

Sharp MultiSync® M502

LCD 50" Message Large Format Display

Datasheet



Built to perform, designed to last

The versatile solution for professional display applications, the Sharp MultiSync® M2 Series (32" up to 98") is purpose-built for demanding signage and meeting room environments. With native USB-C connectivity and broad compatibility with platforms such as Crestron, Cisco Webex, and Microsoft Teams, it enables seamless BYOD collaboration and future-ready integration, while 802.1x LAN support ensures enterprise-grade network security. Featuring class-leading 550 cd/m² brightness, a high-haze panel to minimise glare, and NEC's trusted SpectraView Engine, the M2 Series delivers outstanding visual performance with unmatched colour precision.

As part of the new Sharp-branded display family, the MultiSync® M2 Series builds on NEC's legacy of quality and reliability to drive greater efficiency and long-term value. Its proven modular design supports custom computing options (Raspberry Pi or Intel® SDM) and flexible connectivity (e.g. AV-over-IP), ensuring lasting versatility, performance, and sustainability.

Benefits

Seamless meeting workflows – a single USB-C cable transmits video, data, and power for instant, clutter-free meeting setups. As the established standard for modern collaboration spaces, USB-C supports frictionless BYOD experiences.

Unhindered readability – a high-haze panel reduces glare from windows and ambient light, keeping signage content and presentations clear for uninterrupted viewing in any environment

Security assured – 802.1x support over LAN enables high-level security for corporate networks, giving peace of mind for IT teams and enterprise environments.

Enhanced imaging precision – when brand consistency and corporate identity are important, NEC's SpectraView Engine provides full control over colour, gamma, and uniformity for accurate and impactful content.

Broad AV compatibility – fully interoperable with leading meeting room platforms including Crestron (XiO Cloud), Cisco Webex, Q-Sys, and Microsoft Teams, ensuring effortless integration and future-proof scalability.

Product Information

Product Name	Sharp MultiSync® M502
Model	PN-M502
Product Group	LCD 50" Message Large Format Display
Order Code	60006054

Display

Panel Technology	VA with Direct LED backlights
Active Screen Area (W x H) [mm]	1,095.8 x 616.4
Screen Size [inch/cm]	50 / 125.7
Aspect Ratio	16:9
Pixel Pitch [mm]	0.285
Brightness [cd/m²]	550
Contrast Ratio	≥ 8000:1 ¹
Viewing Angle [°]	178 horizontal / 178 vertical (typ. at contrast ratio 10:1)
Colour Depth [bn]	1.073 (10bit)
Colour Gamut	72% of NTSC
Response Time (typ.) [ms]	8
Panel Refresh Rate [Hz]	60
Haze Level [%]	Pro (25)
Supported Orientation	Face Up ² ; Landscape; Portrait

Resolution

Native Resolution	3840 x 2160
Supported Resolutions	1024 x 768; 1366 x 768; 1920 x 1200; 720 x 400; 1270 x 720; 1400 x 1050; 1920 x 1200; 720 x 480; 1280 x 1024; 1440 x 900; 1920 x 2160; 720 x 576; 1280 x 720; 1600 x 1200; 3840 x 2160; 800 x 600 1280 x 800; 1680 x 1050; 4096 x 2160; 1360 x 768; 1920 x 1080; 640 x 480;

Synchronisation Rate

Horizontal Frequency [kHz]	15 - 135
Vertical Frequency [Hz]	23 - 76

Connectivity

HDMI IN 1	Video Input; UHD (60 Hz) HDCP (2.2); Audio Input; ARC; CEC
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HDMI IN 2	Video Input; UHD (60 Hz) HDCP (2.2); Audio Input; CEC
HDMI OUT	Video Output; UHD (60 Hz) HDCP (2.2); Audio Output; Loop Through: HDMI IN 2, Option, Compute module
DP IN 1	Video Input; UHD (60 Hz) DP 1.2; HDCP (2.2); Audio Input
DP OUT	Video Output; UHD (60 Hz) DP 1.2; HDCP (2.2); Audio Output; Loop Through: DisplayPort IN, USB-C 2
USB-A 1	USB (2.0 / 3.2); 4.5 W; Peripherals; USB Storage
USB-A (Service)	2.5 W; Service
USB-C 1	Video Input; UHD (60 Hz); DP alt. 1.2; HDCP (2.2); Audio Input; USB 2.0 / 3.2; 65 W
USB-C 2	USB 2.0 / 3.2; 7.5 W; Peripherals; Storage
Audio Output (3.5 mm)	Audio Output; Line Out
LAN 1	100 MBit/s
LAN 2	Loop Through: LAN 1, RS-232C, IR; 100 MBit/s
RS-232C	9600 bps
Remote In (3.5 mm)	Eco Sensor (IR-Extender, Ambient and Presence)
Input Detect	Custom; Last; First
PiP / PbP	2-Split; Scalable picture size

Calibration

Factory Calibration	Gamma; Intensity; RGB; Uniformity; White Point
Calibration with Software	Corner Uniformity; Gamma; Intensity; RGB; Update Factory Calibration; White Point
Calibration Software	Display Wall Calibrator

Open Modular Intelligence

Intel® SDM	accepts Intel® Smart Display Modules Large and Small up to 66 W
Compute Module Slot	MPi4 and MPi5 Kit (powered by Raspberry Pi)

Sensors

Ambient Light Sensor	Integrated, triggered actions programmable
Human Sensor	optional via Eco Sensor (KTES1)
Temperature Sensor	Integrated, 3 sensors, triggered actions programmable

Electrical

Power Consumption [W]	85 shipping
Power Savings Mode [W]	< 0.5; < 2 (Networked Standby)

Power Management	VESA DPMS
Power Supply	100-240 V AC; 50/60 Hz; internal

Environmental Conditions

Operating Temperature [°C]	+0 to +40
Operating Humidity [%]	20 to 80
Storage Humidity [%]	10 to 80
Storage Temperature [°C]	-20 to 60

Mechanical

Dimensions (W x H x D) [mm]	1,121.6 x 645.2 x 66.5
Weight [kg]	18
Bezel Width [mm]	10.9 (left, right and top); 13.9 (bottom)
VESA Mounting [mm]	300 x 300 (FDMI); 4 holes; M6
Ingress Protection	IP5x (front); IP2x (back)
Packaging Dimensions (W x H x D) [mm]	1,245 x 785 x 188
Packaging Weight [kg]	23
Material	Metal

Available Options

Accessories	Eco Sensor (KTES1); Feet (ST-43M); Remote control kit (KTRC3); Soundbar (PN-ZCMS1); Speaker (SP-RM3a); Trolley (PD04 Tipster); USB-C cable (USB-C 5M, USB-C 7M); Wall mount (PDW S 32-65 L, PDW S 32-65 P)
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Regulatory

Safety and Ergonomics	CE; EMC Class B; Energy Star 8; FCC Class B; REACH; RoHS; UKCA; UL/C-UL or CSA
Pixel Failure Class	ISO 9241-307, Class 1
Resistance to Fire	Metal backcover, plastic material certified acc. to UL94-5VB

Green Features

Energy Efficiency	Energy consumption: 81 kWh/1000 h; Energy efficiency class: G; LED backlight
Ecological Standards	EnergyStar 8.0

3rd Party Certifications

Additional Features

Special Characteristics	CEC Support; Clone Settings; DICOM Simulation; HDMI ARC; Scheduler
Colour Versions	Black Front Bezel, Black Back Cabinet
Audio	Integrated Speakers (10 W + 10 W)
Shipping Content	2x AAA batteries; Display; HDMI Cable; Power Cable; Remote Control; Setup Manual
Warranty	3 years warranty incl. backlight; additional services available; optional 4. + 5. year warranty extension ³
Operating Hours	24/7
External Control	AMX NetLinx Support; Crestron V2; HDMI CEC; HTTP Browser; PJLink; Scheduled Timer; SNMP
Remote Management	NaViSet Administrator 2
Security	Disable HW Buttons; Disable IR Functionality; IEEE802.1X (LAN)

¹ out of the box conditions, local dimming ON

² adjusted usage conditions for face up/down installations, please refer to operational guidelines or contact our support

³ please refer to terms and conditions of warranty extensions

