



## 9PDOT3

HI-RES SMART RGB 35mm PIXEL DOTS (24V): 125mm PITCH



### General Information

- Auto addressing
- This device will require an external DC power supply (not included) for normal operation.

### Features

- 125mm Pitch
- Supplied in a string of 50 dots with IP rated connectors at each end (length: 6.65m)
- Compatible with Pixie driver, Pixelator Mini and Pixelator (revB only).
- Opal Dome shaped lens
- Easy wall mounting using the ENTTEC 9PDOT3-CLIP mounting clip accessory.
- Built-in data signal reshaping circuit
- 24V DC input supply voltage
- Suitable for indoor and outdoor use
- IP67 Rated
- On-board thermal fuse within each dot
- Thick copper cabling to combat the effect of voltage drop
- 3-year warranty

### Specifications

Item	Value					
<b>Input Voltage</b>	24V DC					
<b>Max. Power</b>	1.44 W					
<b>LED Source</b>	6pcs SMD3535					
<b>Lumens</b>	15.19 lm					
<b>Efficacy</b>	10.55 lm/W					
<b>Housing</b>	Powder coated aluminum body.					
<b>IP Grade</b>	IP67					
<b>Protocol</b>	ENTTEC 9PDOT (8-bit) or 9PDOT (16-bit)					
<b>DMX Footprint per Dot (8-bit)</b>	3 DMX slots per dot					
	Red		Green		Blue	
<b>DMX Footprint per DOT (16-bit)</b>	6 DMX slots per dot					
	Red Coarse	Red Fine	Coarse Green	Fine Green	Blue Coarse	Blue Fine



<b>LED Ordering</b>	R-G-B
<b>Colour Resolution (8-bit)</b>	$2^8 \times 2^8 \times 2^8 = 16.7$ million (Note 1)
<b>Colour Resolution (16-bit)</b>	$2^{12} \times 2^{12} \times 2^{12} = 68$ billion (Note 2)
<b>Beam Angle</b>	120° (opal dome)
<b>Pixel Pitch</b>	125 mm (8 dots per m)
<b>Size</b>	35 mm x 44 mm (each dot)
<b>Weight</b>	1.26 kg (string of 50 dots)
<b>Working Temp</b>	-20° C to +50° C

**Note 1:**

Number of bits per colour for 9PDOT 8-bit protocol:

8 <sup>th</sup> bit	7 <sup>th</sup> bit	6 <sup>th</sup> bit	5 <sup>th</sup> bit	4 <sup>th</sup> bit	3 <sup>rd</sup> bit	2 <sup>nd</sup> bit	1 <sup>st</sup> bit
Most Significant							Least Significant

**Note 2:**

Number of bits per colour for 9PDOT 16-bit protocol:

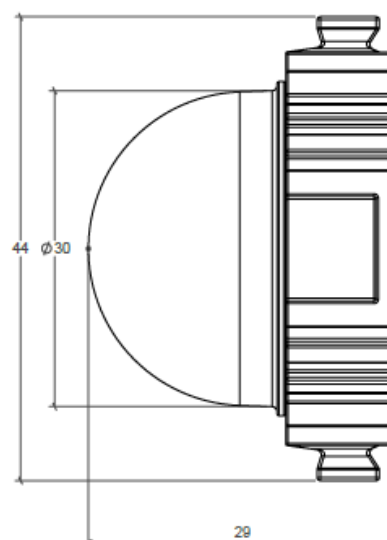
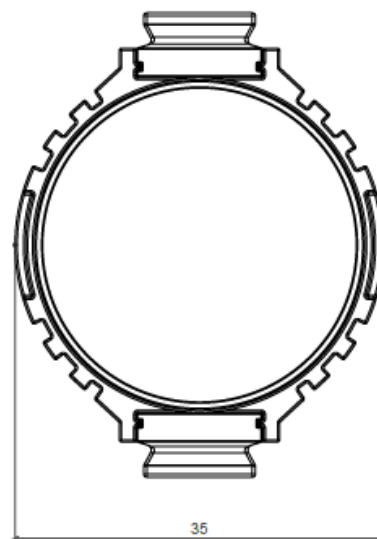
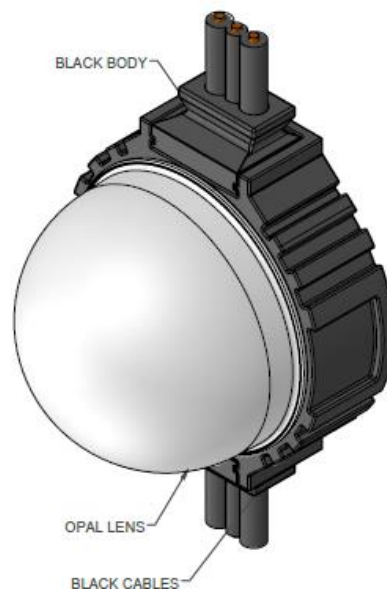
16 <sup>th</sup> bit	15 <sup>th</sup> bit	14 <sup>th</sup> bit	13 <sup>th</sup> bit	12 <sup>th</sup> bit	11 <sup>th</sup> bit	10 <sup>th</sup> bit	9 <sup>th</sup> bit
Most Significant							
8 <sup>th</sup> bit	7 <sup>th</sup> bit	6 <sup>th</sup> bit	5 <sup>th</sup> bit	4 <sup>th</sup> bit	3 <sup>rd</sup> bit	2 <sup>nd</sup> bit	1 <sup>st</sup> bit
4 Least Significant Bits not used							

- Holes in the dome allows the DOT proper ventilation and elimination of residual water without affecting it's IP rating.

## Voltage Drop

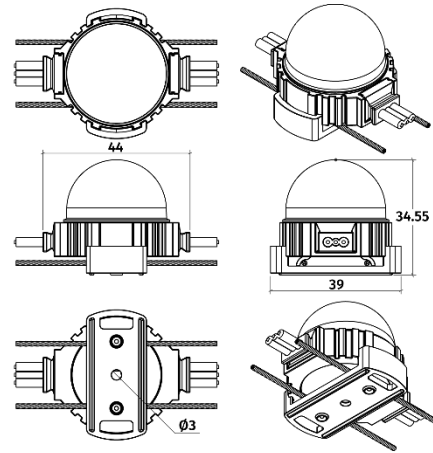
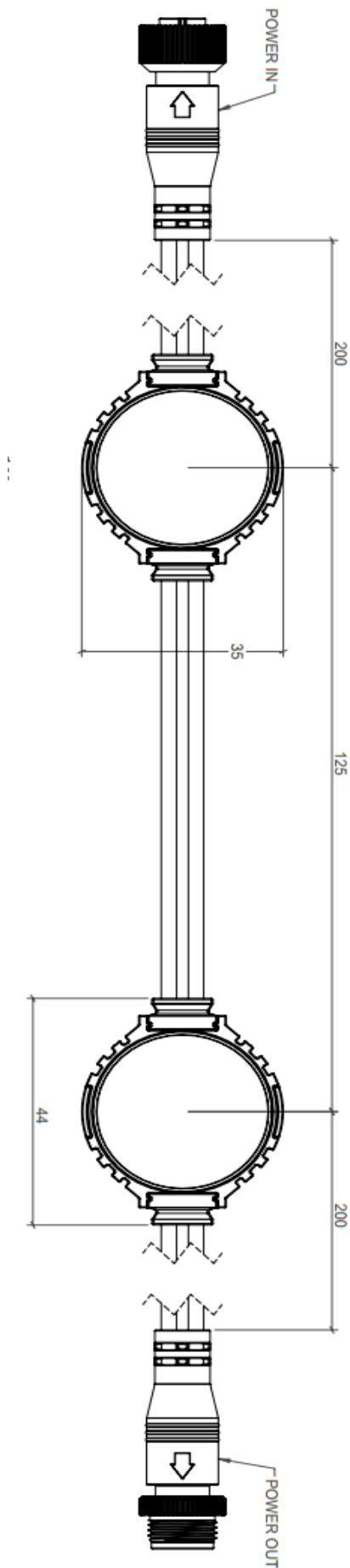
- Based on 125mm spacing, the maximum length that can be run without incurring voltage drop issues is 150 dots.
- Strings longer than 150 dots require power to be re-injected.

## Physical Dimensions (9PDOT3)

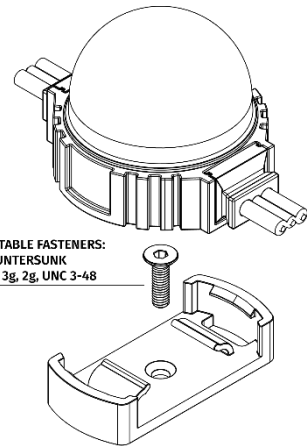




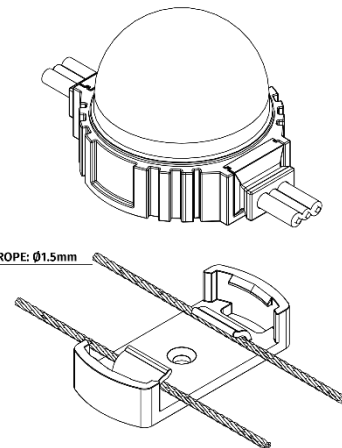
## Mounting Clip Specifications



SUITABLE FASTENERS:  
COUNTERSUNK  
M3, 3g, 2g, UNC 3-48

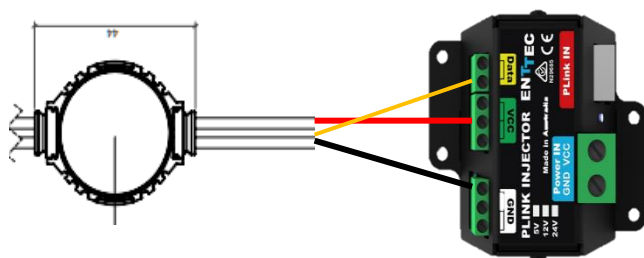


WIRE ROPE: Ø1.5mm





## Connecting to a PLink injector:



Cable	PLink Terminal
Black cable with red strip	VCC+
Thin Black Cable	Data
Thick Black Cable	GND

Ensure your selected PLink is of a voltage rating that matches your selected 9PDots. Ensure that the PLink has been connected in such a way to ensure the data is flowing from the PLink down the string of Dots.

**Note:** For use of PLINK system, please refer to the PLINK datasheet on the ENTTEC website.

## Ordering Information

ENTTEC 9PDOT3 and related products can be ordered from our website or through your ENTTEC dealer using the following part numbers:

P/N	Description
<b>9PDOT3</b>	HI-RES SMART RGB 35mm PIXEL DOTS (24V): 125mm PITCH

## Recommended Products

P/N	Value
<b>9PDOT3-CLIP</b>	9PDOT3 Compatible Mounting Clips
<b>9PDOT-CBL-C</b>	2000mm black cable with Male IP connector
<b>9PDOT-CBL-D</b>	2000mm black cable with Female IP connector
<b>70581-ARC</b>	ENTTEC LED Mapper Software Architectural (512 Universes)
<b>70581-PRO</b>	ENTTEC LED Mapper Software Professional (96 Universes)
<b>70581-STU</b>	ENTTEC LED Mapper Software Standard (16 Universes)

Due to continuous improvements and innovations of all ENTTEC products, specifications and features are subject to change without notice.