

Circular LED Arrays

Product Range Overview

A range of dimmable Circular Arrays with an efficiency of up to 76 lumens per watt (typical) and luminous output of up to 1560 lumen.

Each array has ON BOARD CURRENT CONTROL – this allows the use of larger, more efficient constant voltage power supplies to drive a number of boards.

As well as advanced electronic management – they incorporate excellent thermal management – each board is printed onto a patented aluminium/dielectric substrate and is finished off on the back with a pre-applied double sided thermally conductive adhesive tape for easy assembly onto a suitable heat sink.

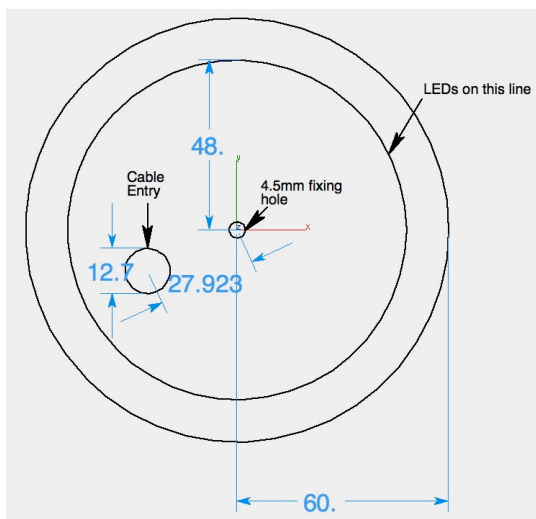
Easy connectivity – each array comes with a screw terminal connectors allowing connection with standard cable.

All boards have PWM dimming circuits which use 0-10V input control (there is a +10V output available for test purposes only).

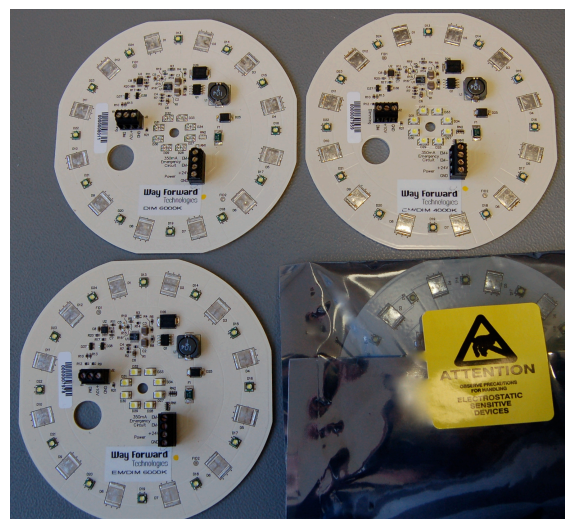
Arrays fitted with Emergency / Night Light feature require a constant current supply of 350mA – typical output = 100 lumen

Dimensions

Note: Cable terminal blocks are 10mm Deep.



Product images.



Notes:

Polarity – it is important to connect the + 24 VDC and GND (or 0 VDC) correctly.

Mounting Tape – the double sided thermally conductive tape on the reverse of the boards is applied prior to populating and passing the array through a Reflow Solder oven – this can result in a yellowing of the paper carrier – this is normal and does not affect the properties of the tape.

ESD – it is recommended that ESD precautions are taken when handling the boards prior to fitting into their final application.

HEAT SINK – these units must be mounted onto a suitable heat sink with a maximum thermal resistance of 1°C/W.

CAUTION: screw terminals require support against twisting whilst being tightened – do not over tighten.

Physical properties

PART NUMBER	Description	Color/CCT/CRI	Dimensions
WFT-DL120-XPE12-500W	Cool White 12 Diode Circular Array	White/6000K/Ra70	120mm diameter
WFT-DL120-XPE12-500M	Warm White 12 Diode Circular Array	White/4000K/Ra80	120mm diameter

Electrical properties

PART NUMBER	Input Voltage (V)			Current Draw (A)			Power Consumption (W)	
	Min	Nominal	Max	Min	Nominal	Max	Nominal	Max
WFT-DL120-XPE12-500W	20.0	24.0	28.0	0.817	0.860	0.903	20.6	25.3
WFT-DL120-XPE12-500M	20.0	24.0	28.0	0.817	0.860	0.903	20.6	25.3

Optical and Thermal properties

PART NUMBER	Luminous Output* (lm)		Efficacy (lm/W)	
	Min	Typical	Min	Typical
WFT-DL120-XPE12-500W	1320	1560	54	76
WFT-DL120-XPE12-500M	1150	1360	47	66