8PX60-12-W2 – Datasheet

12V 60 pixel/per metre RGB pixel strip on white PCB.

AUSTRALIAN DESIGNED

ENTTEC 8PX60-12-W2 is a 12v 60 pixel per metre addressable LED Pixel Strip designed for professional architectural and entertainment purposes, used to display smooth animated graphics achieving soft pastels and saturated colours on a large scale.

Cut and join into any conceivable shape.

The 8PX60-12-W2's white PCB makes it perfectly suited for installing in extrusions and lightboxes where it will contribute to reflecting as much light forward as possible.

A key feature of ENTTEC's 8PX60-12 pixel strips is their 'Data Backup' line feature, this allows single pixels to be damaged on the strip, but still allow data to pass without effecting your mapping.

It's fast 800 Kbps transmission rate and 8-bit colour depth means graphics and animations played back are smooth and consistent.

At ENTTEC, manufacturing quality and attention to detail is paramount. We always use thick 3oz copper PCB to offer more durability, better heat dissipation and reduced voltage drop when compared to other standard LED strips available on the market. This in combination with the 12v operating voltage allows up to a 10m run with a single power injection.

Feature

- **RGB, 3 in 1 full colour LED pixel strip.**
- **Premium flexible white 3oz copper PCB.**
- **Individually addressable led pixels, suitable for stage, entertainment and architectural applications.**
- **12V DC input supply voltage.**
- **60 Pixels/metre density.**
- **Back up data line BI/BO (In/Out).**
- **SK6813 IC chip (compatible to WS2812 and GS8208B protocol).**
- **16.7 million possible shades.**
- **120-degree illumination.**
- **3M adhesive double side tape on the rear.**
- **Built-in data signal reshaping circuit.**
- **High LED density.**
- **Can be cut or joined at each copper tab.**
- **IP20 Indoor use only.**
- **Designed for use with ENTTEC pixel products.**
- **Maximum 7.2 Watts/Metre.**

Specification

Connectors	2* 4Pin JST SM connectors (3A max)
Ip Rating	IP20
Input Voltage	12v
Watts/Metre (Max)	7.2
Lumens/Metre (Max)	188.2
Efficacy (Lm/Watt)	26.14
Dmx Channels/Pixel	3
Beam Angle	120 °
Control Protocol	SK6813 IC chip (compatible to WS2812 and GS8208B protocol).
Transmission Rate	800 Kbps
Backup Data Line	Yes
Pixel Mapping Order	RGB
PCB Colour	White
PCB Width	10mm / 0.40”
Bend Radius (Min)	30mm / 1.2”
Spacing Between Cuttable Sections	16.6mm / 0.66”
Environmental Operating Temperature	0°C to 50°C 32°F to 122°F
Environmental Operating Humidity	5- 95% (non-condensing)
Weight (5m Roll)	0.18Kg / 0.40lbs
Shipping Dimensions (Single Roll)	240 * 215 * 16mm 9.45 * 8.47 * 0.63”
Shipping Weight (Carton Of 5 Rolls)	0.80Kg / 1.76lbs
Shipping Dimensions (Carton Of 5 Rolls)	260 * 225 * 93mm 10.24 * 10.04 * 3.66”
Warranty	1 year return to base manufacturer warranty

Box Content

- 1* 5m 8PX60-12-W2 reel
- 1* 4Pin JST SM connector (3A max)

Connection

4PIN JST SM Connector:

- +12V
- DO/DI: Data Out/Data In
- BO/BI: Backup Out/Backup In
- GND: Ground

Visit the ENTTEC Knowledge base for wiring guides.

Certification

Maximum Run Length

Colour and lumen output will be affected if maximum length is exceeded. Test conducted at maximum brightness using 12volt driver.

		MAXIMUM LENGTH	
POWER INJECTION	LED PER METRE	RED, GREEN, BLUE	ALL ON
SINGLE	60	10m	7m
DUAL	60	16m	14m

Note: Maximum length of pixel strip run is limited by maximum universes of data.

Safety

- Ensure all cabling is rated to handle the current of each pixel strip section. ENTTEC recommend separate wiring soldered directly to the strip, to substitute the original JST SM connector for sections exceeding 3A current consumption.
- Make all connections and ensure your installation is appropriately fused before powering it.
- Handle with care and adhere to the LED Pixel Strip instruction sheet.
- Pixel strips produce heat; ensure proper thermal management by attaching to a thermally conductive surface.
- This product is intended for indoor use only. Do not expose to moisture, doing so will void the warranty.
- Never plug this product into a dimmer.

Ordering Information

For further support and to browse ENTTEC’s range of products visit the ENTTEC website.

Item	SKU
RGB PIXEL STRIP 60 LEDs/METRE 12V – 5-METRE ROLL - WHITE	8PX60-12-W2

enttec.com

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Due to constant innovation, information within this document is subject to change.