BOE

BTS030
Product Introduction

Rev. 0

BOE MLED Technology Co., Ltd.

1. Product Introduction

1.1 Scope of Application

This product specification is applicable to outdoor P3.076 full-color modules

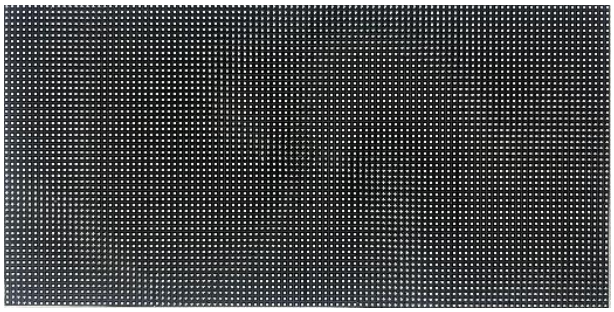
1.2 Product Description

This product uses SMD1415 lamp beads, each of which encapsulates a red chip, a green chip, and a blue chip. The 1415 lamp beads are welded to the PCB with the surface mount technology (SMT).

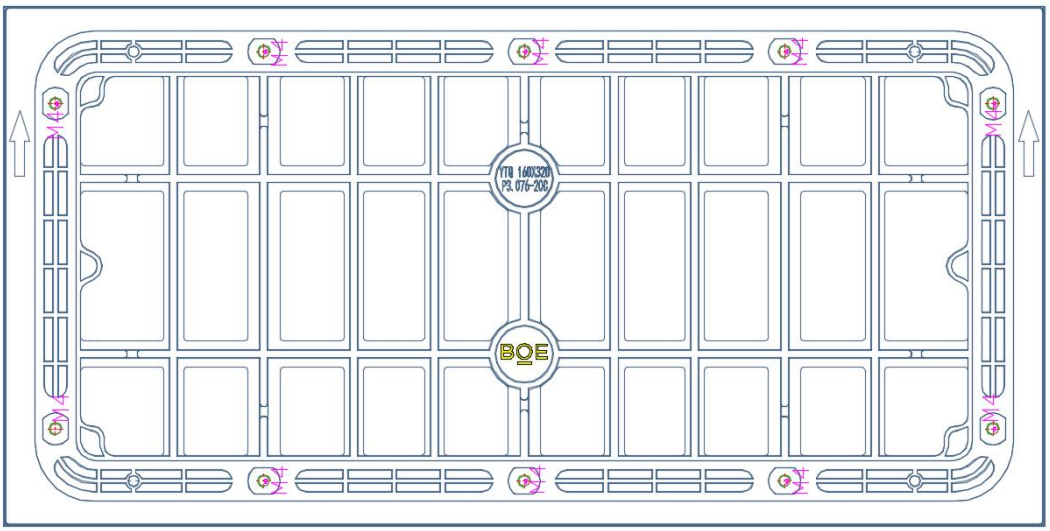
This product uses a constant current driver IC chip and an integrated line driver chip and is controlled by a computer.

Lamp beads and chips are mounted on the PCB board to form a unit board, which is then mounted on the bottom case to form a module.

1.3 Product Picture

View	Illustration
Front view	
Back view	
Side view	

1.4 LOGO location

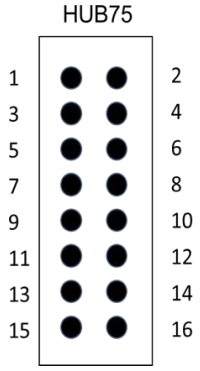


2. Product Specification

Category	Parameters	Specification
Module	Pitch(mm)	3.076
	LED Model	SMD1415
	LED Type	Gold/Copper wire
	Module resolution	104*52
	Module size ± tolerance(mm × mm × mm)	319.9 ± 0.1*159.9 ± 0.1*16 ± 0.2
	Module weight ± tolerance(g)	430 ± 10
	Module flatness (mm)	≤0.7
	Pixel density (dots/m^2)	105625
Optical Parameters	White balance brightness (cd/m^2)	≥5000
	Color temperature	9000-15000K
	Horizontal viewing angle	≥120°
	Vertical viewing angle	≥120°
	View distance (m)	≥3
Electrical Parameters	Maximum power consumption per module (W)	40
	Operating voltage (V)	5
	Signal input interface type	HUB75
Processing performance	Scanning mode	1/13
	Frame change frequency (Hz)	60
	Refresh frequency (Hz)	≥3840
	Driving mode	Constant drive
	Grayscale (Bit)	13
Operating Parameters	Continuous operation time	168hrs，Support uninterrupted display
	Average trouble-free working time	≥5000 hours

Category	Parameters	Specification
	Discrete runaway point	Preset at 0，＜30PPM
	Continuous runaway point	0
	Blind spot rate	Preset at 0，＜30PPM
Utilization Parameters	Typical life value (hrs)	100000
	Operating temperature (℃)	-10~50
	Storage temperature (℃)	-20~50
	Operating humidity (RH)	10%~60%
	Storage humidity (RH)	10%~60%
Protection grade	Protection grade	IP65(The protection level of the lamp surface when the back of the panel is under strict protection)

3. Definition of signal interface



Pin	Signal	Function	Pin	Signal	Function
1	R1	Red data signal	2	G1	Green data signal
3	B1	Blue data signal	4	GND	GND of power supply
5	R2	Red data signal	6	G2	Green data signal
7	B2	Blue data signal	8	N	Suspended
9	A	Line control signal	10	B	Line control signal
11	C	Line control signal	12	N	Suspended
13	CLK	Clock signal	14	LAT	Latch signal
15	OE	Enable signal	16	GND	GND of power supply

4. Mounting holes

4.1 Module mounting hole location（Unit：mm）