT TEMPERATURE ($^{\circ}$)



INPUT VOLTAGE (VAC) 60Hz