1.2 mm Indoor FinePitch LED Module

Sharp LD-EC121





Built to last, designed to inspire.

Combining remarkable energy-efficiency with outstanding imaging performance, the LD-EC Series delivers all the benefits of advanced COB technology at a compelling price-performance ratio.

Chip-on-Board (COB) technology is engineered for high traffic environments delivering exceptional durability and long service life. LED chips are mounted directly to the substrate and sealed against dust and damage creating a smooth, reflection-free surface that's easy to clean. With rich colours and deep blacks enabled by a high contrast ratio, content is presented with vivid clarity even in bright sunlit environments.

Consuming up to 60% less power compared to standard SMD technology at the same brightness level, COB technology significantly reduces energy costs. The LD-EC Series leverages these efficiencies to make advanced LED display technology accessible for cost-conscious applications across retail, higher education, leisure and corporate environments.

A robust aluminium cabinet ensures structural stability and provides heat and fire resistance for long-term operational safety. Front-access modules simplify maintenance, and spare parts availability supports the extended service life of Sharp's high-quality LED solutions.

Benefits

Reduced operating costs – Up to 60% lower power consumption than standard SMD technology at equivalent brightness, with reduced cooling demands.

Consistent high-contrast image quality – A 10000:1 contrast ratio delivers deep blacks and clear detail, ensuring excellent visibility even in bright environments.

Durability and longevity – A sealed, easy-clean surface protects against dust, moisture and projectiles, making it robust for use in high traffic areas.

Fast and easy installation – Established mechanical housing design and front-access modules enable quick, precise installation and simplified servicing.

Specifications

Product Information

Product Name
Sharp LD-EC121

Product Group
1.2 mm Indoor FinePitch LED Module

Order Code
LDEC121

Display

LED type
FlipChip COB (0407)

Pixel Pitch [mm]
1.2

Aspect Ratio
16:9

Contrast Ratio (typ.)
10000:1

Viewing Angle [°]
160 horizontal / 140 vertical

Brightness (max.) [cd/m²]
600

Dimming Capability
256 levels

Lifetime
100000 hrs (50% brightness)

Colour Processing
14 bit

LED Driving Method
1/60 dynamic scan

Frame Rate [Hz]
50/60

Refresh Rate [Hz]
≤ 3840

Colour Temperature [K]
3000 - 9500

Screen Resolution

Number of Pixel per m²
640000

Resolution of Pixel per module [dot]
480 x 270

Resolution of Pixel Card [px]
120 x 135

Electrical

Power Consumption typ. [W]
143 per m² (normal use)

Power Consumption max. [W]
252 per m²

Power Consumption typ. [BTU]
488 per m² (normal use)

Power Consumption max. [BTU]
859 per m²

Environmental Conditions

Operating Temperature [°C]
-10 to 40

Operating Humidity [%]
10 to 80

Mechanical

Dimensions (W x H x D) [mm] per module
600 x 337.5 x 27.4

Weight [kg]
4.3

Regulatory

Safety and Ergonomics
CE; ETL; FCC Class A; RoHS; UKCA

Additional Features

Shipping Content
LED Modules (1 Cabinets, 8 Pixel Cards)

Special Characteristics
Single Data Receiving Cards; Single Power Supplies

Manufacturer
SHARP

Serviceability
Front Service

IP Level
IP20; IP40

Warranty
2 years

Material
Aluminum Cabinet



RoHS


FCC Class A


CE

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