



50-inch Class 4K UHD LCD Display

## TH-50CQE2W

### Product specification (design and specification subject to change without notice)

#### ■ DISPLAY PANEL

Screen Size (Diagonal)	50-inch class (1257.3 mm / 49.50 inch)
Panel type / Backlight	VA / Direct-LED
Aspect ratio	16:9
Effective Display Area (W x H)	1095.8 x 616.4 mm (43.14" x 24.26")
Resolution (H x V)	3840 x 2160
Brightness (Typ)	500 cd/m <sup>2</sup>
Contrast Ratio (Typ)	5000:1
Dynamic Contrast Ratio	50000:1
Max. Display Colors	Approx. 1.07 Billion
Response Time (Typ)	9.5 ms (G to G)
Viewing Angle (Horizontal / Vertical)	178° / 178° (CR>10)
Panel Life Time <sup>1</sup> (Typ)	Approx. 50000 hours
Panel Surface Treatment	Anti-glare type (Haze 3%)

<sup>1</sup> When the panel lifetime is at 50% of the brightness under the condition of 25 degrees Celsius (+/- 2 degrees Celsius).

#### ■ CONNECTION TERMINAL

HDMI™ IN	HDMI™ Type A Connector x 4 (HDCP2.2)
SERIAL IN	Stereo mini jack (Φ3.5 mm) x 1, RS-232C Compatible
IR IN	Stereo mini jack (Φ3.5 mm) x 1
AUDIO OUT	Stereo mini jack (Φ3.5 mm) x 1 SPDIF x 1
LAN	RJ45 x 1 compatible with PLink™ 10BASE-T/100BASE-TX/1000BASE-T
USB	USB connector TYPE A x 1 : DC5 V / MAX 0.9 A, (USB 3.0 is supported) USB connector TYPE A x 1 : DC5 V / MAX 0.5 A, (USB 2.0 is supported) USB connector TYPE A x 1 : DC5 V / MAX 0.5 A, (USB 2.0 is supported) (Internal) USB connector TYPE C x 1 : DC5 V / MAX 3.0 A, (USB 3.0 is supported, DP Alt Mode)
microSD	microSD / SDHC / SDXC / MAX 1TB
Wifi / Bluetooth®	Built-in IEEE 802.11 a/b/g/n/ac Dual band Bluetooth® 5.1, HID / A2DP

#### ■ AUDIO

Built in Speaker	20 W [10 W + 10 W]
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#### ■ ELECTRICAL

Power Supply	AC220-240 V 50 Hz / 60 Hz 0.8A
Power Consumption	100 W (Shipping Condition)
On Mode Average Power Consumption <sup>1</sup>	95 W (Picture Mode: [Natural])
Power Off Condition	0 W
Stand-by Condition	0.5 W
Apparent power	163VA
Energy efficiency class for Europe	

<sup>1</sup> Based on IEC 62087 Ed.2 measurement method

#### ■ MECHANICAL

Dimension (W x H x D) Not including remote controller sensor	1121 x 646 x 68 mm (44.12" x 25.43" x 2.66")
Dimension (W x H x D) Including remote controller sensor	1121 x 664 x 68 mm (44.12" x 26.14" x 2.66")
Weight	13.4 kg / 29.6 lbs
Carton Dimensions (W x H x D)	1215 x 775 x 165 mm (47.83" x 30.51" x 6.50")
Gross Weight	18 kg / 39.7 lbs
Cabinet Material	Front: Metal, Side / Back: Plastic
Bezel Color	Black
Bezel Width	T/R/L 10 mm (0.39") B 15.5 mm (0.61")
Pitch for Wall-Hanging	VESA Compliant 200 x 200 mm (7.9" x 7.9") (Installed by: M6 screws / Screw hole depth: 10 mm (0.39"), Allowable screw length 24 mm (0.95"))

This model has two types of Remote IR sensor. One is built-in type and the another is external type. It can be detached only for external type.

#### ■ INSTALLATION

Orientation	Landscape / Portrait (clockwise rotation)
Tilting Angle	Landscape installed 20 degrees forward

Please contact your sales representative with regard to the tilt angle before installation.

#### ■ ENVIRONMENTAL

Operating Environment	Temperature	: 0°C to 40°C (32°F to 104°F) <sup>1</sup> : 0°C to 35°C (32°F to 95°F) <sup>2</sup>
	Humidity	: 20% to 80% (No condensation)

<sup>1</sup> : for up to 1400 m (4593 ft) altitude <sup>2</sup> : for between 1400 m (4593 ft) and 2800 m (9186 ft) altitude

· Depending on the temperature or humidity conditions, uneven brightness may be observed. This is not a malfunction.

· This unevenness will disappear while applying current continuously. If not, consult the distributor.

**MAIN FEATURE**

Input search	Yes
Multi display settings	Yes
Power Management (HDMI™)	Yes
Power save	Yes
Button Lock	Yes
Controller user level	Yes
Dynamic backlight control	Yes
Timer setting	Yes
PJLink	Yes
Image settings	Yes
USB Media Player	Yes
Memory Viewer	Yes
Built-in memory function	Yes
Data Cloning	Yes
Multi Monitoring & Control	Yes
Software compatible	
Android™ OS	Yes
HTML5 Browser	Yes
Wireless Display	Yes
Operating Time <sup>1</sup>	16 h / day

1 In case of running for a long time, the moving image is recommended to be displayed. If you display a still picture for an extended period, the image retention might remain on the screen. However, image retention can gradually disappear by displaying movie images.

**INCLUDED ACCESSORIES**

- Remote Control - Batteries (AA Size) x 2
- AC cord x 2 (EU/UK (approx. 2 m (78.7"))
- IR sensor x 1 (cable length approx. 1480 mm (4.85 ft))
- IR Sensor Holder x 1 (Screw x 3)
- RS232C cable x1 (Approx. 1 m (3.28 ft)) - Clamper x 3

**STANDARD (CERTIFICATIONS)**

SAFETY REGULATIONS	EN62368-1
RADIATION REGULATIONS	EN55032, EN55035, EN61000-3-2, EN61000-3-3

**WIRELESS LAN**

Compliance standard	IEEE 802.11 a/b/g/n/ac Dual band (Wireless LAN Standard protocol)
Channel	CH 1-13, CH 36-64, CH 100-140
Communication range	Approx. 30 m (Depends on usage environment)

**Bluetooth®**

Supported version	Bluetooth® 5.1
Profile	HID / A2DP

**REMOTE CONTROL TRANSMITTER**

Power Requirements	DC 3 V (AA Size batteries x 2)
Operating distance <sup>1</sup>	Approx. 7 m/23 ft
Weight	Approx. 111 g (3.92 oz) ncluding batteries
Dimensions (W x H x D)	51 x 161 x 27 mm (2.00" x 6.34" x 1.07")

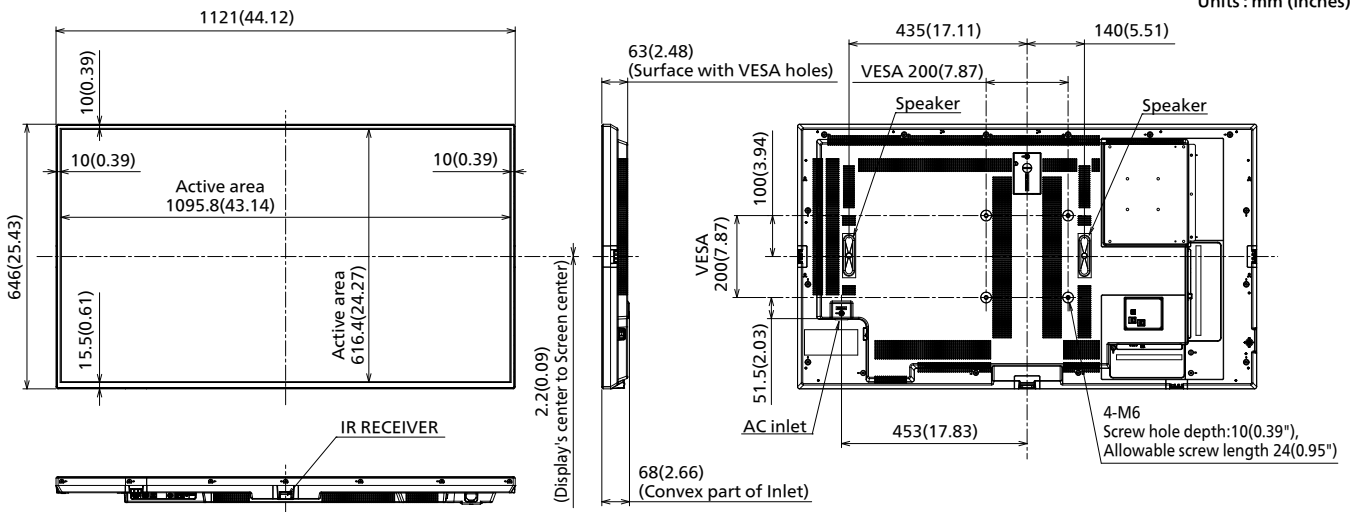
1 When operated directly in front of the display screen.

**OPTIONAL ACCESSORIES**

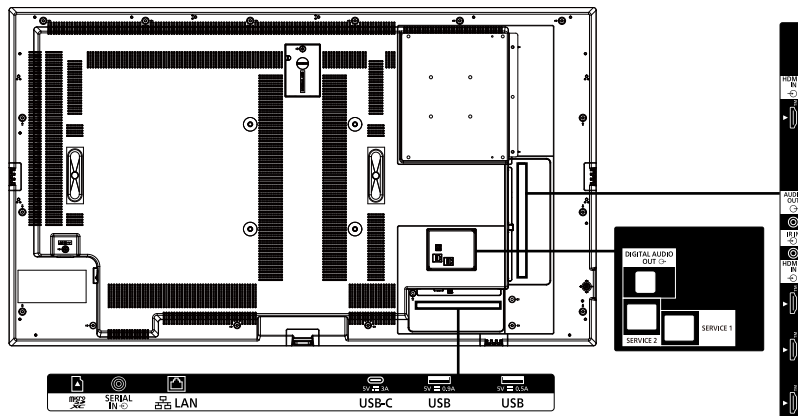
Early warning software	ET-SWA 100 / 105 series
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**DIMENSIONS**

Cautions: This drawing is not a scale  
Units: mm (inches)



**CONNECTION TERMINAL**



1 Specifications and appearance are subject to change without notice.

**List of correspondence signals**

HDMI 1/2/3/4, USB-C common

Corresponding Signal	Resolution (Dot)	Scanning frequency		Dot Clock frequency (MHz)	Plug and Play supported signal <sup>1,2</sup>	
		Horizontal (kHz)	Vertical (Hz)		Enhanced	Enabled
480/60i	720(1440) x 480i <sup>1</sup>	15.73	59.94	27	○	○
576/50i	720(1440) x 576i <sup>1</sup>	15.63	50	27	○	○
480/60p	720 x 483	31.47	59.94	27	○	○
576/50p	720 x 576	31.25	50	27	○	○
720/60p	1280 x 720	45	60	74.25	○	○
720/50p	1280 x 720	37.5	50	74.25	○	○
1080/60i	1920 x 1080i	33.75	60	74.25	○	○
1080/50i	1920 x 1080i	28.13	50	74.25	○	○
1080/24p	1920 x 1080	27	24	74.25	○	○
1080/25p	1920 x 1080	28.13	25	74.25	○	○
1080/30p	1920 x 1080	33.75	30	74.25	○	○
1080/60p	1920 x 1080	67.5	60	148.5	○	○
1080/50p	1920 x 1080	56.25	50	148.5	○	○
3840 x 2160/24p	3840 x 2160	54	24	297	○	○
3840 x 2160/25p	3840 x 2160	56.25	25	297	○	○
3840 x 2160/30p	3840 x 2160	67.5	30	297	○	○
3840 x 2160/60p	3840 x 2160	135	60	594	○	-
3840 x 2160/50p	3840 x 2160	112.5	50	594	○	-
4096 x 2160/24p	4096 x 2160	54	24	297	○	○
4096 x 2160/25p	4096 x 2160	56.25	25	297	○	○
4096 x 2160/30p	4096 x 2160	67.5	30	297	○	○
4096 x 2160/60p	4096 x 2160	135	60	594	○	-
4096 x 2160/50p	4096 x 2160	112.5	50	594	○	-
640 x 480/60	640 x 480	31.47	59.94	25.18	○	○
640 x 480/73	640 x 480	37.86	72.81	31.5	-	-
640 x 480/75	640 x 480	37.5	75	31.5	-	-
640 x 480/85	640 x 480	43.27	85.01	36	-	-
800 x 600/56	800 x 600	35.16	56.25	36	-	-
800 x 600/60	800 x 600	37.88	60.32	40	○	○
800 x 600/72	800 x 600	48.08	72.19	50	-	-
800 x 600/75	800 x 600	46.88	75	49.5	-	-
800 x 600/85	800 x 600	53.67	85.06	56.25	-	-
1024 x 768/50	1024 x 768	39.55	50	51.89	-	-
1024 x 768/60	1024 x 768	48.36	60	65	○	○
1024 x 768/70	1024 x 768	56.48	70.07	75	-	-
1024 x 768/75	1024 x 768	60.02	75.03	78.75	-	-
1024 x 768/82	1024 x 768	65.55	81.63	86	-	-
1024 x 768/85	1024 x 768	68.68	85	94.5	-	-
1152 x 864/60	1152 x 864	53.7	60	81.62	-	-
1152 x 864/70	1152 x 864	63.99	70.02	94.2	-	-
1152 x 864/75	1152 x 864	67.5	75	108	-	-
1152 x 864/85	1152 x 864	77.09	85	119.65	-	-
1280 x 720/60	1280 x 720	44.76	60	74.48	-	-
1280 x 768/50	1280 x 768	39.55	49.94	65.18	-	-
1280 x 768/60	1280 x 768	47.7	60	80.14	-	-
1280 x 768/60	1280 x 768	47.78	59.87	79.5	-	-
1280 x 800/50	1280 x 800	41.2	50	68.56	-	-
1280 x 800/60	1280 x 800	49.31	59.91	71	-	-
1280 x 800/60	1280 x 800	49.7	59.81	83.5	-	-
1280 x 960/60	1280 x 960	60	60	108	-	-
1280 x 960/85	1280 x 960	85.94	85	148.5	-	-
1280 x 1024/60	1280 x 1024	63.98	60.02	108	○	○
1280 x 1024/75	1280 x 1024	79.98	75.02	135	-	-
1280 x 1024/85	1280 x 1024	91.15	85.02	157.5	-	-
1360 x 768/60	1360 x 768	47.71	60.02	85.5	-	-
1366 x 768/50	1366 x 768	39.55	50	69.92	-	-
1366 x 768/60	1366 x 768	48.39	60.03	86.71	-	-
1366 x 768/60	1366 x 768	48	60	72	-	-
1366 x 768/50	1366 x 768	39.56	49.89	69	-	-
1366 x 768/60	1366 x 768	47.71	59.79	85.5	-	-
1400 x 1050/60	1400 x 1050	65.22	60	122.61	-	-
1400 x 1050/75	1400 x 1050	82.2	75	155.85	-	-
1440 x 900/60	1440 x 900	55.47	59.9	88.75	-	-
1440 x 900/60	1440 x 900	55.92	60	106.47	-	-
1600 x 900/50	1600 x 900	46.3	50	97.05	-	-
1600 x 900/60	1600 x 900	60	60	108	-	-
1600 x 900/60	1600 x 900	55.99	59.95	118.25	-	-
1600 x 900/60	1600 x 900	55.92	60	119	-	-
1600 x 1200/60	1600 x 1200	75	60	162	-	-
1680 x 1050/60	1680 x 1050	65.29	59.95	146.25	-	-
1920 x 1080/60	1920 x 1080	66.59	59.93	138.5	-	-
1920 x 1080/60	1920 x 1080	67.5	60	148.5	○	○
1920 x 1200/60	1920 x 1200	74.04	59.95	154	○	○

1: Pixel-Repetition signal (dot clock frequency 27.0 MHz) only

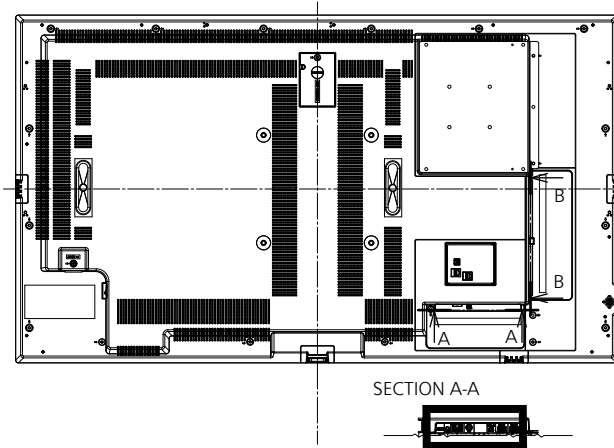
2: Signals with ○ in the Plug and Play-supported signal column are the ones written in EDID (Extended Display Identification Data) of this unit. For signals without ○ in the Plug and Play-supported signal column, resolutions may not be selected on the PC side even if this unit supports those signals.

Note

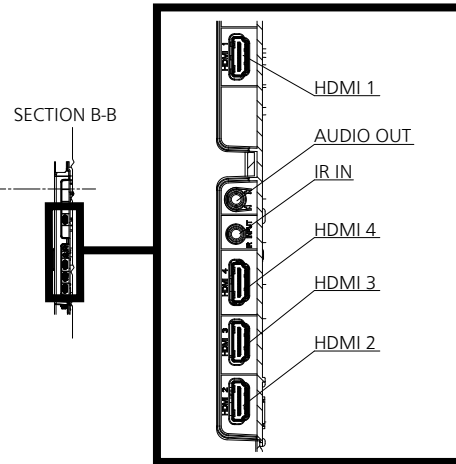
- An auto detected signal format may be differently displayed from the actual input signal.
- [ i ] shown after the number of dots of resolution means the interlace signal.

**● Drawing of terminals**

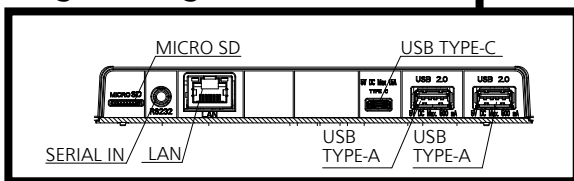
View from back



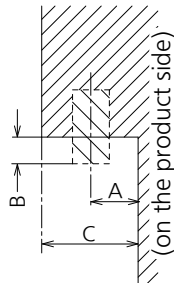
Magnified figure of terminal b



Magnified figure of terminal a



**Sectional view of terminal a**  
(MICRO SD / SERIAL IN / LAN / USB TYPE-C /  
USB TYPE-A / USB TYPE-A)

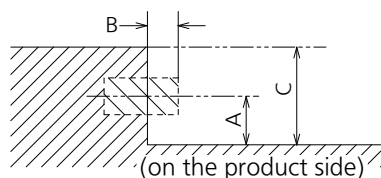


**Terminal a**  
**50CQE2W Terminal (Bottom)**

Units : mm (inches)

	MICRO SD	SERIAL	LAN	USB TYPE-C	USB TYPE-A
A	5.1 (0.2)	7.7 (0.3)	9.3 (0.36)	4.8 (0.18)	7.3 (0.28)
B	-	0.7 (0.02)	5.1 (0.2)	-	-
C	27.0 (1.06)				

**Sectional view of terminal b**  
(HDMI 1 / AUDIO OUT / IR IN / HDMI 4 / HDMI 3 / HDMI 2)



**Terminal b**  
**50CQE2W Terminal (Side)**

Units : mm (inches)

	HDMI	IR / AUDIO OUT
A	6.6 (0.26)	7.7 (0.3)
B	-	0.7 (0.02)
C	27.0 (1.06)	

1 Due to the construction of terminal, some types of connecting cable or USB memory device cannot be used. Be sure to use connecting cable or USB memory device after confirmation in this drawing.