

Intelligent LED Driver (Constant Current)

- Housing made from SAMSUNG/COVESTRO's V0 flame retardant PC materials.
- Ultra small, thin and lightweight, screwless end cap.
- Change the output current, dimming mode and other parameters via the APP.
- Adjustable output current with 1mA step.
- Automatically recognize 0-10V and 1-10V input signal.
- Ultra-low consumption of 0-10V ports < 0.05mA.
- Soft-on and fade-in dimming function enhances your visual comfort.
- T-PWM super deep dimming technology, 0.01% dimming depth.
- The whole dimming process is flicker-free with high frequency exemption level.
- Comply with the EU's ErP Directive, networked standby < 0.5W.
- When there is no load, the output will be 0V to prevent damage to LEDs due to poor contact.
- Overheat, over voltage, overload, short circuit protection and automatic recovery.
- Suitable for Class I / II indoor light fixtures.
- Normal service life can reach 100,000 hours.
- 5-year warranty (Rubycon capacitor).

4 in 1 dimming
0-10V
1-10V
10V PWM
RX

DIM

T-PWM
Dimming Technology

Flicker Free
IEEE 1789

Dimmable:
1:10000    

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



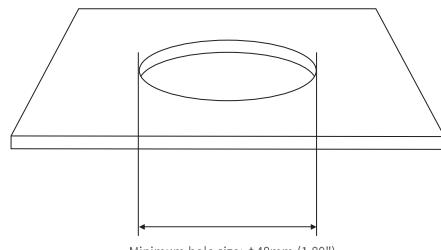
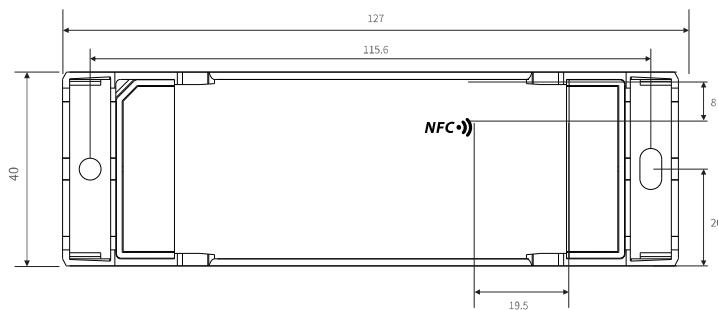
NFC•)

Technical Specs

Model	SE-20-100-700-W1A		
Features	Output Type	Constant current	
	Dimming Interface	0-10V(1-10V, 10V PWM, RX)	
	Output Feature	Isolation	
	Protection Grade	IP20	
	Insulation Grade	Class II (Suitable for class I / II / III light fixtures)	
OUTPUT	Output Voltage	9-42Vdc	
	Maximum output voltage	≤48Vdc	
	Output Current Range	100-700mA	
	Output Power Range	0.9W-20W	
	Dimming Range	0~100%, down to 0.01%	
	LF Current Ripple	<3%(Maximum current for non dimming state)	
	Current Accuracy	±5%	
INPUT	PWM Frequency	≤3600Hz	
	DC Voltage Range	120-300Vdc	
	AC Voltage Range	100-240Vac	
	Input Voltage	115Vac/230Vac	
	Frequency	0/50/60Hz	
	Input Current	≤0.25A/115Vac, ≤0.13A/230Vac	
	Power Factor	PF>0.95/115Vac (at full load), PF>0.9C/230Vac (at full load)	
	THD	THD≤10%/230Vac, at full load	
	Efficiency (Typ.)	84%@700mA(at full load), 87%@500mA(at full load),	
	Inrush Current	Cold start 15A(Test twidh=102us tested under 50% Ipeak)/230Vac	
ENVIRONMENT	Anti Surge	L-N: 2kV	
	Leakage Current	Max. 0.24mA	
	Working Temperature	ta: -20 ~ 50°C tc: 80°C	
	Working Humidity	20 ~ 95%RH, non-condensing	
	Storage Temperature/Humidity	-40 ~ 80°C/10-95%RH	
PROTECTION	Temperature Coefficient	±0.03%/°C(0-50°C)	
	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	
SAFETY & EMC	Short Circuit Protection	Enter hiccup mode if short circuit occurs, and recover automatically	
	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
		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
		KC	Korea KC61347-1, KC61347-2-13
		EAC	Russia IEC61347-1, IEC61347-2-13
		RCM	Australia AS 61347-1, AS 61347-2-13
	EMC Emission	ENEC	Europe 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)
		CUL	Canada CSA C22.2 NO.250.13
		UL	America UL 8750
		CCC	China GB/T17743, GB17625.1
		CE	European Union EN55015, EN61000-3-2, EN61000-3-3, EN61547
	EMC Immunity	KC	Korea KSC 9815, KSC 9547
		EAC	Russia IEC62493, IEC61547, EH55015
		RCM	Australia EN55015, EN61000-3-2, EN61000-3-3, EN61547
		UKCA	Britain BS EN IEC 55015, BS EN IEC 61000-3-2, BS EN 61000-3-3, BS EN 61547
		CUL	Canada ICES-005
		UL	America FCC PART 15B
ErP	EN61000-4-2,3,4,5,6,8,11, EN61547		
	Power Consumption	<0.5W (After shutdown by command)	
	No-load power consumption	<0.5W (When the lamp is not connected)	
	IEEE 1789	Meet IEEE 1789 standard/High frequency exemption level	
	CIE SVM	Pst LM≤1.0, SVM≤0.4	
OTHERS	DF	DF ≥ 0.9	
	Weight(N.W.)	Net weight: 99.7g/PC; gross weight: 108.2g/PC	
	Dimensions	127×40×23mm(L×W×H)	

Product Size

Unit: mm



Wiring Diagram

0-10V Connection

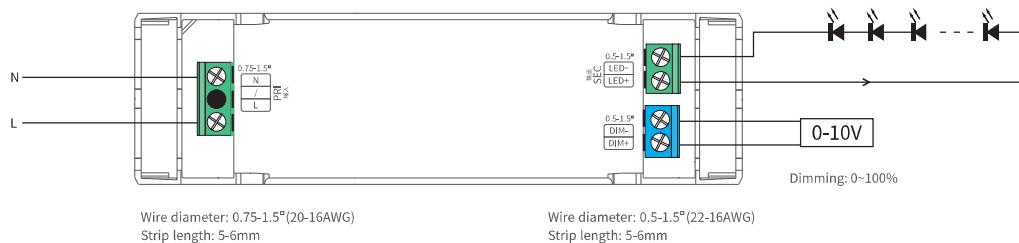
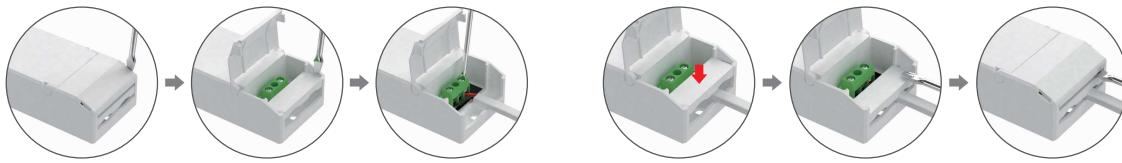


Table of Typical Corresponding Parameters for Current

The typical 13 current data sets below are for reference when selecting LED fixture models. More current levels can be set by NFC using mobile APP with 100-700mA adjustable in 1mA step							
Output Current	100mA	150mA	200mA	250mA	300mA	350mA	400mA
Output Voltage	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc	9-42Vdc
Output Power	0.9-4.2W	1.35-6.3W	1.8-8.4W	2.25-10.5W	2.7-12.6W	3.15-14.7W	3.6-16.8W
Output Current	450mA	500mA	550mA	600mA	650mA	700mA	/
Output Voltage	9-42Vdc	9-40Vdc	9-37Vdc	9-34Vdc	9-31Vdc	9-28.5Vdc	/
Output Power	4.05-18.9W	4.5-20W	4.95-20.35W	5.4-20.4W	5.85-20.15W	6.3-19.95W	/

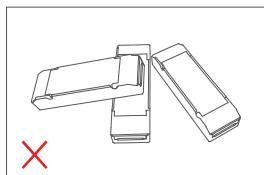
Application Diagram of Protective Cover



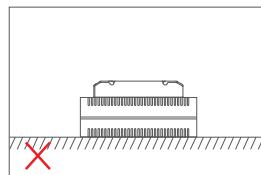
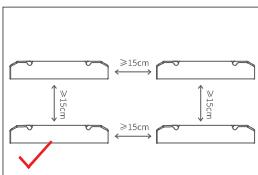
1. Put the head of a screwdriver on the side of the housing to pry up both the protective cover and wire fixing board. Then remove the wire fixing board and connect to the wires as wiring diagram shows.

2. Install the wire fixing board and press it down. Then snap on the protective cover while pressing the wire fixing board with a small flat-head screwdriver.

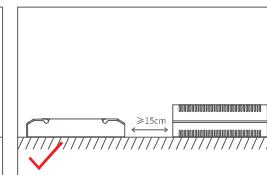
Installation Precautions



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.



Please do 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.



Note: The temperature within the installation area should be within the working temperature range of the products. Please do not install products inside LED fixtures to avoid temperature exceeding the working temperature that may affect the product lifetime.

Use the NFC Lighting APP

Scan the QR code below with your mobile phone and follow the prompts to complete the APP installation [According to performance requirements, you need to use a NFC-capable Android phone, or an iPhone 8 and later that are compatible with iOS 13 or higher].



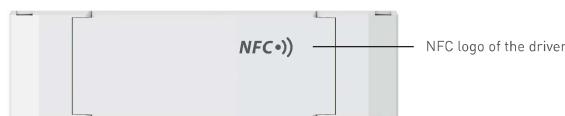
* Before you begin setting the parameters of the driver, please make sure the driver is powered off.

Read/Write the LED driver

Use your NFC-capable phone to read LED driver data, then edit the parameters and they can be directly written to the driver.

1. Read the LED driver

On the APP home page, click **【Read/Write LED driver】**, then keep the programmer's sensing area close to the NFC logo of the driver to read the driver parameters.

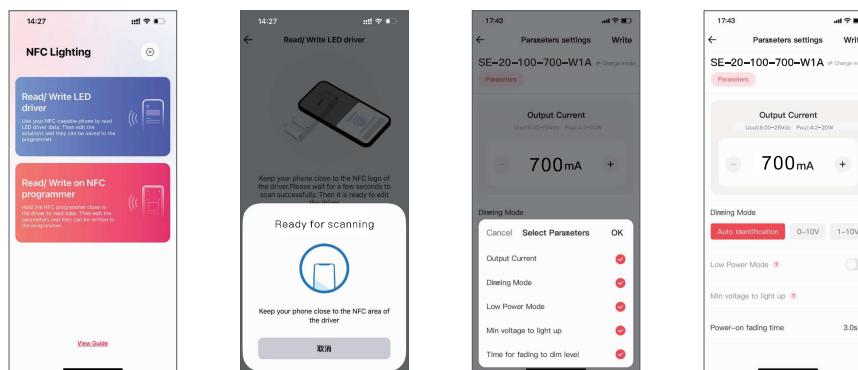


2. Edit the parameters

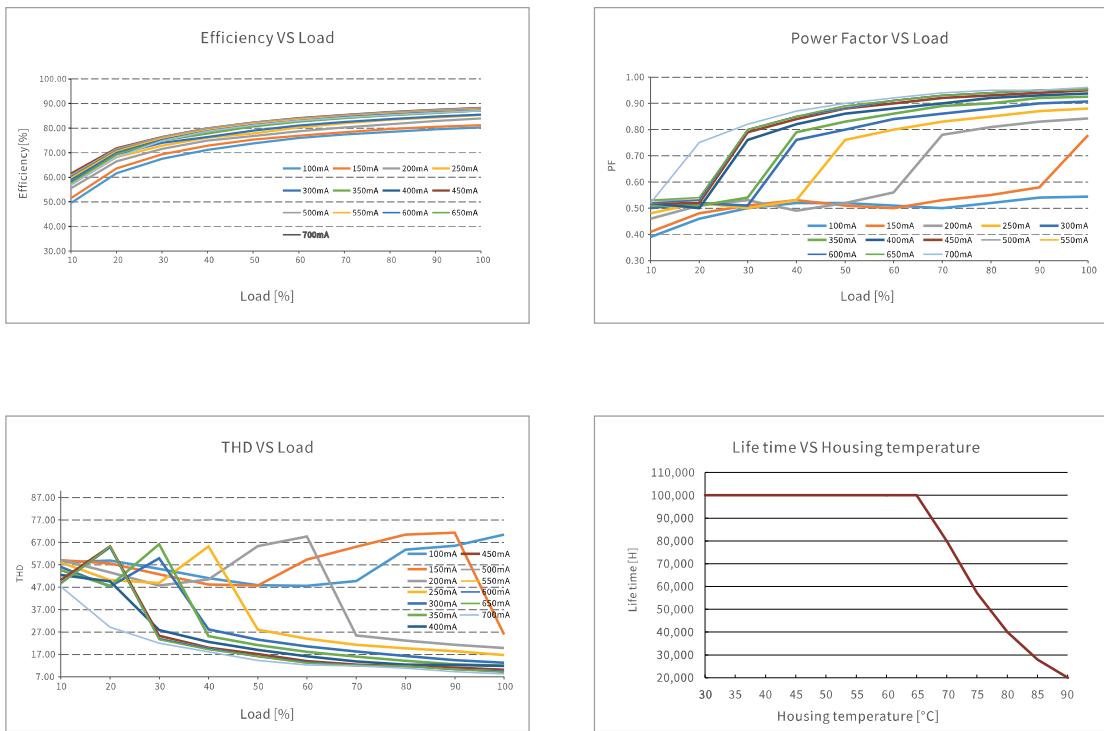
Click **【Parameter settings】** to edit the advanced parameters, like output current, dimming mode, low power mode, etc.

3. Write to the driver

After completing the parameter settings, click **【Write】** in the upper right corner, and keep the programmer's sensing area close to the NFC logo of the driver, so the parameters can be written to the driver.

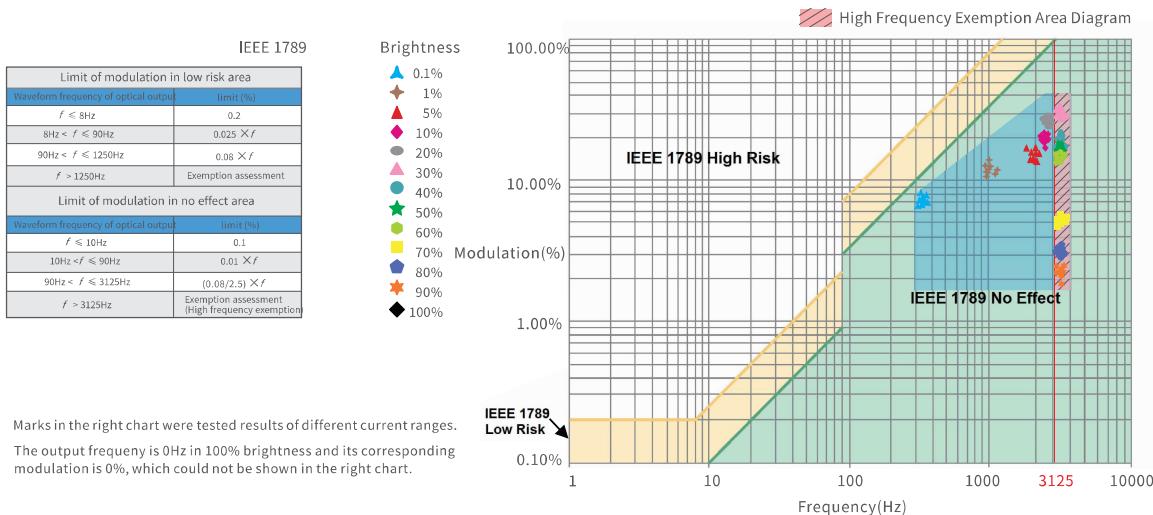


Relationship Diagrams



SE-20-100-700-W1A

Flicker Test Sheet



Packaging Specifications

Model	SE-20-100-700-W1A
Carton Dimensions	372×355×105mm(L×W×H)
Quantity	32 PCS/Layer; 2 Layers/Carton; 64 PCS/Carton
Weight	Net weight: 0.0997kg/PC; gross weight: 0.1082kg/PC; 7.4kg±5%/Carton

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 of the product. Please install the product in an 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 an 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	20230513	Original version	YangWeiling
A1	20250804	Update product silkscreen, certification information, and change logo.	Simin Zhong