



## Pulsar 320E High Current Controller

## Product Highlights

- The Pulsar 320E provides the ultimate in lighting control for strobe-only, high power applications.
- 2 outputs for controlling 2 lights independently, each capable of 50A @ 100V DC.
- NOTE: If you've purchased a Pulsar 320 in the past, please see the change notice below for details on what updates have been made to the Pulsar series.



## General Specifications

Controller Style	Discrete Control System (External, Detachable)	
User Interface	Software GUI	
Operating Mode	Pulse (Overdrive Strobe)	
Light Head Connection	Via Proprietary Header Block with Embedded EEPROM on Light Head Cable (C5)	
Input Supply Requirements	24V DC Nominal, 4.0A Recommended 21V Min - 30V Max; Power Inputs Reverse-Polarity Protected	
Output Channels	Number of Outputs: 2 Number of Channels per Output: 1	
Output Power	Pulsed: 5000W Peak Total, 2500W Peak per Channel*	
Output Current	Pulsed: 100A Max Total, 50A per Channel*	
Output Voltage	Pulsed: 100V Max*	
Trigger Signal	2.5V Min - 30V Max, <=5mA	
Trigger Protection	Protected up to 30V	
Trigger Delay	<2µs	

# Pulsar 320E

Trigger Frequency Limit	2KHz	
Pulse Width Range	1μs - 100ms	
Programmable Pulse Delay	1μs - 1ms	
Duty Cycle Range	Typical <1% for high current overdrive, up to 15%  Dependent on the limitations of the connected light.	
Dimming Range	0% - 100%, 1mA Increments via Software Settings	
Status Indicator LEDs	Green: Power  Yellow: Communication  Red: Error	
Communication	10/100 Ethernet Standard TCP-IP, UDP USB (Custom HID) C++ Library	
Operating System Software	GUI: Windows 7+ x86 and x86-64, Linux x86 and x86-64 (requires Kernel 2.6.39+	
Support	with libudev installed)	
Operating Temperature Range	0°C to +55°C	
Storage Temperature Range	-25°C to +85 °C	
IP Rating	Not Rated	
Dimensions	4.40" x 3.37" x 5.10" (111.6mm x 85.6mm x 129.5mm)	
Weight	1.63lb (739g)	
Mounting	DIN Rail	
Case Material	Aluminum and Steel	
Warranty	5 Years	
Compliance	CE, RoHS	
	*Values shown are based on controller component limitations. Actual limitations will vary depending on the limits set for the connected light head. These limits are determined using Advanced Illumination's proprietary SignaTechTM (Signature Technology) in order to ensure safe peak performance.	

## Part Number Key

Model	Controller
Pulsar	XXXX
Pulsar	320E

Lights for use with the Pulsar 320E need to be configured with a C5 connector.

Stock Product: shipped next day

Pulsar 320E

#### Change Notice

PCN No: 156

Date Issued: 11/10/20

Notice Type: Product Change

Product Type: Pulsar 320

Change Notification Summary

Effective immediately, Advanced illumination's (Ai) Pulsar 320 is no longer available and will be replaced with the Pulsar 320E. The microprocessor used within the Pulsar 320 was discontinued so Ai was forced to replace it. To properly support this new microprocessor, an updated software revision is now required to operate new units. A link to this new software revision will be available on the Pulsar 320E product webpage under downloads. In Q3 of 2021, additional features will be added to the Pulsar 320E, including but not limited to improved commands, DHCP support and UDP functionality.

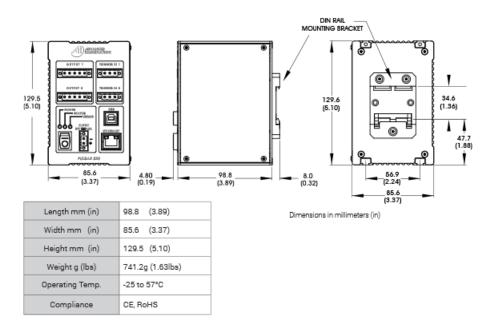
If you currently have an older Pulsar 320, all of the necessary downloads for that device will remain accessible under the downloads section on the Pulsar 320E webpage.

To make the differentiation between the original Pulsar 320 and the new Pulsar 320E visually clear, Ai has updated the Pulsar 320E front labels to incorporate green as a primary color, as opposed to gray.

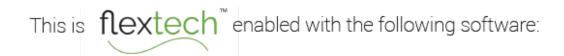
Please contact your Ai Sales Representative if you have any guestions.

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## Mechanical Specs



## Control Specs



#### SignaTech®

The proprietary SignaTech® (Signature Technology) control system allows an LED illuminator to operate at maximum output without risk of damage.

A microprocessor-based controller reads a SignaTech® memory chip, specifically programmed for each illuminator, in order to establish maximum operating parameters. The memory chip, located in the light-head cable, is preprogrammed with details about the illuminator's circuit design as well as specific LED characteristics.

## Warranty Information

Every Advanced illumination, Inc. (Ai) product is thoroughly inspected and tested before leaving the factory. Products are warranted to be free of defects in workmanship and materials for a period of FIVE YEARS from the original date of purchase. Should a defect develop during this period, customers may return the complete product, freight prepaid, to one of Ai's distributors or to the Ai factory. All product warranty returns require a Return Merchandise Authorization (RMA) number which is obtained from Customer Service. The RMA number must be clearly marked on the outside of the package. Ai will inspect the unit, and if a defect is found will, at our option, repair or replace the product without charge. Ai disclaims liability for any implied warranties, including implied warranties of "merchantability" and "fitness for a specific purpose." For products under warranty that have since been discontinued, Ai will make an effort to replace with equivalent parts; for circumstances that do not allow for equivalent replacement, Ai reserves the right to repair or replace these products with an updated version. Ai cannot be held responsible for the unauthorized or inappropriate use of its products. Any unauthorized repair or modifications will result in a voided warranty.

No Liability for Consequential Damages: In no event shall Ai be liable for any consequential, special, incidental, or indirect damages of any kind arising from the sale or use of the products.

#### Electromagnetic Compatibility

This product was tested and complies with the regulatory requirements and limits for electromagnetic compatibility (EMC) as stated in the product specifications. These requirements and limits are designed to provide reasonable protection against harmful interference only when the product is operated in its intended industrial electromagnetic environment. To minimize the potential for electromagnetic interference or unacceptable performance degradation, install and use this product in strict accordance with the instructions in the product documentation.

#### Customer Service

For information on existing orders, or to make an order adjustment, contact us Monday through Friday 8:00 am to 5:00 pm ET or send an email to orders@advancedillumination.com.

## Company Information

#### **Advanced Illumination**

440 State Garage Road, Rochester, VT 05767

Phone: 802.767.3830 Fax: 802.767.2636

Email: info@advancedillumination.com

Web: advancedillumination.com

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