

Machine Vision



# LTN-450 Series

4-CH/ 2-CH constant-current LED controller supporting 10A overdriving



CE FCC

## Key Features

- Constant current LED lighting control
- 4-CH/ 2-CH LED outputs
  - Up to 2A continuous output, max 180 W rated
  - Up to 10A overdriving output, max 500 W peak
- 4-CH/ 2-CH isolated trigger inputs
- Support versatile operating modes: continuous, pulsed, overdriving and switched
- Support RS-232 and Ethernet interface
- 12 ~ 35V wide-range DC input

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## Introduction

LTN-450 series is a constant-current LED lighting controller with overdriving capability. Driving LED light with constant current output offers precise control of light intensity in mA scale and generates stable illumination for machine vision applications.

LTN-450 series provides up to four LED control channels capable of delivering up to 2A current continuously with a total of 180W power budget. It also has four isolated trigger inputs to accept strobe signals from cameras or proximity sensors. In addition, LTN-450 supports 10A overdriving output to strobe the LED with up to 10x brightness for a very short period of time. This gives a burst of 500W peak energy to LED lights and benefits applications such as line scan imaging and high-speed image capture. LTN-450 imposes a patent-pending, MCU-based scheme to rigidly regulate strobe pulse width and overall duty cycle to protect LED lights against burning-out.

The operating mode, output current, trigger source, trigger delay and pulse width can be easily configured via RS-232 or Ethernet interface. A simple GUI utility and cross-platform driver API make it easy to manipulate and control in various applications. LTN-450 series provides a cost-effective way to control the LED where precise and stable illumination matters.

## Specifications

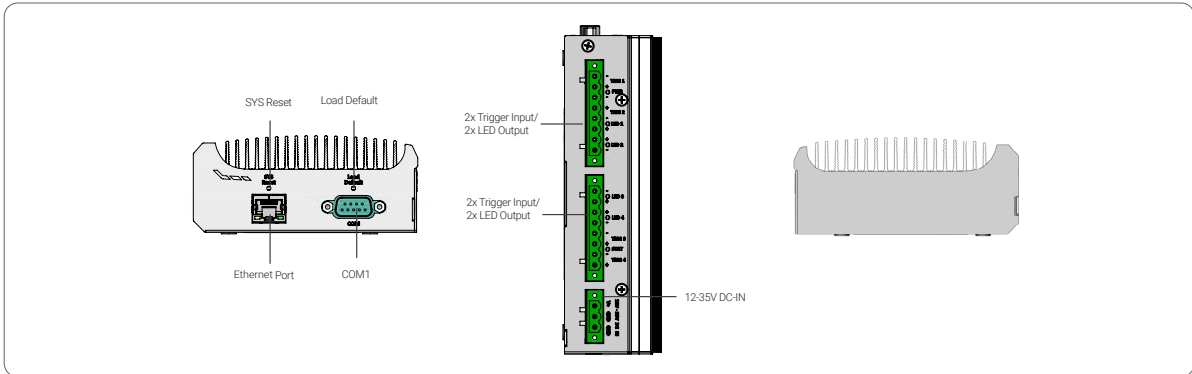
	LTN-454	LTN-452
Communication Interface	1x RS-232 COM port 1x Ethernet port	
LED Lighting Controller	4-CH constant current outputs	2-CH LED constant current outputs
Output voltage	Continuous: 5V to 24V Overdriving: 5V to 40V	
Supply voltage	1x 3-pin pluggable terminal block for 12~35V DC input	
Output current	Up to 2A in 2.5 mA increments Up to 10A for overdriving in 10 mA increments	
Output power	Up to 180W rated power output for continuous mode Up to 500W peak power output for overdriving mode	
Operating modes	Continuous, pulsed, overdriving and switched modes	
Trigger input	4-CH isolated trigger inputs Logic low: 0V ~ 1.5V Logic high: 5V ~ 24V	2-CH isolated trigger inputs Logic low: 0V ~ 1.5V Logic high: 5V ~ 24V
Pulse width	For overdriving mode: minimum 50 $\mu$ s in 1 $\mu$ s increments, maximum 30 ms according to 100% to 1000% overdriving scale For other modes: minimum 400 $\mu$ s in 1 $\mu$ s increments	
Pulse Delay	Minimum 0s $\mu$ s in 1 $\mu$ s increments	
Operating Temperature	0°C ~ 60°C *	
Dimension	47 mm(W) x 108 mm(D) x 150 mm (H)	
Mounting	DIN-rail mount	
Weight	0.9 kg	
EMC	CE/FCC	

\* Due to various operating modes and current output discrepancies, active cooling may be required.

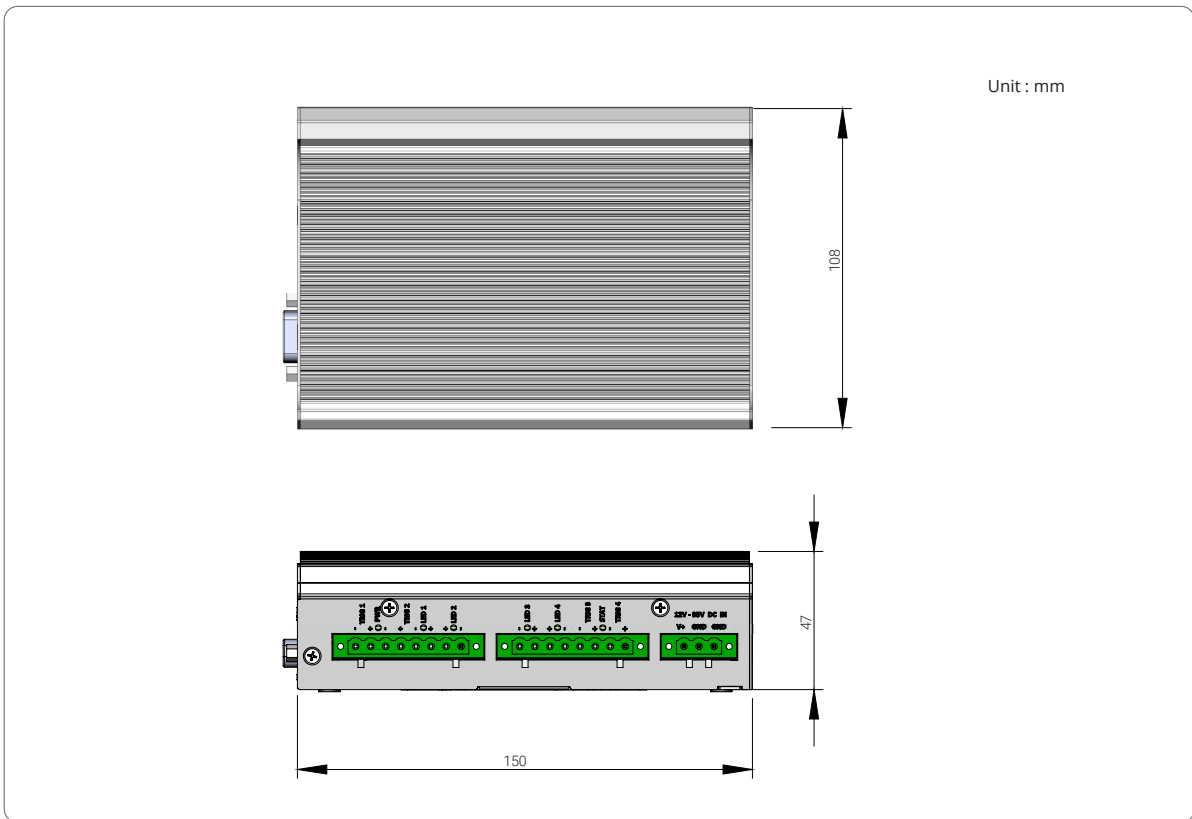
LTN-450 Series



## Appearance



## Dimensions



## Ordering Information

Model No.	Product Description
LTN-454	4-CH constant-current LED controller supporting 10A overdriving output and 4x trigger inputs
LTN-452	2-CH constant-current LED controller supporting 10A overdriving output and 2x trigger inputs

## Optional Accessories

PA-280W-ET2	280W AC/ DC power adapter 24V/ 11.67A; 16AWG/ 100cm; cord end terminals for terminal block, operating temperature : -30°C to 60°C.
PA-480W-DIN	480W AC/ DC power adapter DIN-rail mount, 24V 20A, 90~264VAC/ 127~370VDC, terminal block, -20 to 70°C

## Assured Systems

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