

LTN-450 Series

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



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 µs in 1 µs increments, maximum 30 ms according to 100% to 1000% overdriving scale For other modes: minimum 400 µs in 1 µs increments		
Pulse Delay	Minimum 0s µs in 1 µs 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 according to EN61000-6-4&EN61000-6-2		
	* Due to vario	ous operating modes and current output discrepancies, active cooling may be required.	

COASTIPC

LTN-450 Series



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 to70°C