Sharp MultiSync® P656
LCD 65" Professional Large Format Display

Datasheet

Precision performance for critical applications

When reliability, security, and exceptional visual performance are mandatory, the Sharp MultiSync® P6 Series delivers with precision and resilience. Engineered for mission-critical applications and high-end signage, the P6 Series combines robust durability with advanced visual technologies to meet the most demanding commercial needs. With 700 cd/m² brightness, a high-haze panel, and SpectraView™ Engine, it delivers outstanding image clarity and colour accuracy even in challenging lighting conditions. Despite its slim profile, the P6 Series is endorsed for use in heavy traffic spaces with a durable all-metal chassis that complies to the strictest fire safety standards.

Building on NEC's trusted heritage, the next generation Sharp P6 Series is designed for longevity and integration flexibility. Its modular architecture supports custom computing options by Intel® SDM or Raspberry Pi, and flexible connectivity including AVoverIP for versatile deployments. Native video daisy chaining via HDMI and DisplayPort enables content to be easily cloned or expanded across multiple displays. Compatibility with leading platforms such as Crestron, Cisco Webex, and Q-Sys enhances its future-proof appeal, while 802.1x LAN support safeguards robust security against cyber threats. Purpose-designed for control rooms, passenger information, and prestige retail or corporate signage, the P6 Series delivers uncompromising performance, day after day.

Benefits

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.

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 – 802.2x support over LAN enables high-level security for corporate networks, giving peace of mind for IT teams and enterprise environments.

Mission-critical performance – with 700 cd/m² brightness, long-life components and robust flame-resistant metal chassis, the P6 series is engineered to deliver lasting clarity and durability in challenging environments without the need for bulky housings.

Trusted integration – full compatibility with major AV ecosystems, including Crestron XiO Cloud and NVX, Q-Sys, Cisco Webex, Matrox IPMX, and CMS solutions, ensures seamless setup and scalability.

Product Information

Product Name	Sharp MultiSync® P656
Model	PN-P656
Product Group	LCD 65" Professional Large Format Display
Order Code	60006061

Display

Panel Technology	ÎPS with Direct LED backlights
Active Screen Area (W x H) [mm]	1,428.5 x 803.5
Screen Size [inch/cm]	64.5 / 163.9
Aspect Ratio	16:9
Pixel Pitch [mm]	0.372
Brightness [cd/m²]	700
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	92% of DCI
Response Time (typ.) [ms]	8
Panel Refresh Rate [Hz]	60
Haze Level [%]	Pro (25)
Supported Orientation	Face Down; 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
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	RPi Compute Module 4

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]	160 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]	1,454.5 x 832.4 x 59.5
Weight [kg]	26
Bezel Width [mm]	11 (left, right and top); 13.9 (bottom)
VESA Mounting [mm]	4 holes; 400 x 400 (FDMI); M6
Ingress Protection	IP5x (front); IP2x (back)
Packaging Dimensions (W x H x D) [mm]	1,620 x 950 x 185
Packaging Weight [kg]	35
Material	Metal

Available Options

Accessories	Eco Sensor (KTES1); Feet (ST-65M); Remote control kit (KTRC3); Soundbar (PN-ZCMS1); Speaker (SP-RM3a); Trolley (PD04 Tipster, L20PNSR780MEU); USB-C cable (USB-C 5M, USB-C 7M); Wall mount (PDW S 32-65 L, PDW S 32-65 P, L20PNWALL90EU, PDW T XL-2)

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

3rd Party Certifications

Crestron	Certified for Crestron CCV2 and XiO Cloud

Additional Features

Special Characteristics	CEC Support; Clone Settings; DICOM Simulation; HDMI ARC; Scheduler
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; Emergency Notification; 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

FCC Class B   CE   RoHS