

# PixLite® E16-S Mk3

## Pixel Controller

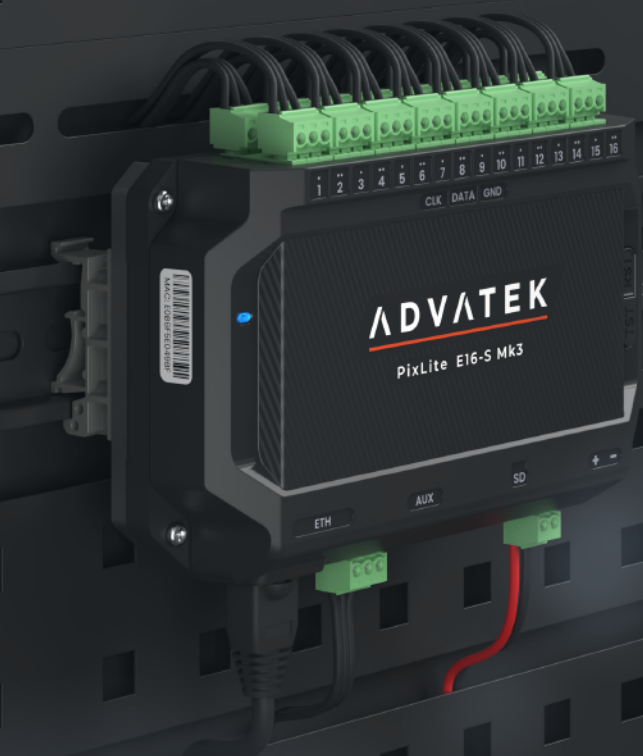


DATASHEET

### KEY FEATURES

- 96 Universes of Art-Net or sACN
- 16 Non-Powered Pixel Outputs
- Over 80+ Pixel Protocols Supported
- microSD Card Slot for Advatek SHOWTime™
- Auxiliary Port for DMX512 In/Out
- Configure Using Any Web Browser or Advatek Assistant 3 Software
- Electrical Fault Protection on All Ports

Made in Australia  
5 Year Warranty



**ADVATEK**  
LIGHTING

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### PRODUCT OVERVIEW

The **PixLite E16-S Mk3** is an economical, but powerful pixel LED controller built upon Advatek's 3rd generation PixLite Mk3 processor. The feature set of this processor are too significant to fit here, explore in the [PixLite Mk3 Processor Datasheet](#).

The **PixLite E16-S Mk3** drives up to 6 universes of data on each of its 16 outputs for a total of 96 universes of LED pixel control. The easily accessible and removable screw terminal blocks each have three pins [Clock | Data | Ground], which is suitable for installations where pixel power is not routed through the pixel controller.

### A CLOSER LOOK AT THE CONTROLLER

#### SHOW Time

SHOWTime™ unleashes the potential of Advatek PixLite® Mk3 devices to independently drive light shows without a computer or any source of live data.

SHOWTime™ allows users to record and play back pixel shows from the PixLite E16-S Mk3 using the inbuilt microSD slot. Design your own breathtaking pixel shows, record them directly onto the microSD card and play them back as many times as you wish.

SHOWTime™ also unlocks the ability to create up to 25 powerful triggers and use advanced intensity controls to enable true standalone behavior and enhance live environments.

#### BUDGET FRIENDLY

Lower the cost of your installation with the removal of some features that are standard on most of the PixLite Mk3 range, like powered pixel outputs, smart electronic fuses, dual gigabit Ethernet ports and universe data hardware firewall.

#### FAULT PROTECTION

Features electrical fault protection on all ports resulting in higher reliability and fewer equipment failures. See details on next page.

#### AUXILIARY PORT

Versatile RS485 Auxiliary port can be used as either an input or an output.

As an output, connect DMX512 devices to the port and control them via sACN or Art-Net. As an input, connect a DMX512 source directly to the PixLite and use DMX512 as the data source for your pixels, or as a trigger source, or as a live intensity data source.

#### CERTIFICATIONS



#### 5 YEAR WARRANTY

For your absolute peace of mind, all Mk3 products come with a 5-year warranty. All products need to be used and installed in accordance with their designed purpose and operating environment. Please register your product on our website.

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### SPECIFICATIONS

#### PHYSICAL

Ethernet Ports .....	1 x 10/100 Mbit/s
microSD Card Slot .....	1
Auxiliary Port .....	1 x RS485 Input/Output
Pixel Outputs .....	16 x Non-Powered
Dimensions (inc. connectors) .....	114.5 x 149.5 x 35.5 mm
Weight .....	0.2kg
Enclosure .....	ABS
Mounting .....	Flat surface, DIN rail (optional accessory)

#### CERTIFICATIONS & MARKS

North America .....	ETL Listing (Equivalent to UL Listing)
Europe .....	CE
North America .....	FCC
Canada .....	ICES3
Australia & New Zealand .....	RCM
United Kingdom .....	UKCA

#### PIXEL DATA

##### EXPANDED MODE DISABLED / ENABLED

Pixel Outputs .....	16	/	32
RGB Pixels per Output .....	1020	/	510
RGBW Pixels per Output .....	768	/	384
Universes per Pixel Output .....	6	/	3
Total Pixel Universes .....	96	/	96

#### POWER

Input Power .....	5V - 24V DC
Maximum Power Consumption .....	3.5W

#### THERMAL

Storage Temperature .....	-20°C to +70°C
Ambient Operating Temperature .....	-20°C to +70°C

#### FAULT PROTECTION

Electrostatic Discharge (ESD) .....	All ports protected
Power Input .....	Reverse polarity protection
Auxiliary Port .....	+/- 48V DC fault protection
Pixel Output Clock/Data .....	+/- 36V DC fault protection

#### TESTING STANDARDS

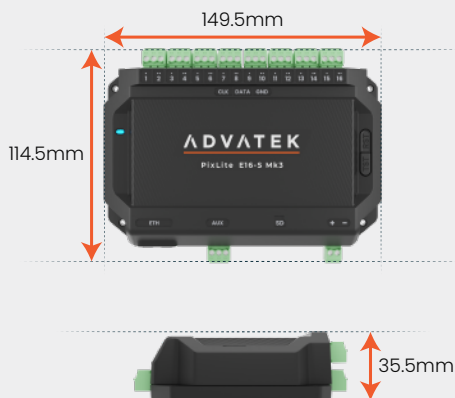
Audio/Video & ICTE - Safety Requirements .....	UL 62368-1
Radiated & Conducted Emissions .....	EN 55032 & FCC Part 15
Multimedia Immunity .....	EN 55035
Restriction of Hazardous Substances .....	RoHS 3 + DD 2011/65/EU + 2017/2102/EU + 2015/863/EU

#### INSTALLATION

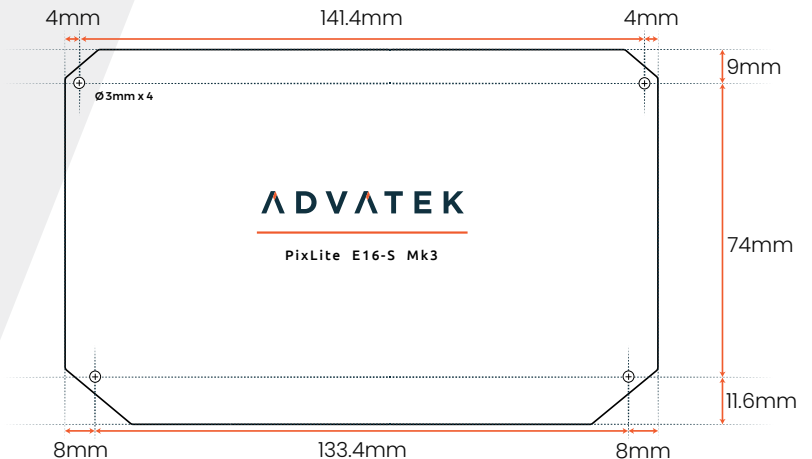
Refer to installation instructions in the Product User Manual for acceptable use and storage requirements.

Standard .....	Indoors Only
With Conformal Coating .....	May be installed outdoors when installed inside a weatherproof enclosure

#### OVERALL DIMENSIONS



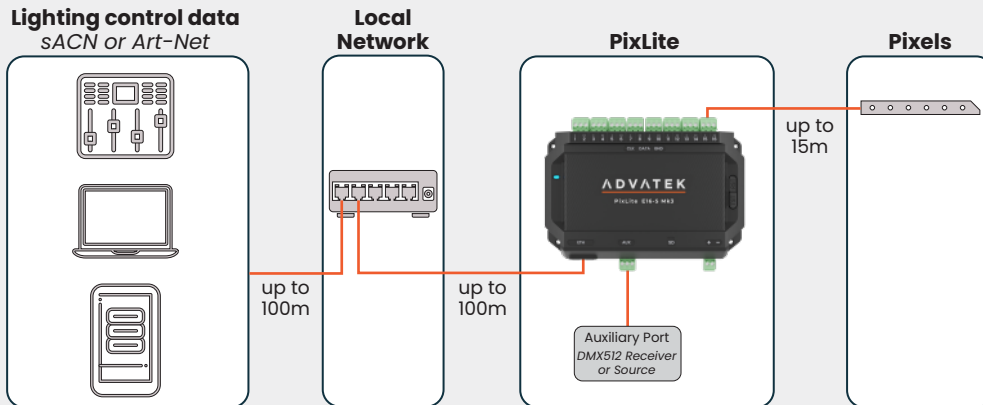
#### MOUNTING DIMENSIONS



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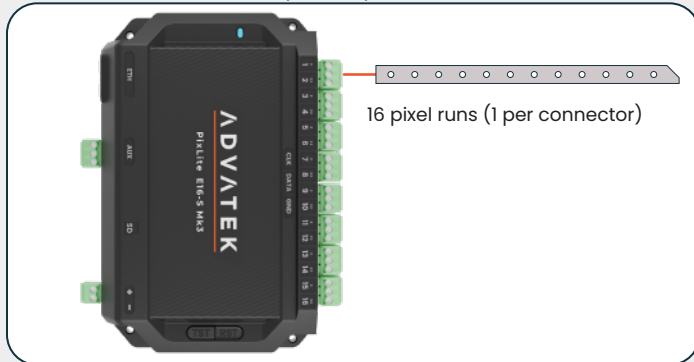
### TYPICAL WIRING DIAGRAM



### COMPATIBLE SYSTEMS

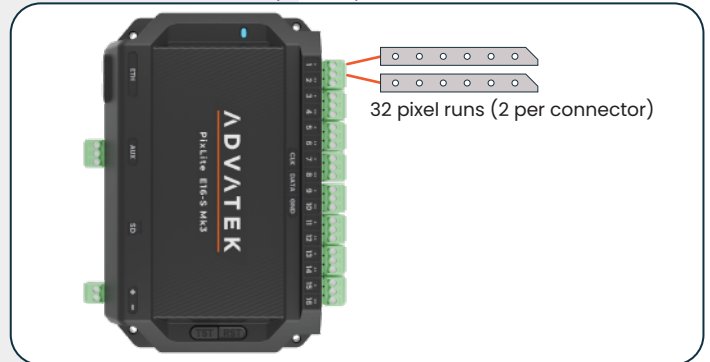
#### Expanded Mode Disabled

Any pixel type  
1020 RGB / 768 RGBW pixels per run



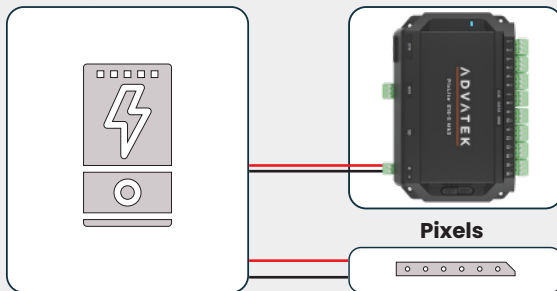
#### Expanded Mode Enabled

Data-only pixel types  
510 RGB / 384 RGBW pixels per run



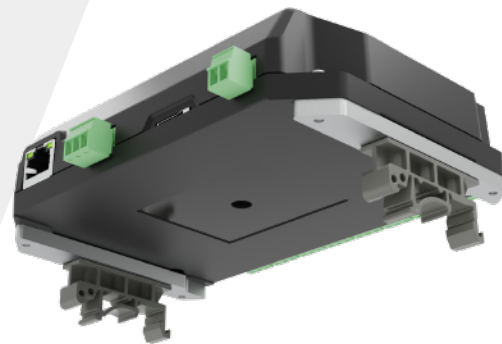
### POWERING PIXELS

#### DC Power Supply 5 - 24V



### OPTIONAL ACCESSORIES

#### Din-Rail Mounting Bracket



### CONNECTIONS TO PIXELS

Normal Usage	Expanded Mode	Differential DMX512	Select Pixels <sup>2</sup>
Clock <sup>1</sup>	Data 1	DMX D-	Backup
Data	Data 2	DMX D+	Data
Data Return	Data Return	Data Return	Data Return

<sup>1</sup> For pixels that do not have a clock input, this pin is not connected.

<sup>2</sup> Many pixels with a backup data input do not require it to be connected to the PixLite as shown. See pixel glossary on the Advatek website to confirm pixels which require a backup connection to the PixLite.

### ORDER CODES

PixLite E16-S Mk3 ..... PIXE16S3  
 PixLite E16-S Mk3 with Conformal Coating ..... PIXE16S3-CC  
 DIN Rail Mount Kit (Suits Single R2F-S, R4D-S, E4-S, E16-S) ..... MNT0101