

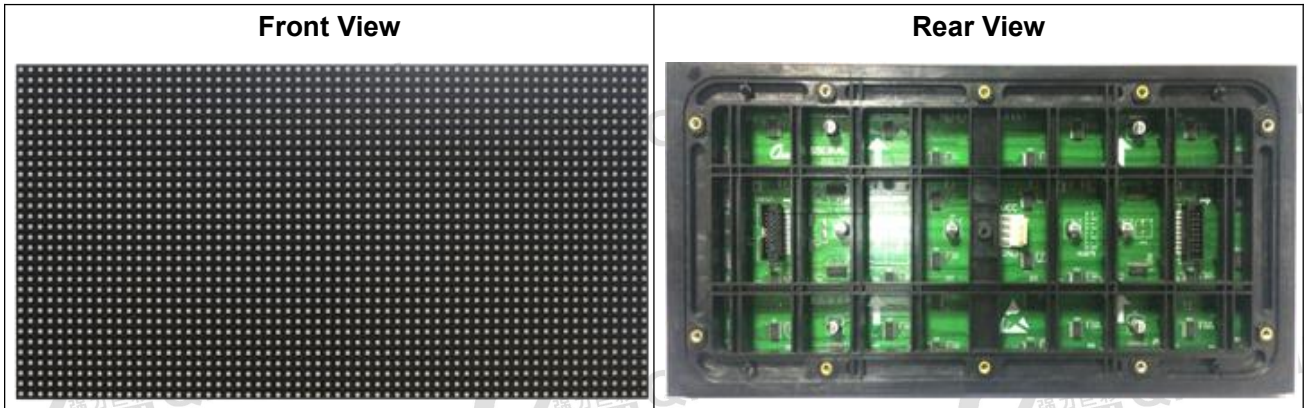
Product Specification

Product: Outdoor Full Color Q5 1/8 Scan Module

Item No.: Q5-8S-Pro-2525

Version: 2.7

1. Module Picture



2. Suggestion Cabinet -(960*960 Magnesium Cabinet)



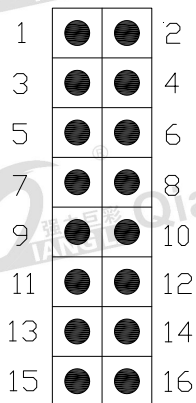
3. Technical Specification

Module	Pixel Pitch	5mm	Pixel Density	40000Dots/m ²
	Configuration	1R1G1B	LED Lamp	SMD2525
	Size (Width*Height*Depth)	320*160*18.5mm	Weight	0.45kg±0.01kg
	Structure	Lamp & IC in same PCB	Resolution	64*32=2048Dots
	Input Voltage (DC)	4.5±0.1V	Maximum Current	≤9.51A
	Power Consumption	≤43W	Driving Method	Constant Current 1/8 Scan
	40A Power Supply for	2-3 pcs module	50A Power Supply for	3-4 pcs module
	40A PFC Power Supply for	3-4 pcs module	80A Power Supply for	6-7 pcs module
Cabinet (Magnesium Cabinet)	Cabinet Size (Width*Height*Thickness)		960mm*960mm*104.5mm (with module, cabinet) 960mm*960mm*169.5mm(with module, cabinet, connecting plate)	
	Cabinet Pixel Density		192*192=36864 Dots	
	Cabinet Area		0.9216 m ²	
	Cabinet Weight		28.5kg±0.5 kg	
	Cabinet Max Power Consumption		≤770W	
	Average Power Consumption (1/3 Max)		≤257W	
	Distribution Power (Power Supply Capacity 78%)		≤988W	
Screen	Brightness	≥4500cd/m ²	Brightness Uniformity	>0.95
	Horizontal Viewing Angle	140 ±10 degree	Vertical Viewing Angle	130 ±10 degree
	Best Viewing Distance	≥5m	Black Spot Ratio	< 0.0003
	Max Power Consumption	≤836W/m ²	Operation Environment	Outdoor
	Grayscale	12-14bits (RGB each)	Display Color	4398 Billion
	Frame Frequency	≥60 frame/sec	Refresh Frequency	≥3840 Hz

Control Mode	Computer control, Point-to-point	Brightness Adjustment	256-grade manual / automatic
Life Span	≥100,000 hours	Average Failure Free Time	≥10,000 hours
Attenuation (3 years later)	≤15%	Operating Humidity	10%-90%RH

4.Signal Pin

HUB75



Pin	Signal	Function	Pin	Signal	Function
1	RD1	Red data signal	2	GD1	Green data signal
3	BD1	Blue data signal	4	GND	GND
5	RD2	Red data signal	6	GD2	Green data signal
7	BD2	Blue data signal	8	GND	GND
9	A	Line power control signal	10	B	Line power control signal
11	C	Line power control signal	12	D	Line power control signal
13	CLK	Clock signal	14	LAT	Data locking signal
15	OE	Enable signal	16	GND	GND

5.Precautions

Item	Description
Environmental Precautions	Storage temperature range: -10 ° C - 30 ° C, over 30 ° C needs to do cooling treatment. Operating temperature range: -20 ° C -40 ° C, other temperature range, need to install temperature control equipment. Lamp surface temperature (working time): ≤85°C, temperature control equipment is required to be installed when temperature exceeding the standard
	Storage humidity range: 10% RH-60% RH, humidity over 60% RH requires dehumidification treatment. Operating humidity range: 10% RH-90% RH, If the humidity exceeds the standard, it must be dehumidified before it can be used normally.

	Avoiding corrosive gas	Corrosive gas, which contains alkaline or acid gas in the environment, may cause corrosion of electronic components, crystallization, leakage and so on.
	Avoid electrostatic hazard and lightning strikes	Metal components of the screen, the shell of power supply and the cabinet should be grounded well, and the grounding resistance should be less than 10Ω. Prevent electrostatic damage to electronic devices in humid environment, while avoiding electric leakage to harm human body.
Operational precautions	Electro-static Protection	The worker must wear an anti-electrostatic wrist strap and anti- electrostatic glove. Various tools must be strictly grounded during assembly
	Screen waterproof	After installation of Led display screen, waterproof glue should be used on the connection part of cabinet and around the screen, making sure strict waterproof protection measures be implemented.
	Hazard statement of the Magnetic installation Method	It's not recommended customers install modules outdoor with magnetic installation method. It will cause the following hazards, 1) Rain and snow could enter from the screen front side to the screen back side, it may cause the electronic components, system card, power supply and cables be corroded and lose efficacy. 2) The magnetic installation method cannot guarantee the flatness and the performance of the led screen. 3) Module is likely to deform under extremely cold weather.
	Product batch control	Different batches of products cannot be installed in the same screen, otherwise there will be color blocks (mosaic) on the display.
	Product wiring	The module cannot be directly connected to 220V, and the module's positive and negative poles connection must be right.
	Disassembly and transportation	Do not throw, push, squeeze or press the module, avoid damaging the display screen.
	Installation torque control	In connection with power supply, it is necessary to ensure tightening of terminal joint screw to prevent joint position from loosening, resulting in wire burning or product damage caused by high contact resistance. Torque of M4 screw is 6.0-8.0 Kgf.cm, and that of M3 screw is 4.0-6.0 Kgf.cm.
	Display control	Please do not display static picture or text, for this may cause LED lamp brightness go down seriously or LED lamp die. Please play moving pictures or text.
	Prohibition of	It is forbidden to assemble the module under the condition of

live work	power on, the module should be assembled on the wall when the main power input is disconnected.
Environmental inspection	Temperature and humidity meters should be equipped on the installation site to monitor the surrounding environment of the screen in time. After heavy rain, it is necessary to check whether there are any problems such as dampness, water droplets and over humidity in the screen in time.
Avoid construction work near the installed LED screen	It is strictly forbidden to rebuild after the installation of the LED display screen, so as to prevent the LED display screen from being affected by the impact of high current and dust, such as welding, electric saw and other equipment.

6. Application

This technical manual applies to Outdoor Q5-8S-Pro-2525

7. Product Description

7.1 Outdoor full color P5 1/8 scan module is composed of a pixel matrix, which is dominated by red LED chip, green and blue LED chip ,then fixed on the plastic package.

7.2 This module contains drive IC and input buffer IC, connected to the LED display control system .It can display videos, images, texts etc.

7.3 Through OE signal to drive RGB's drive IC, the screen can form 4,398,000,000,000 kinds of colors.

7.4 The module can be assembled both in horizontal and vertical direction, so that customer can get different sizes display screen accordingly.

7.5 Module Characteristics:

super bright LED and high quality plastic parts

high contrast display can achieve good results

Light weight: easy installation and removal

using constant current drive LED, light uniformity, low power consumption

pixel pitch of 5mm, a total of 64*32 pixels , each pixel is composed of 1R1G1B

