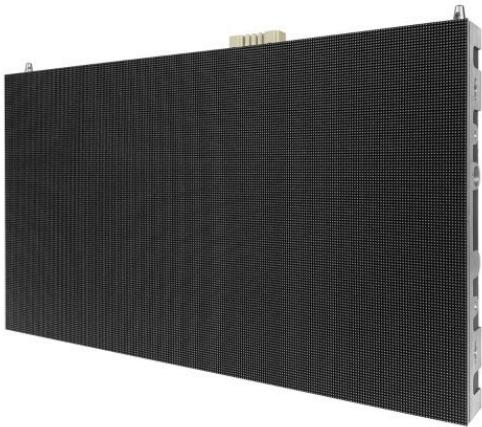


Sharp LD-FE093

0.9 mm Indoor FinePitch LED Module

Datasheet



Engineered for efficiency, without compromise

For bezel-free visual impact and long-lasting performance, the Sharp LD-FE3 Series sets a new benchmark in energy-efficient dvLED display technology. Built on NEC's legacy of engineering excellence, the third-generation FE Series features advanced Flip-Chip technology and industrial-grade components to deliver vibrant, high-contrast imagery while reducing energy consumption and heat output by up to 60%. The result is a substantial reduction in operating costs and HVAC demands, without compromising visual precision or performance.

The proven mechanical all-metal cabinet design ensures precise module alignment, long-term structural stability, and fire safety compliance. Configurable to any shape or size, its modular architecture supports endless creative potential, while front-serviceable modules enable hassle-free maintenance. With fine pixel pitch performance, the FE3 Series modules create a seamless detail-rich viewing experience, ideal for command and control, broadcast, signage, and conferencing. Its cost-saving efficiency also makes it a smart choice for education and leisure environments.

Benefits

Significantly lower energy usage – Highly efficient Flip-Chip IMD technology reduces power consumption by up to 60% compared to standard SMD, at the same brightness.

Uncompromised image quality – An exceptional contrast ratio, ultra-deep black levels, fine pixel pitch, and wide viewing angles ensure vivid clarity and accurate colour reproduction even in bright

ambient light conditions.

Minimised interference – low electromagnetic emissions allowing for EMC Class-B certified modules.

Scalable versatility – Customisable to any shape or size, the bezel-free modules fit the space available enabling endless creative possibilities and seamless large-surface installations.

Slim design – with a flush rear profile, LED modules can be integrated very close to the wall with minimal gap necessary due to very low heat emission.

Product Information

Product Name	Sharp LD-FE093
Product Group	0.9 mm Indoor FinePitch LED Module
Order Code	81000685

Display

Pixel Configuration	4-in-1 IMD (Black)
LED type	FlipChip IMD (1616)
Pixel Pitch [mm]	0.9
Brightness (max.) [cd/m ²]	600
Lifetime	100000 hrs (50% brightness)
Contrast Ratio (typ.)	4000:1
Viewing Angle [°]	170 horizontal / 170 vertical
Dimming Capability	256 levels
Colour Processing	16 bit
Colours [Trill.]	281
LED Driving Method	1/46 dynamic scan
Frame Rate [Hz]	50/60
Refresh Rate [Hz]	≤ 3840
Colour Temperature [K]	3000 - 9500

Screen Resolution

Resolution per m ²	1108033
Number of Pixel per module [dot]	640 x 360
Number of Pixel per card [dot]	160 x 180

Electrical

Power Consumption typ. [W]	96 per m ² (normal use)
Power Consumption max. [W]	168 per m ²
Power Consumption typ. [BTU]	328 per m ² (normal use)
Power Consumption max. [BTU]	574 per m ²

Environmental Conditions

Operating Temperature -10 to 40

[°C]

Operating Humidity [%] 10 to 80

Mechanical

Dimensions (W x H x D) 608 x 342 x 49

[mm] per module

Weight [kg] 8.8

Additional Features

Special Characteristics Flush Surface SMD Design; Single Data Receiving Cards; Single Power Supplies

Manufacturer SHARP

Serviceability Front Service

IP Level IP20

Certifications CE; EMC Class B; ETL; FCC Class A; RoHS

Warranty 3 years

Material Aluminum Cabinet



FCC Class A



CE



RoHS

This document is © 2025 Sharp NEC Display Solutions Europe GmbH.

All rights reserved in favour of their respective owners. All hardware and software names are brand names and/or registered trademarks of the respective manufacturers. All specifications are subject to change without notice. Errors and omissions are excepted. 27.08.2025