

Intelligent LED Driver (Constant Current)

- Housing made from SAMSUNG/COVESTRO's V0 flame retardant PC materials.
- Ultra small, thin and lightweight, screwless end cap design.
- Leading edge (Triac), trailing edge (ELV) phase control dimming.
- Soft-on and fade-in dimming function enhances your visual comfort;
- T-PWM super deep dimming technology, 0.1% dimming depth.
- The whole dimming process is flicker-free with high frequency exemption level;
- Overheat, over voltage, overload, short circuit protection and automatic recovery.
- Suitable for ClassI/II/III indoor light fixtures.
- Normal service life can reach 100,000 hours.
- 5-year warranty (Rubycon capacitor).

DIM

T-PWM

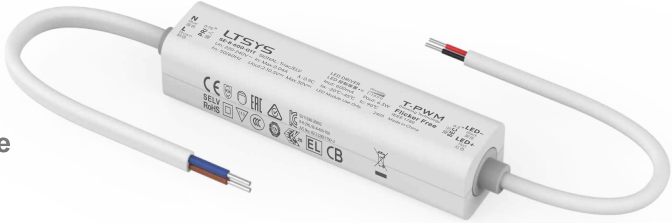
Dimming Technology

Flicker Free

IEEE 1789

Dimmable:

1:1 0 0 0



CCC

25

TUV

CB

EL

EAC

CE

SELV RoHS

Overheat Protection

Over voltage protection

Over Load protection

Short circuit protection

Technical Specs

MODEL		SE-8-100-G1T	SE-8-150-G1T	SE-8-200-G1T	SE-8-250-G1T	SE-8-300-G1T	SE-8-350-G1T									
FEATURES	Output Type	Constant current														
	Dimming Interface	Triac/ELV														
	Output Feature	Isolation														
	IP Rating	IP50														
	Insulation Glass	Class II (Suitable for class I/ II /III light fixtures)														
OUTPUT	Output Voltage	9-42Vdc	9-42Vdc	9-31Vdc	9-25Vdc	9-21Vdc	2-18Vdc									
	Max. Output Voltage(No-load)	≤52Vdc	≤52Vdc	≤52Vdc	≤52Vdc	≤52Vdc	≤30Vdc									
	Output Current	100mA	150mA	200mA	250mA	300mA	350mA									
	Output Power	Max.4.2W	Max.6.3W	Max.6.2W	Max.6.25W	Max.6.3W	Max.6.3W									
	Load Power Range	0.9-4.2W	1.35-6.3W	1.8-6.2W	2.25-6.25W	2.7-6.3W	3.15-6.3W									
	Dimming Range	0~100%, Down to 0.1%														
	LF Current Ripple	< 3% (Maximum current for non dimming state)														
	Current Accuracy	±5%														
INPUT	PWM Frequency	≤3600Hz														
	AC Voltage Range	220-240Vac														
	DC Voltage Range	220-240Vdc(EMI evaluation required after luminaire integration)														
	Input Voltage	230Vac														
	Frequency	50/60Hz														
	Input Current	≤0.045A/230Vac														
	Power Factor	PF > 0.9/230Vac (at full load)														
	Efficiency (Typ.)	72%	76%	74%	74%	73%	75%									
	Inrush Current	Cold start 10A(Test twidth=300us tested under 50% Ipeak)/230Vac														
	Anti Surge	L-N:1KV														
ENVIRONMENT	Leakage Current	Max.0.5mA														
	Operating Temperature	ta:-20°C~45°C tc: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)														
PROTECTION	Vibration	10~500Hz, 2G 12min/1cycle, 72 min for X, Y and Z axes respectively														
	Overload Protection	Automatically protect the device when the load exceeds 102% 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														
	Overvoltage Protection	Automatically protect the device when voltage exceeds the no-load voltage. It can be recovered automatically														
	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 Certifications	CCC	China	GB19510.1, GB19510.14, GB19510.213												
		TUV	Germany	EN61347-1, EN61347-2-13, EN62493												
		CB	CB Member States	IEC61347-1, IEC61347-2-13												
		CE	European Union	EN61347-1, EN61347-2-13, EN62384												
		EAC	Russia	IEC61347-1, IEC61347-2-13												
		RCM	Australia	AS 61347-1, AS 61347-2-13												
		ENEC	Europe	EN61347-1, EN61347-2-13, EN62384												
		KC	Korea	KC61347-1, KC61347-2-13												
	EMC Emission	CCC	China	GB/T17743, GB17625.1												
		CE	European Union	ENIEC55015, ENIEC61000-3-2, EN61000-3-3												
		EAC	Russia	IEC62493, IEC61547, EH55015												
		RCM	Australia	EN55015, EN61000-3-2, EN61000-3-3, EN61547												
		KC	Korea	KN15, KN61547												
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11,EN61547														
ErP	Power Consumption	Networked standby	Standby power consumption without network connection (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	PstLM≤1.0, SVM≤0.4													
OTHERS	DF	Phase factor	DF≥0.9													
	Weight(N.W.)	50g±5g														
	Dimensions	84x20x20mm(LxWxH)														
	Package size	115x36x26mm(LxWxH)														

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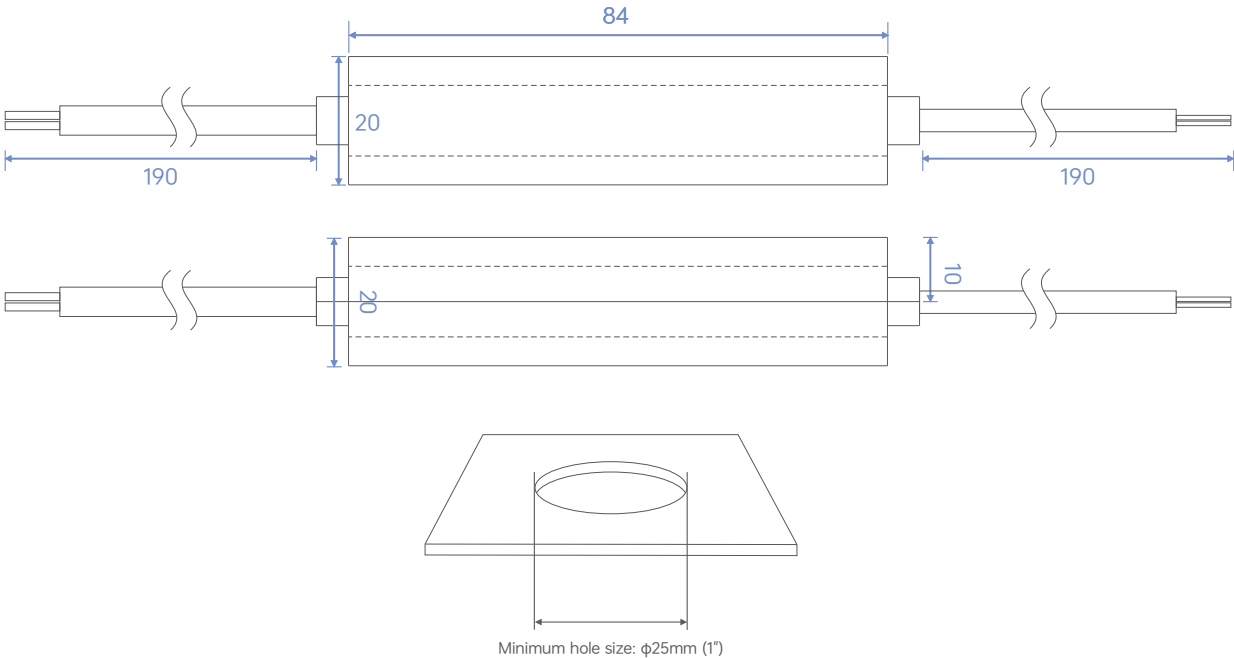
www.ltech-led.com

Technical Specs

MODEL		SE-8-400-G1T	SE-8-450-G1T	SE-8-500-G1T	SE-8-550-G1T	SE-8-600-G1T	SE-8-650-G1T	SE-8-700-G1T
FEATURES	Output Type	Constant current						
	Dimming Interface	Triac/ELV						
	Output Feature	Isolation						
	IP Rating	IP50						
	Insulation Glass	Class II (Suitable for class I/ II /III light fixtures)						
OUTPUT	Output Voltage	2-15.5Vdc	2-14Vdc	2-12.5Vdc	2-11.5Vdc	2-10.5Vdc	2-9.5Vdc	2-9Vdc
	Max. Output Voltage(No-load)	≤30Vdc	≤30Vdc	≤30Vdc	≤30Vdc	≤30Vdc	≤30Vdc	≤30Vdc
	Output Current	400mA	450mA	500mA	550mA	600mA	650mA	700mA
	Output Power	Max.6.2W	Max.6.3W	Max.6.25W	Max.6.3W	Max.6.3W	Max.6.175W	Max.6.3W
	Load Power Range	0.8-6.2W	0.9-6.3W	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 0.1%						
	LF Current Ripple	< 3% (Maximum current for non dimming state)						
	Current Accuracy	±5%						
	PWM Frequency	≤3600Hz						
INPUT	AC Voltage Range	220-240Vac						
	DC Voltage Range	220-240Vdc(EMI evaluation required after luminaire integration)						
	Input Voltage	230Vac						
	Frequency	50/60Hz						
	Input Current	≤0.045A/230Vac						
	Power Factor	PF > 0.9/230Vac (at full load)						
	Efficiency (Typ.)	73%	73%	73%	73%	72%	72%	70%
	Inrush Current	Cold start 10A(Test twidth=300us tested under 50% Ipeak)/230Vac						
	Anti Surge	L-N:1KV						
	Leakage Current	Max.0.5mA						
ENVIRONMENT	Operating Temperature	ta:-20℃~45℃ tc:90℃						
	Working Humidity	20~95%RH, non-condensing						
	Storage Temperature/Humidity	-40~80℃/10~95%RH						
	Temperature Coefficient	±0.03%/℃(-20℃~45℃)						
	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% of the rated power. Automatically recover once load is reduced						
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SAFETY & EMC	Insulation Resistance	I/P-O/P: 100MΩ/500VDC/25℃/70%RH						
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	EMC Immunity	EN61000-4-2,3,4,5,6,8,11,EN61547						
	ErP	Power Consumption	Networked standby		Standby power consumption without network connection (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		PstLM≤1.0, SVM≤0.4				
	DF	Phase factor		DF≥0.9				
OTHERS	Weight(N.W.)	50g±5g						
	Dimensions	84x20x20mm(LxWxH)						
	Package size	115x36x26mm(LxWxH)						

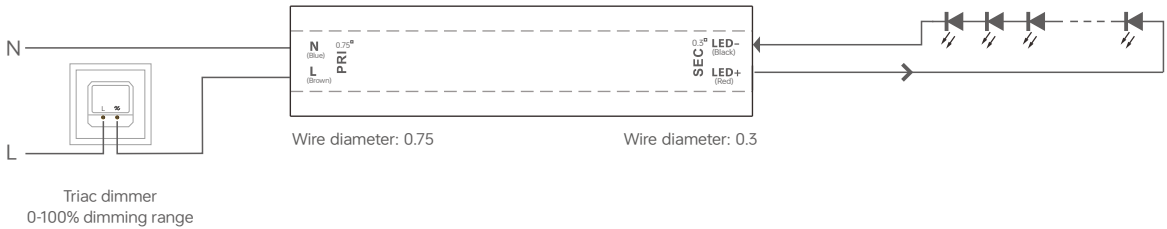
Product Size

Unit: mm

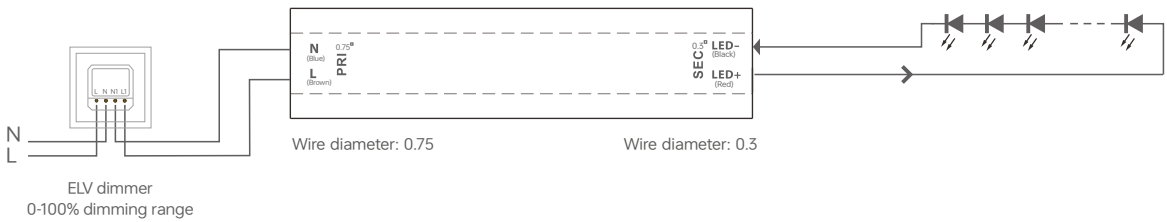


Wiring Diagram

Triac Connection



ELV Connection



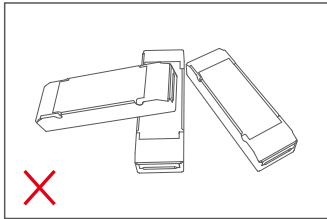
Surge Current & Corresponding Miniature Circuit Breaker (MCB) Load Capacity Table

MCB Model	B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
Maximum Load Capacity	20	26	32	40	40	23	30	37	47	58	27	34	42	53	66

Remarks:

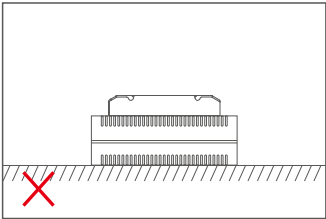
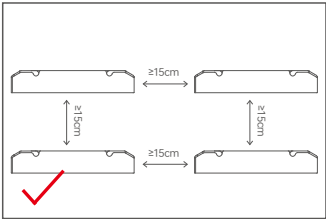
1. Test Conditions: Cold start 10A(Test twidth=300us tested under 50% Ipeak)/230Vac
- 2.The number of supported drivers may vary depending on the brand and model of the MCB.
- 3.It is recommended not to exceed the specified load capacity during on-site installation. The actual load should be determined based on field conditions.
- 4.If the ambient temperature exceeds 30°C or multiple MCBs are installed side by side, the number of installed drivers must be reduced and recalculated accordingly.
- 5.Electricians typically use Type B MCBs for residential lighting and Type C MCBs for commercial lighting applications.
- 6.Different testing equipment may yield variations in measured current peaks and pulse widths. Always use professional-grade instruments for accurate testing.

Installation Precautions

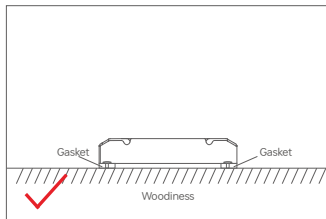
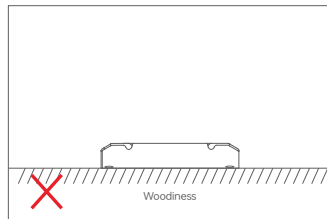
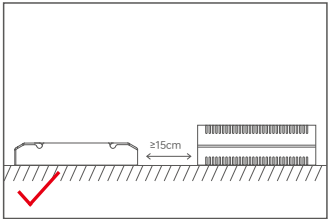


Please do not stack the products. The distance between two products should be $\geq 15\text{cm}$ so as not to affect heat dissipation and the lifespan of the products.

Note: The installation should be in line with the environmental operating temperature of the product. Do not install it inside the lamp to avoid exceeding the environmental operating temperature of the product, which may affect the product's lifespan.

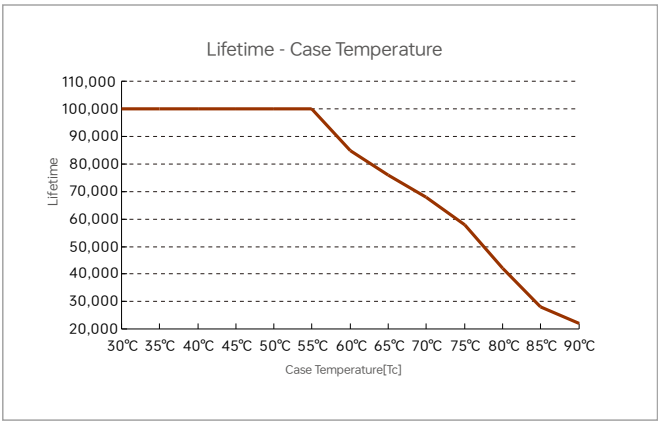
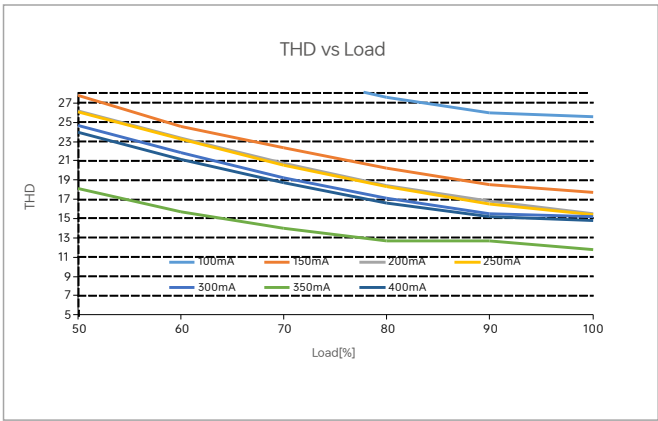
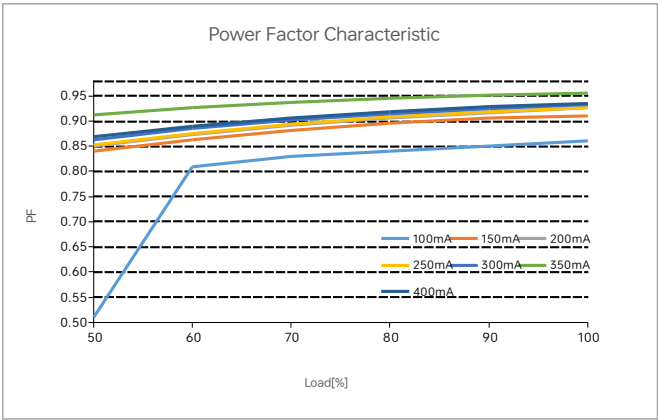
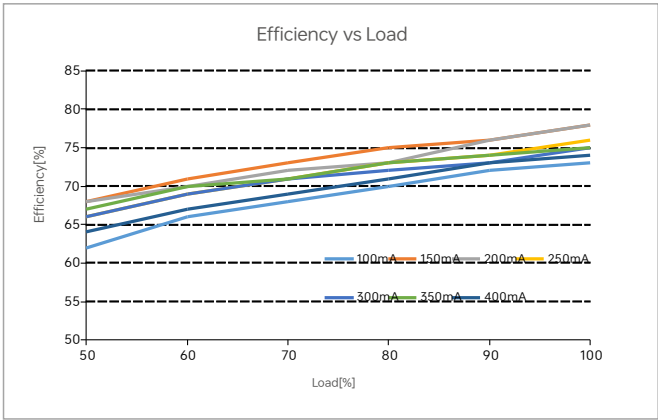


Please not place the products on LED drivers. The distance between the product and the driver should be $\geq 15\text{cm}$ so as not to affect heat dissipation and shorten the lifespan of the products.

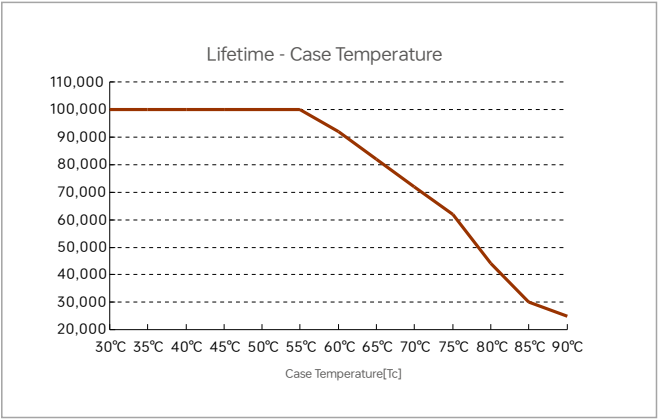
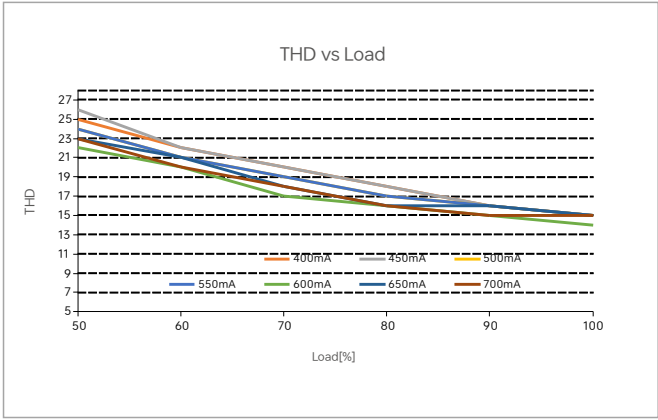
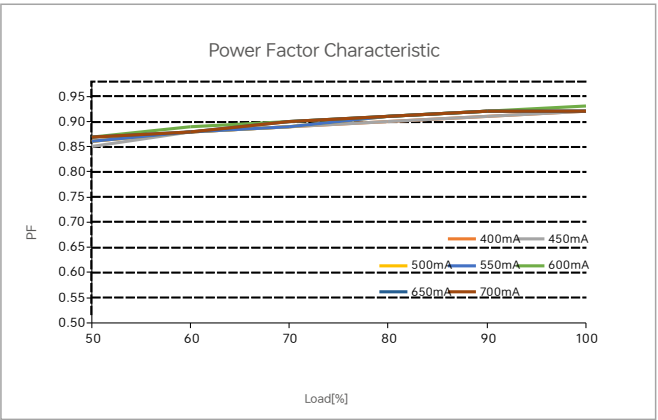
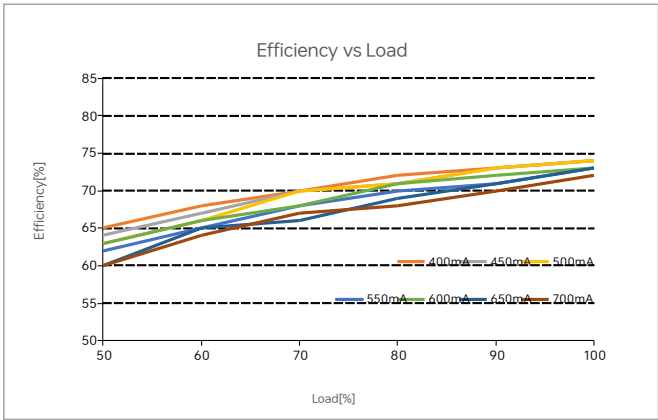


Do not fix the product screws tightly against the wooden board. Instead, add a washer with a thickness of $\geq 7\text{mm}$ under the fixing screws. Leaving some gaps can effectively dissipate heat, preventing any impact on the product's heat dissipation performance and service life.

Relationship Diagrams

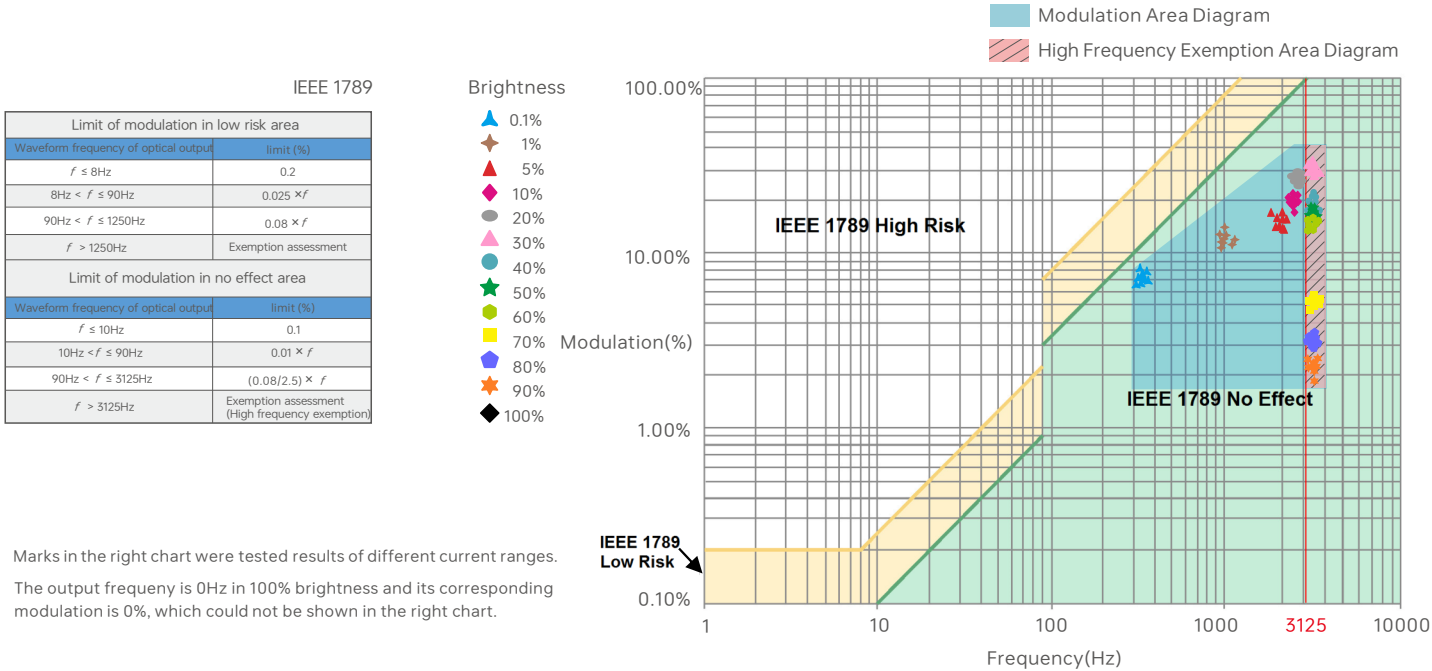


SE-8-100-400-G1T



SE-8-400-700-G1T

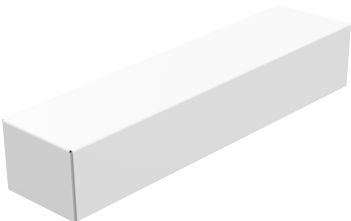
Flicker Test Sheet



Packaging Specifications

Model	SE-8-(100-700)-G1T
Package size	115×36×26mm(L×W×H)
Carton Dimensions	385×245×160mm(L×W×H)
Quantity	20 PCS/Layer; 5 Layers/Carton; 100 PCS/Carton
Weight	0.055kg/PC;5.5kg/Box

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	20250822	Original version	Li Haipeng
A1	20260121	Change silkscreen	Li Haipeng
A2	20260731	Update the product's screen printing and certification labels	Li Haipeng