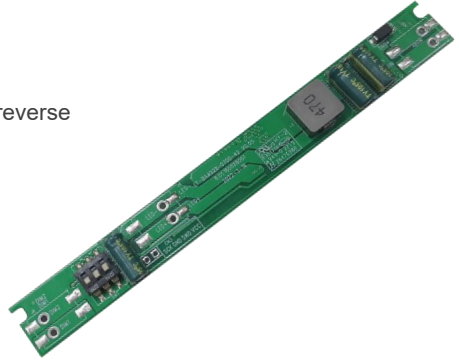


### Features

- Constant current output and current adjustable via DIP switch
- All-round protections: short circuit, over load, no load and anti-reverse connection
- Compact size
- 0-10V/PWM/Rx dimmable
- Flicker free during the whole process of dimming
- 5-year warranty (please refer to the warranty condition)



### Applications

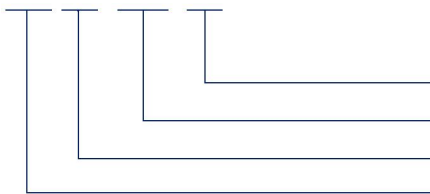
· Horticultural lighting · indoor office lighting · decorative lighting · commercial lighting · residential lighting

### Descriptions

LF-BAA028-0700-42 is a 28W constant current 0-10V/PWM/Rx dimmable LED driver. Its rated input voltage is 48Vdc $\pm$ 5% and output current can be adjusted via DIP switch from 350 to 700mA with every 50mA as a step. It features compact size, built-in design (inside the magnetic track box), high efficiency and flicker-free effect.

### Product Model

LF - BAA 028 - 0700 - 42



- 42: maximum output voltage: 42V
- 0700: maximum output current: 700mA
- 028: rated power: 28W
- BAA: 0-10V/PWM/Rx dimmable LED driver

## ■ Electrical Characteristics

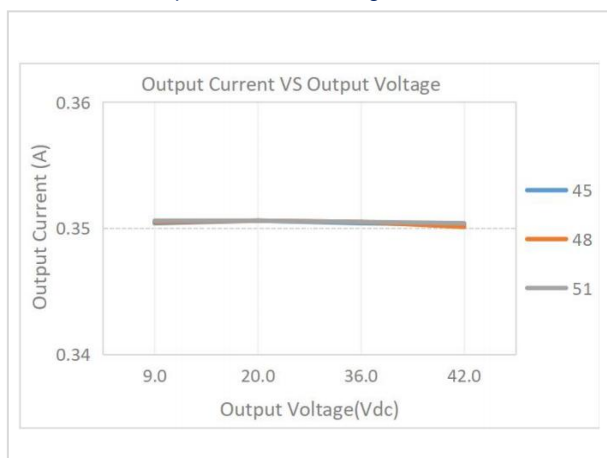
Model		LF-BAA028-0700-42							
Environment Descriptions	Output Current	350mA	400mA	450mA	500mA	550mA	600mA	650mA	700mA
	Output Voltage	9-42V ( $V_{in}-V_o \geq 7V$ )							
	Output Power	29.8W max.							
	Flicker Index	IEC-Pst $\leq 1$ , CIE SVM $\leq 0.9$ , modulation depth $\leq 1\%$ Complies with flicker-free standard: IEEE Std 1789-2015							
	Current Tolerance	$\pm 10\%$	$\pm 8\%$	$\pm 5\%$					
Input	Input Voltage	48Vdc $\pm 5\%$ (positive or negative electrode not necessary to be identified)							
	Input Current	0.75A max.							
	Efficiency	$\geq 92\%$							
Protections	Short Circuit	Auto-recovery							
	Over Load	The output current decreases when the actual voltage exceeds the output voltage and automatically recovers after the load is lightened.							
	No Load	The driver cannot be easily damaged.							
	Anti-reverse Connection	The positive or negative electrode of input terminal are not necessary to be identified.							
Environment Descriptions	Operating Temperature	$-20^{\circ}\text{C} - +60^{\circ}\text{C}$							
	Operating Humidity	20-90%RH (without condensation)							
	Storage Temperature/ Humidity	$-30^{\circ}\text{C} - 80^{\circ}\text{C}$ (6 months in Class I environment); 10-90%RH (without condensation)							
	Atmospheric Pressure	86-106kPa							
Other Parameters	RoHS	RoHS 2.0 (EU) 2015/863							
	Warranty Condition	5 years							
Testing Equipment	Digital power meter: CHROMA66202, oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber; Everfine EMS61000-5B; Everfine EMS61000-4A, spectrometer: KH3935, hi-pot tester: TH9201B, flicker tester (flicker-free coefficient test): 60N-01, etc.								
Testing Remarks	If there are no special remarks, the above parameters are tested at the ambient temperature of $25^{\circ}\text{C}$ , humidity of 50%, full load and input voltage of 48Vdc.								

**Electrical Characteristics**

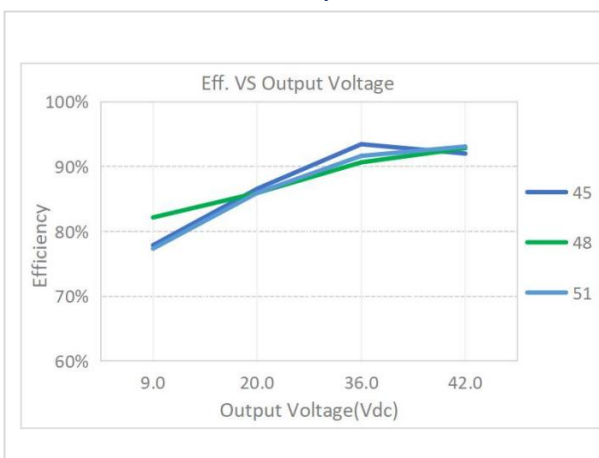
<b>Testing Remarks</b>	<ol style="list-style-type: none"> <li>1. When using the magnetic function, pay attention to making the PCB insulated in case that the driver fails to work.</li> <li>2. For some special requirements on driver's installation, make sure that the installation dimension match the one of PCB in case that the circuit board is damaged; during the installation, avoid the abnormalities such as short circuit, open circuit and so on which would incur the failure or damage of LED driver .</li> <li>3. The plastic accessories matching the magnetic light driver must meet the fire rating of UL94-V0 or above.</li> <li>4. Pay attention to keeping the driver away from water, moisture, etc. during application in case of the abnormality of short circuit.</li> </ol>
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**Product Characteristic Curves**

Output Current & Voltage Curve



Efficiency Curve




**Product Terminal & DIP Switch Definitions**

Product Terminals

INPUT		OUTPUT	
48VIN	DC input terminal (positive or negative electrode not necessary to be identified)	LED+	Positive electrode output of LED driver
48VIN	DC input terminal (positive or negative electrode not necessary to be identified)	LED-	Negative electrode output of LED driver
DIM1	Positive electrode output of 0-10V/PWM/Rx dimming terminal		
DIM2	Negative electrode output of 0-10V/PWM/Rx dimming terminal		

**Product Terminal & DIP Switch Definitions**

Product DIP Switch (current adjustable via built-in DIP switch)

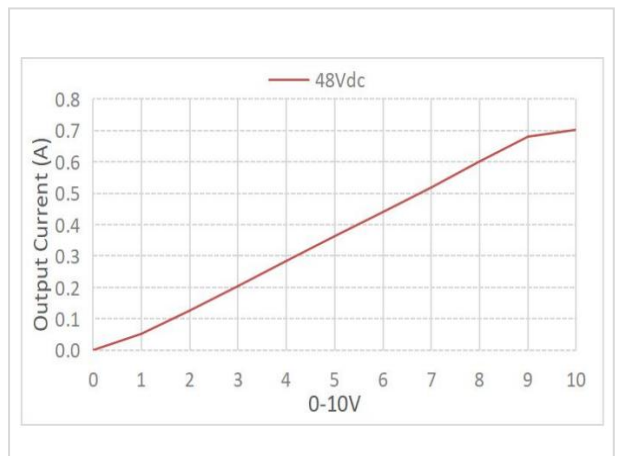
Current Adjustment Reference Table				
Output Current	1	2	3	DIP Switch Diagram
350mA	OFF	OFF	OFF	
400mA	OFF	OFF	ON	
450mA	OFF	ON	OFF	
500mA	OFF	ON	ON	
550mA	ON	OFF	OFF	
600mA	ON	OFF	ON	
650mA	ON	ON	OFF	
700mA	ON	ON	ON	

**Dimming Operation Instructions**

0-10V Dimming Operation

- Connect 0-10V signal to DIM terminal.
- Flicker free during the whole process of dimming
- DIM+/- (without signal connected): 100% rated current output

0-10V Dimming Curve



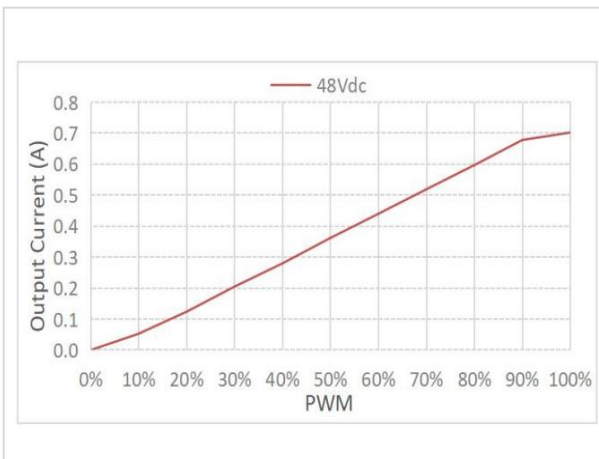
Remark: input: 48Vdc, output: 42Vdc/700mA (this data is measured by Lifud 0-10V dimmer and the chart is for reference only)

■ **Dimming Operation Instructions**

PWM Dimming Operation

- Connect PWM signal to DIM terminal.
- Compatible signal range: 400-4000Hz, amplitude: 10V
- DIM+/- (without signal connected): 100% rated current

PWM Dimming Curve

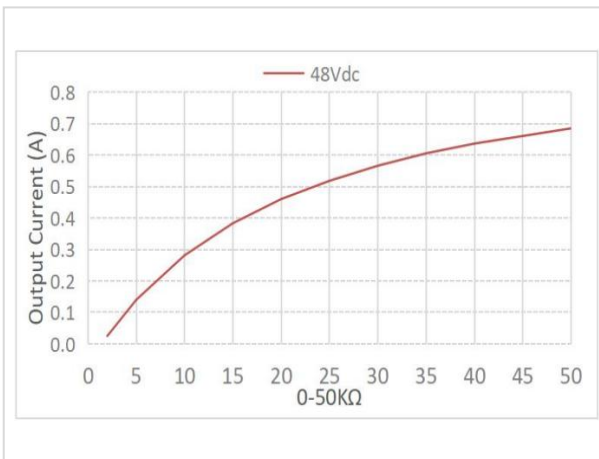


Remark: input: 48Vdc, output: 42Vdc/700mA (this data is measured by Lifud PWM dimmer and the chart is for reference only)

Rx Dimming Operation

- Connect Rx signal to the DIM terminal.
- Dimming range: 0-50K (in normal/low temperature); 0-60K (in high temperature)
- DIM+/- (without signal connected): 100% rated current

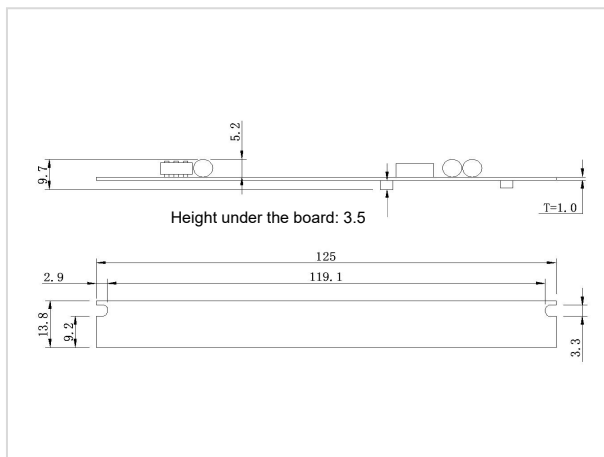
Rx Dimming Curve



Remark: input: 48Vdc, output: 42Vdc/700mA (this data is measured by Lifud resistance dimmer and the chart is for reference only)

■ **Structure & Dimensions (unit: mm)**

Appearance dimension (positions of components are subject to the ones of actual object)



■ **Packaging Specifications**

Model	LF-BAA028-0700-42
Carton Size	385*285*210 mm (L*W*H)
Quantity	20 pcs/layer; 11 layers/ctn; 220 pcs/ctn
Weight	0.01 kg/pc; 3.00 kg/ctn

## ■ Transportation and Storage

### 1. Transportation

- Suitable transportation means: vehicles, boats and aeroplanes.
- In transit, it is necessary to prepare awnings for rain or sun protection. Moreover, please keep civilized loading and unloading to prevent the vibration or impact of LED driver as much as possible.

### 2. Storage

- The storage of LED driver shall conform to the standard of Class I environment. When using LED drivers which have been stored for more than 6 months, please re-test them firstly. Do not use them unless they are tested to be qualified.

## Cautions

- Please use Lifud LED driver according to its parameters in the specification, otherwise the LED driver may malfunction.
- Using any incompatible light fixtures or those that have not been certified may cause fire, explosion or other risks.
- Man-made damage is beyond the scope of Lifud warranty service.

Remark: Lifud Tecnology Co., Ltd. reserves the right to interpret any contents of this specification.