Panasonic CONNECT

PT-MZ20K Series
LCD Projectors

PT-MZ20KL / PT-MZ17KL
PT-MZ14KL / PT-MZ11KL

Note: Model availability varies by country or region.
PT-MZ20KL available from CY2023 Q2.

The World's Smallest, Lightest, and Quietest 20,000 lm[1] Projector

1 Light output of PT-MZ20KL. As of November 2022, based on publicly available dimensions, weight, and operation noise values for LCD laser projectors with 20,000 lm brightness and above. Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2020 international standards. Value is average of all products when shipped.

■ Main Features

01 | World's Smallest, Lightest, and Quietest 20,000 lm[1] LCD Projector

Introducing the smallest, lightest, and quietest LCD laser projector in its class with up to 20,000 lm[1], compact 23 kg[3] (50.7 lbs) body, and quiet 42 dB[4] operation. Optimized optical engine delivers a 25 % increase in brightness over the 16,000 lm[5] PT-MZ16KL from the same body size, ensuring clear visibility in well-lit spaces.

02 | Long-Life Energy-Saving Design Minimizes Problems

Multi-Laser Drive Engine and Backup Input[6] enable continuous projection even in the event of trouble, and no light-source or filter maintenance is required for 20,000 hours[7]. The series efficiently delivers high brightness with MZ20KL achieving the lowest power consumption in its class[8] for sustainable operation.

03 | Delivering up to 20,000 lm[5] on AC 100–240 V, a World First[9]

PT-MZ20K Series is the industry's first[9] 20,000 lm-class projector to deliver full brightness on AC 100–240 V power, eliminating need to install a high-voltage power supply. It supports NFC function[10], optional lenses including ET-EMU100 Ultra-Short-Throw Zoom Lens, and preactivated upgrade kits for Geo Pro[11].

White Models

Black Models

Note: Projectors ship without a lens. PT-MZ20KL available from CY2023 Q2.

PT-MZ20K Series

	PT-MZ20KL	PT-MZ17KL	PT-MZ14KL	PT-MZ11KL
Light Output	20,000 lm[5]	16,500 lm[5]	14,000 lm[5]	11,000 lm[5]
Resolution	WUXGA (1920 x 1200, 16:10)			

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Light, Bright, Quiet, and Harmonious

As the smallest and lightest 20,000 lm[1] LCD laser projector in its class, MZ20K Series installs flexibly almost anywhere and delivers bright, immersive images in a wide range of applications, from conferences to edutainment. Its sophisticated body styling harmonizes with the spatial environment while quiet 42 dB[2] operation limits distractions, ideal for hybrid meeting rooms, museums, or lecture halls.

Perfectly Balanced Brightness and Color

Together with high-efficiency optical engine for immersive high-contrast images in well-lit rooms, MZ20K Series features Pure White Generator, an original technology that minimizes loss of light energy and balances rich color and high brightness. Dynamic Contrast NX includes new scene-recognition circuitry that detects light and dark areas of the image more precisely, while Detail Clarity Processor 4 sharpens text edges for clear visibility.

World First[3]: Up to 20,000 lm[4] on AC 100–240 V

MZ20KL is the first[3] projector to deliver 20,000 lm[4] on AC 100–240 V from a standard AC outlet, expanding application possibilities without special power-supply construction. The series' evolved features enable resource-friendly installation: highlights include preactivated upgrade kits for Geo Pro[5], Remote Preview LITE, NFC function[6], Information Monitor, support for 4K input signals[7], black-level adjustment for curved screens, and eight[8] optional lenses.

Eco-Friendly Energy-Saving Design

MZ20K Series is highly efficient, with MZ20KL consuming less energy than any projector in its class[9] for highly sustainable daily operation. Light-source and filter replacement is extended to 20,000 hours[10], reducing waste. The projector is liquid cooled and features a dustproof structure for stable operation. Multi-Laser Drive Engine limits brightness loss should a diode fail, while Backup Input[11] function maintains image display if the primary signal is interrupted.

■ Other Features

- Supports Art-Net DMX, PJLink™, Crestron Connected™ V2, Crestron XiO Cloud™, Extron XTP®, and IPv6[12]
- Direct Power Off function
- Quick Startup and Quick Off
- DICOM Simulation Mode
- Multi-Screen Support System
- Multi-Unit Brightness and Color Control
- Waveform Monitor function
- Power management system

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Specifications

Model		PT-MZ20KL	PT-MZ17KL	PT-MZ14KL	PT-MZ11KL
Projector type		LCD projector			
LCD Panel	Size	25.4 mm (1.0 in) diagonal (16:10 aspect ratio)			
	Display system	Transparent LCD panel (x 3, R/G/B)			
	Pixels	2,304,000 (1920 x 1200 pixels)			
Light source		Laser diode			
Light output[1, 2]		20,000 lm	16,500 lm	14,000 lm	11,000 lm
Time until light output declines to 50 %[3]		20,000 hours (NORMAL/QUIET)			
Resolution		WUXGA (1920 x 1200 pixels)			
Contrast ratio[1]		3,000,000:1 (Full On/Full Off) (When [PICTURE MODE] is set to [DYNAMIC] and [DYNAMIC CONTRAST] set to [3].)			
Screen size (diagonal)		2.03–15.24 m (80–600 in), 2.54–10.16 m (100–400 in) with ET-EMU100, 16:10 aspect ratio	2.03–15.24 m (80–600 in), 2.54–10.16 m (100–400 in) with ET-EMU100, 2.03–12.70 m (80–500 in) with ET-EMT800[4], 16:10 aspect ratio		
Center-to-corner zone ratio[1]		85 %			
Lens		Optional (no lens included with this model)			
Lens shift (from center of screen)	Vertical	±60 % (+50 %, -20 % with ET-EMU100, ±40 % with ET-EMW200, ±50 % with ET-EMW300) (powered)			
	Horizontal	±20 % (±19 % with ET-EMW200) (powered)			
Keystone correction range		Vertical: ±45 ° (±5 ° with ET-EMU100, ±14 ° with ET-EMW200/ET-EMW300, ±22 ° with ET-EMW400/ET-EMW500), Horizontal: ±40 ° (±0 ° with ET-EMU100, ±8 ° with ET-EMW200/ET-EMW300, ±15 ° with ET-EMW400/ET-EMW500). When [VERTICAL KEYSTONE] and [HORIZONTAL KEYSTONE] are used simultaneously, correction cannot be made exceeding a total of 55 °.			
Terminals	SDI IN	BNC x 1: 3G/HD-SDI input			
	HDMI IN	HDMI 19-pin x 2 (Compatible with HDCP 2.3, Deep Color, 4K/60p signal input[5]), CEC supported			
	SERIAL/MULTI PROJECTOR SYNC IN	D-sub 9-pin (female) x 1 for external control (RS-232C compliant)			
	SERIAL/MULTI PROJECTOR SYNC OUT	D-sub 9-pin (male) x 1 for link control (RS-232C compliant)			
	REMOTE 1 IN	D-sub 9-pin (female) × 1 for external control (parallel)			
	REMOTE 2 IN	M3 x 1 for wired remote control			
	REMOTE 2 OUT	M3 x 1 for link control (for wired remote control)			
	DIGITAL LINK	RJ-45 x 1 for network and DIGITAL LINK connection (video/network/serial control) (HDBaseT™ compliant), 100Base-TX (Compatible with PJLink™ [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal input[5])			
	LAN	RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLink™ [Class 2], Art-Net)			
	DC OUT	USB connector (Type A) x 1 for power supply (Output: 5 V / 2 A)			
	USB	USB connector (Type A) x 1 for optional AJ-WM50 Series Wireless Module, for USB memory			
Power supply		AC 100–240 V, 50/60 Hz			
Power consumption[6] (Operating mode)	Maximum power consumption	1100 W (11.2–4.6 A) (1120 VA)	950 W (9.6–4.0 A) (960 VA)	800 W (8.1–3.3 A) (810 VA)	615 W (6.3–2.7 A) (630 VA)
	On-mode power consumption [NORMAL]	1050 W (AC 100–120 V), 1000 W (AC 200–240 V)	880 W (AC 100–120 V), 850 W (AC 200–240 V)	720 W (AC 100–120 V), 690 W (AC 200–240 V)	540 W (AC 100–120 V), 520 W (AC 200–240 V)
	[QUIET]	630 W (AC 100–120 V), 610 W (AC 200–240 V)	580 W (AC 100–120 V), 560 W (AC 200–240 V)	460 W (AC 100–120 V), 445 W (AC 200–240 V)	360 W (AC 100–120 V), 340 W (AC 200–240 V)
Filter		Included (Estimated maintenance time: approx. 20,000 hours[7])			
Operation noise[1]		42 dB (NORMAL), 36 dB (QUIET)	38 dB (NORMAL), 32 dB (QUIET)	35 dB (NORMAL), 30 dB (QUIET)	
Dimensions (W x H x D)		Approx. 650 x 185 x 440 mm (25 19/32˝ x 7 9/32˝ x 17 5/16˝) (excluding feet and protrusions), 650 x 211 x 440 mm (25 19/32˝ x 8 5/16˝ x 17 5/16˝) (excluding protrusions, feet at shortest position)			
Weight[8]		Approx. 23.0 kg (50.7 lbs)	Approx. 22.5 kg (49.6 lbs)		
Operating environment		Operating temperature: 0–45 ℃ (32–113 ℉)[9], operating humidity: 10–80 % (no condensation)			
Applicable software		Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software, Geometry Manager Pro, Projector Network Setup Software, Smart Projector Control for iOS/Android™			

1 Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2020 international standards. Value is average of all products when shipped. 2 When [OPERATING MODE] is set to [NORMAL]. This is the value when the Zoom Lens (Model No.: ET-EMS650) is used. The value varies depending on the lens. 3 Around this time, light output will have decreased by approximately 50 %. IEC62087: 2008 Broadcast contents, NORMAL Mode, [DYNAMIC CONTRAST] set to [3], under conditions with 30 ℃ (86 ℉), 700 m (2,297 ft) above sea level, and 0.15 mg/m³ of particulate matter. Estimated time until light output decreases to 50 % will vary depending on environment. 4 ET-EMT800 is compatible with PT-MZ17KL/MZ14KL/MZ11KL only. It cannot be used with PT-MZ20KL. 5 4K signals are converted to the projector's resolution (1920 x 1200 pixels) upon projection. 4K/60p and 4K/50p signals input via DIGITAL LINK are supported in YPBPR 4:2:0 format only. 6 Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2020 international standards. On-mode power consumption measured at 25 ℃ (77 ℉) operating temperature at an altitude of 700 m (2,297 ft). 7 Under conditions of 0.15 mg/m³ of particulate matter. Estimated maintenance time varies depending on environment. Filter can be washed and reused up to two times. 8 Average value. May differ depending on the actual unit. 9 Note that the projector cannot be used at altitudes 2,700 m (8,858 ft) or higher above sea level. In the following operating environments, light output may be reduced to protect the projector: when the projector is used at altitudes below 1,400 m (4,593 ft) and ambient temperature is 35 ℃ (95 ℉) or higher; when the projector is used at altitudes between 1,400 m (4,593 ft) and 2,700 m (8,858 ft) exclusive and ambient temperature is 30 ℃ (86 ℉) or higher. The operating environment temperature should be between 0 ℃ (32 ℉) and 40 ℃ (104 ℉) when the optional AJ-WM50 Series Wireless Module is attached.

Optional Accessories

- **Zoom Lens**
  ET-EMU100 (0.330–0.353:1) / ET-EMW200 (0.480–0.550:1) / ET-EMW300 (0.550–0.690:1) / ET-EMW400 (0.690–0.950:1) / ET-EMW500 (0.950–1.36:1) / ET-EMS650 (1.35–2.10:1)[1] / ET-EMS600 (1.35–2.10:1)[2] / ET-EMT700 (2.10–4.14:1)[1] / ET-EMT750 (2.10–4.14:1)[1] / ET-EMT850 (4.14–7.40:1)[1] / ET-EMT800 (4.14–7.40:1)[2]
  1 ET-EMS650, ET-EMT750, and ET-EMT850 will be available from CY2023 Q1. 2 ET-EMS600, ET-EMT700, and ET-EMT800 are compatible with PT-MZ17KL/MZ14KL/MZ11KL only. They cannot be used with PT-MZ20KL.
- **Replacement Filter** ET-RFM100

- **Ceiling Mount Bracket**
  ET-PKD120H (for high ceilings) / ET-PKD120S (for low ceilings) / ET-PKD130H (with 6-axis adjustment mechanism)
  Note: ET-PKD120H/PKD120S/PKD130H used in combination with ET-PKE301B (sold separately).
- **Attachment for Ceiling Mount Bracket**
  ET-PKE301B
- **DIGITAL LINK Switcher** ET-YFB200G
  Note: ET-YFB200G is not compatible with 4K signals.

- **Digital Interface Box** ET-YFB100G
  Note: ET-YFB100G is not compatible with 4K signals.
- **NFC Upgrade Kit** ET-NUK10
  Note: Availability may vary by country or region.
- **Wireless Module** AJ-WM50 Series
  Note: Availability may vary by country or region. The suffix at the end of the model number is omitted. Operating temperature: 0–40 ℃ (32–104 ℉).

- **Wireless Presentation System PressIT**
  TY-WPS1 (basic set)
  Note: Visit https://panasonic.net/cns/prodisplays/pressit for more information.
- **Early Warning Software**
  ET-SWA100
  Note: Part number suffix may differ depending on the license type.

For more information about Panasonic projectors, please visit:
Projector Global Website – **https://panasonic.net/cns/projector/**
Facebook – **www.facebook.com/panasonicprojectoranddisplay**
YouTube – **www.youtube.com/user/PanasonicProjector**

Note: Following the shift of the Panasonic Group to a holding company system, the Connected Solutions Company of the Panasonic Corporation has changed to Panasonic Connect Co., Ltd. as of April 1, 2022.

All information included here is valid as of December 2022.

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