LTECH

SE-6-100-G1T SE-6-300-G1T SE-6-500-G1T
SE-6-150-G1T SE-6-350-G1T SE-6-550-G1T
SE-6-200-G1T SE-6-400-G1T SE-6-600-G1T
SE-6-250-G1T SE-6-450-G1T SE-6-650-G1T
SE-6-700-G1T

Triac/ELV

Intelligent LED Driver (Constant Current)

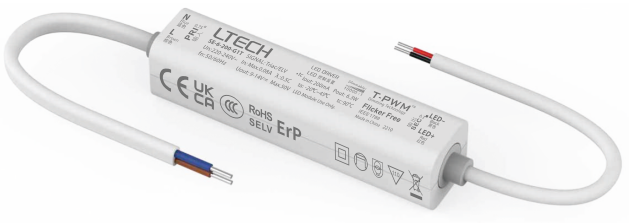
- Small size and light weight. The housing is made from V0 flame retardant PC materials from SAMSUNG/COVESTRO.
- Support Leading edge (Triac), Trailing edge (ELV) .
- With soft-on and fade-in dimming function, enhancing your visual comfort.
- T-PWM™dimming technology allows continuous and flicker-free images under high-speed photography.
- The whole dimming process is flicker-free with high frequency exemption level.
- Dimming from 0~100%, down to 0.1%.
- Innovative thermal management technology intelligently protects the life of the LED driver.
- Overheat, over voltage , overload, short circuit protection and automatic recovery.
- Normal service life can reach 100,000 hours.
- 5-year warranty (Rubycon capacitor).

0~100% dimming

T-PWM®
Dimming Technology

Flicker Free
IEEE 1789

Dimmable:
10000 : 1



SELV RoHS UK CA ErP 110

The certification icon represents undergoing certification applications only, and final certification qualification subject to actual product.

Triac ELV | T-PWM Super depth dimming technology | Flicker-free IEEE 1789 | Short circuit protection | Over Load protection | Overheat Protection

Technical Specs

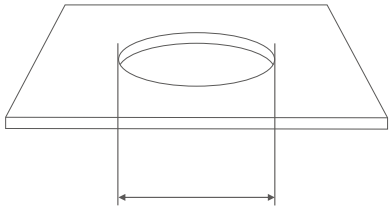
Model		SE-6-100-G1T	SE-6-150-G1T	SE-6-200-G1T	SE-6-250-G1T	SE-6-300-G1T	SE-6-350-G1T	SE-6-400-G1T
Features	Output Type	Constant current						
	Dimming Interface	Triac/ELV						
	Output Feature	Isolation						
	Protection Grade	IP20						
	Insulation Grade	Class II (Suitable for class I/ II /III light fixtures)						
OUTPUT	Output Voltage	9-42Vdc	9-42Vdc	9-31.5Vdc	9-25Vdc	9-21Vdc	9-18Vdc	9-15.5Vdc
	Maximum output voltage	⩽50Vdc	⩽50Vdc	⩽50Vdc	⩽50Vdc	⩽50Vdc	⩽30Vdc	⩽30Vdc
	Output Current	100mA	150mA	200mA	250mA	300mA	350mA	400mA
	Output Power	Max.4.2W	Max.6.3W	Max.6.3W	Max.6.25W	Max.6.3W	Max.6.3W	Max.6.2W
	Load Power Range	0.9-4.2W	1.35-6.3W	1.8-6.3W	2.25-6.25W	2.7-6.3W	3.15-6.3W	3.6-6.2W
	Dimming Range	0~100%, down to 0.01%						
	LF Current Ripple	＜3%						
	Current Accuracy	±5%						
	PWM Frequency	3600Hz						
INPUT	DC Voltage Range	200-280Vdc(Dimming is not possible)						
	AC Voltage Range	220-240Vac						
	Input Voltage	230Vac						
	Frequency	50/60Hz						
	Input Current	⩽0.08A/230Vac						
	Power Factor	PF＜0.5/230Vac(at full load)						
	Efficiency (Typ.)	＞70%	＞72%					
	Inrush Current	Cold start 15A(Test twidth=300us tested under 50% Ipeak)/230Vac						
	Anti Surge	L-N:1KV						
	Leakage Current	<0.5mA/230Vac						
ENVIRONMENT	Working Temperature	ta:-20°C~45°Ctc:90°C						
	Working Humidity	20 ~ 95%RH, non-condensing						
	Storage Temperature/Humidity	-40~80°C/10~95%RH						
	Temperature Coefficient	±0.03%/°C(-20°C~45°C)						
	Vibration	10~500Hz, 2G 12min/1cycle, 72 min for X, Y and Z axes respectively						
PROTECTION	Overload Protection	Automatically protect the device when the load exceeds 102%-135% of the rated power. Automatically recover once load is reduced						
	Overheat Protection	Intelligently adjust or turn off the current output if the PCB temperature ⩾110°C. When the PCB temperature <90°C, automatically recover normal output						
	Short Circuit Protection	Enter hiccup mode if short circuit occurs, and recover automatically						
SAFETY & EMC	Withstand Voltage	I/P-O/P: 3750Vac						
	Insulation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH						
	Safety Standards	CCC	China	GB19510.1, GB19510.14				
		CE	European Union	EN61347-1, EN61347-2-13, EN62384				
		UKCA	Britain	BS EN 61347-1, BS EN 61347-2-13, BS EN 62493				
		BIS	India	IS 15885 (PART 2/SEC 13)				
	EMC Emission	CCC	China	GB/T17743, GB17625.1				
		CE	European Union	EN55015, EN61000-3-2, EN61000-3-3, EN61547				
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61547						
ErP	Power Consumption	Standby power consumption		Network standby power consumption (when the thyristor signal is 0, the power consumption is 0)				
		No-load power consumption		No-no load mode				
	Flicker/Stroboscopic Effect	IEEE1789		Meet IEEE 1789 standard/High frequency exemption level				
		CIE SVM		Pst LM⩽1.0, SVM⩽0.4				
其他	Weight(N.W.)	50g±5g						
	Dimensions	84x20x20mm(LxWxH)						

Technical Specs

Model		SE-6-450-G1T	SE-6-500-G1T	SE-6-550-G1T	SE-6-600-G1T	SE-6-650-G1T	SE-6-700-G1T
Features	Output Type	Constant current					
	Dimming Interface	Triac/ELV					
	Output Feature	Isolation					
	Protection Grade	IP20					
	Insulation Grade	Class II (Suitable for class I/ II /III light fixtures)					
OUTPUT	Output Voltage	9-14Vdc	2-12.5Vdc	2-11.5Vdc	2-10.5Vdc	2-9.5Vdc	2-9Vdc
	Maximum output voltage	≤30Vdc	≤30Vdc	≤30Vdc	≤30Vdc	≤30Vdc	≤30Vdc
	Output Current	450mA	500mA	550mA	600mA	650mA	700mA
	Output Power	Max.6.3W	Max.6.25W	Max.6.3W	Max.6.3W	Max.6.175W	Max.6.3W
	Load Power Range	4.05-6.3W	1-6.25W	1.1-6.3W	1.2-6.3W	1.3-6.175W	1.4-6.3W
	Dimming Range	0~100%, down to 0.01%					
	LF Current Ripple	＜3%					
	Current Accuracy	±5%					
	PWM Frequency	3600Hz					
INPUT	DC Voltage Range	200-280Vdc(Dimming is not possible)					
	AC Voltage Range	220-240Vac					
	Input Voltage	230Vac					
	Frequency	50/60Hz					
	Input Current	≤0.08A/230Vac					
	Power Factor	PF＜0.5/230Vac(at full load)					
	Efficiency (Typ.)	＞72%					
	Inrush Current	Cold start 15A(Test twidth=300us tested under 50% Ipeak)/230Vac					
	Anti Surge	L-N:1KV					
	Leakage Current	<0.5mA/230Vac					
ENVIRONMENT	Working Temperature	ta:-20°C~45°Ctc:90°C					
	Working Humidity	20 ~ 95%RH, non-condensing					
	Storage Temperature/Humidity	-40~80°C/10~95%RH					
	Temperature Coefficient	±0.03%/°C(-20°C~45°C)					
	Vibration	10~500Hz, 2G 12min/1cycle, 72 min for X, Y and Z axes respectively					
PROTECTION	Overload Protection	Automatically protect the device when the load exceeds 102%-135% of the rated power. Automatically recover once load is reduced					
	Overheat Protection	Intelligently adjust or turn off the current output if the PCB temperature ≥110°C. When the PCB temperature <90°C, automatically recover normal output					
	Short Circuit Protection	Enter hiccup mode if short circuit occurs, and recover automatically					
SAFETY & EMC	Withstand Voltage	I/P-O/P: 3750Vac					
	Insulation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH					
	Safety Standards	CCC	China	GB19510.1, GB19510.14			
		CE	European Union	EN61347-1, EN61347-2-13, EN62384			
		UKCA	Britain	BS EN 61347-1, BS EN 61347-2-13, BS EN 62493			
		BIS	India	IS 15885 (PART 2/SEC 13)			
	EMC Emission	CCC	China	GB/T17743, GB17625.1			
		CE	European Union	EN55015, EN61000-3-2, EN61000-3-3, EN61547			
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61547					
ErP	Power Consumption	Standby power consumption	Network standby power consumption (when the thyristor signal is 0, the power consumption is 0)				
		No-load power consumption	No-no load mode				
	Flicker/Stroboscopic Effect	IEEE1789	Meet IEEE 1789 standard/High frequency exemption level				
		CIE SVM	Pst LM≤1.0，SVM≤0.4				
其他	Weight(N.W.)	50g±5g					
	Dimensions	84x20x20mm(LxWxH)					

Product Size

Unit: mm



Maximumholesize: ϕ25mm(1'')

Wiring Diagram

Triac Connection

Wire diameter: 0.75□ Wire diameter: 0.3□

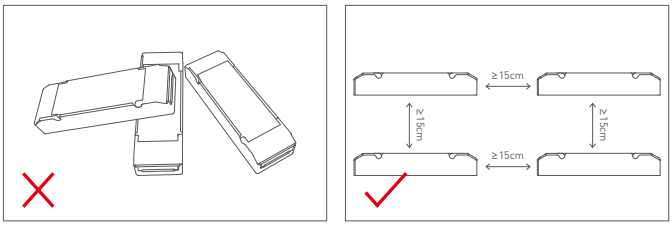
Triac dimmer
0-100% dimming range

ELV Connection

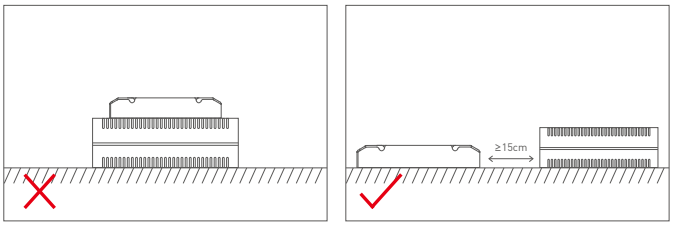
Wire diameter: 0.75□ Wire diameter: 0.3□

ELV dimmer
0-100% dimming range

Installation Precautions

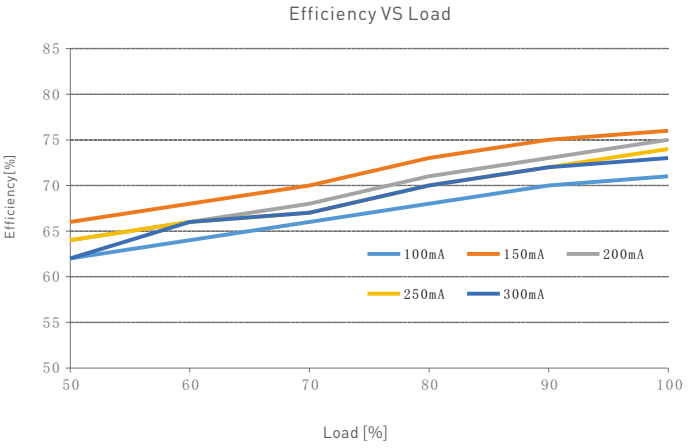


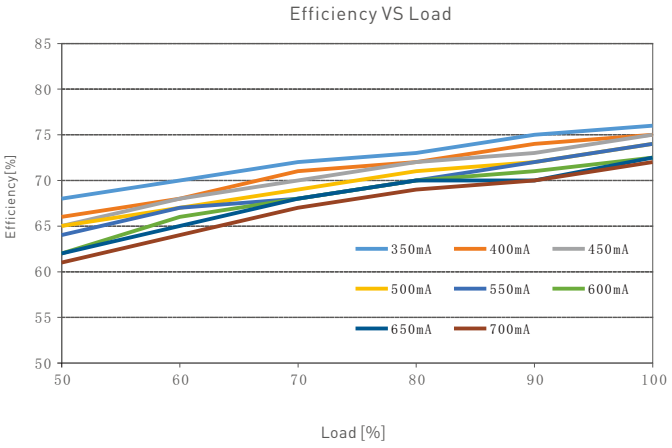
Please do not stack the products. The distance between two products should be ≥15cm so as not to affect heat dissipation and the lifespan of the products.



Please not place the products on LED drivers. The distance between the product and the driver should be ≥15cm so as not to affect heat dissipation and shorten the lifespan of the products.

Relationship Diagrams

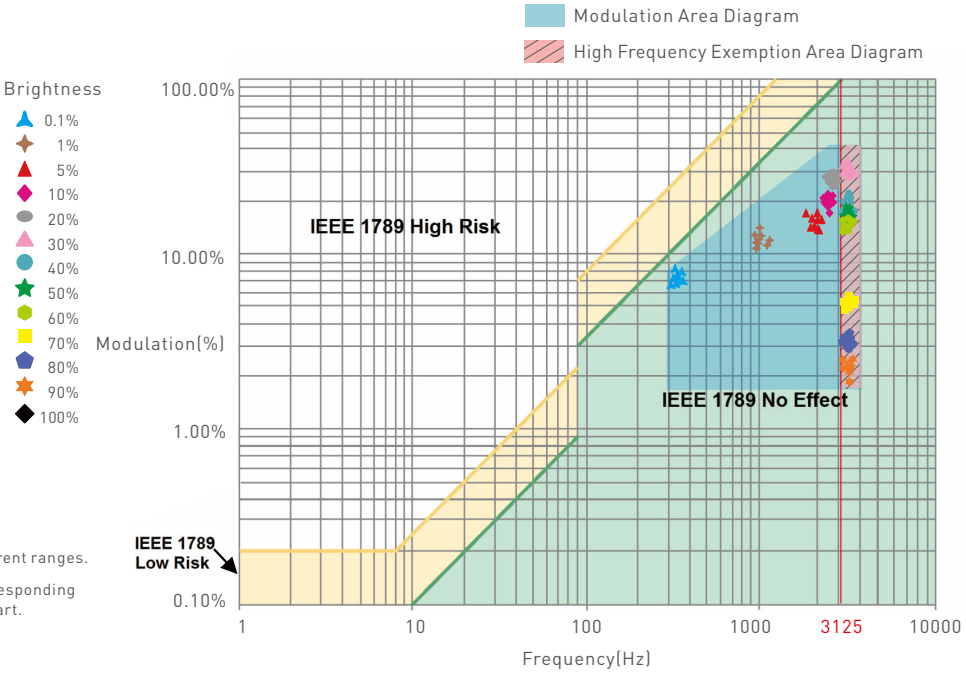




Flicker Test Sheet

IEEE 1789

Limit of modulation in low risk area	
Waveform frequency of optical output	Limit (%)
$f \leq 8Hz$	0.2
$8Hz < f \leq 90Hz$	$0.025 \times f$
$90Hz < f \leq 1250Hz$	$0.08 \times f$
$f > 1250Hz$	Exemption assessment
Limit of modulation in no effect area	
Waveform frequency of optical output	Limit (%)
$f \leq 10Hz$	0.1
$10Hz < f \leq 90Hz$	$0.01 \times f$
$90Hz < f \leq 3125Hz$	$(0.08/2.5) \times f$
$f > 3125Hz$	Exemption assessment (High frequency exemption)



Marks in the right chart were tested results of different current ranges.

The output frequeny is 0Hz in 100% brightness and its corresponding modulation is 0%, which could not be shown in the right chart.

Packaging Specifications

Model	SE-6-100-G1T/SE-6-150-G1T/SE-6-200-G1T/SE-6-250-G1T/ SE-6-300-G1T/SE-6-350-G1T/SE-6-400-G1T/SE-6-450-G1T/ SE-6-500-G1T/SE-6-550-G1T/SE-6-600-G1T/SE-6-650-G1T/ SE-6-700-G1T
Carton Dimensions	318×240×215mm(L×W×H)
Quantity	22 PCS/Layer; 5 Layers/Carton; 110 PCS/Carton
Weight	0.055kg/PCS; 6.0 kg±5%/Carto

Packaging Image

Inner Packaging Box

Carton Packaging

Transportation and Storage

1. Transportation

Products can be shipped via vehicles, boats and planes.

During transportation, products should be protected from rain and sun. Please avoid severe shock and vibration during the loading and unloading process.

2. Storage

The storage conditions should comply with the Class I Environmental Standards. The products that have been stored for more than six months are recommended to be re-inspected and can be used only after they have been qualified.

Attentions

- This product must be installed and adjusted by a qualified professional.
- This product is non-waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure it is mounted in a water proof enclosure.
- Good heat dissipation will extend the life the product. Please install the product in a environment with good ventilation.
- When you install this product, please avoid being near a large area of metal objects or stacking them to prevent signal interference.
- Please keep the product away from a intense magnetic field, a high pressure area or a place where lightning is easy to occur.
- Please check whether the working voltage used complies with the parameter requirements of the product.
- Before you power on the product, please make sure all the wiring is correct in case of incorrect connection that may cause a short circuit and damage the components, or trigger a accident.
- If a fault occurs, please do not attempt to fix the product by yourself. If you have any question, please contact the supplier.

✻ This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.

Warranty Agreement

- Warranty periods from the date of delivery: 5 years.
- Free repair or replacement services for quality problems are provided within warranty periods.

Warranty exclusions below:

- Beyond warranty periods.
- Any artificial damage caused by high voltage, overload, or improper operations.
- Products with severe physical damage.
- Damage caused by natural disasters and force majeure.
- Warranty labels and barcodes have been damaged.
- No any contract signed by LTECH.

1. Repair or replacement provided is the only remedy for customers. LTECH is not liable for any incidental or consequential damage unless it is within the law.
2. LTECH has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.

Update Log

Version	Updated Time	Update Content	Updated by
A0	20230628	Original version	Yang Weiling