



98-inch 4K UHD LCD Display TH-98LQ70W

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

■ DISPLAY

Screen Size (Diagonal)	98-inch (2476.9 mm)
Panel Type	IPS / Direct-LED
Aspect Ratio	16:9
Effective Display Area (W x H)	2159 x 1214 mm
Number of Pixels (H x V)	3840 x 2160 pixels
Brightness	500 cd/m ²
Contrast Ratio	1300:1
Dynamic Contrast Ratio	500000 : 1
Response Time	8 ms (G to G)
Viewing Angle (Horizontal / Vertical)	178° / 178°
Panel Life Time	approx. 50000 hours (typ)*

* When the panel lifetime is at 50% of the brightness under the condition of 25 degrees Celsius (+/- 2 degrees Celsius).
Panel lifetime may be shortened due to usage environment.

■ CONNECTION TERMINAL

HDMI IN	HDMI TYPE A Connector x 4 HDMI 1*1 / HDMI 2*1 (Up to 4K@50/60Hz) HDMI 3*1 / HDMI 4*2 (Up to 2K@50/60Hz)
DisplayPort IN	DisplayPort x 1 (DP1.2a)*2
DVI-D IN	DVI-D 24pin x 1*3
AUDIO IN (L/R)	Stereo mini jack (M3) x 1set (shared with PC IN)
PC IN	Mini D-sub 15pin x 1 (Female)*4
AUDIO IN (L/R)	Stereo mini jack (M3) x 1set (shared with DVI-D IN)
Function Slot	SLOT NX x 2*5 (Vacant)

*1: HDCP1.4 supported, Embedded audio supported

*2: HDCP1.3 supported, Embedded audio supported

*3: Compliance with DVI Revision 1.0, HDCP1.1 supported

*4: RGB / YPbPr switchable

*5: Option 3G-SDI terminal board TY-TBN03G: (w/ active through)

■ CONTROL

SERIAL IN	D-sub 9pin x 1*1
LAN	RJ45 x 1 100BASE-TX*2
DIGITAL LINK	RJ45 x 1 100BASE-TX (shared with LAN)

*1: RS-232C compatible

*2: PJLink compatible (shared with DIGITAL LINK)

■ AUDIO

AUDIO OUT	Stereo mini jack (M3) x 1
Built in Speaker	20 W [10 W + 10 W] (10% THD)

■ ELECTRICAL

Power Requirements	220-240 V AC, 50/60Hz
Power Consumption	620 W (653 VA) 2116 BTU
On Mode Average Power Consumption*	480 W
Power Off Condition	0.3 W
Stand-by Condition	0.5 W
Network Stand-by Mode	3 W

* Based on IEC 62087 Ed.2 measurement method

■ MECHANICAL

Dimensions (W x H x D)	2233 x 1288 x 122 mm
Bezel Width	32.5 mm
Carton Dimensions (W x H x D)	2406 x 1520 x 460 mm
Weight	approx. 136 kg
Gross Weight	approx. 161 kg
Cabinet Material / Color	Metal / Black
Protective Glass	Yes
Mount Screw Holes	Diameter: M16, Valid screw depth: 26 mm
Eyebolt Screw Holes	Diameter: M12, Valid screw depth: 25 mm

■ INSTALLATION REQUIREMENT

Orientation	Landscape / Portrait
Tilting Angle	10 degrees with landscape setting / 5 degrees with portrait setting

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

■ ENVIRONMENTAL

Operating Environment	Temperature	: 0°C to 40°C*1 : 0°C to 35°C*2
	Humidity	: 20% to 80% (Non condensation)
	Altitude	: 0 to 2400 m*3
Storage Environment	Temperature	: -20°C to 60 °C
	Humidity	: 20% to 80% (Non condensation)

*1: for up to 1400 m altitude

*2: for between 1400 m and 2400 m altitude

*3: When using the unit where it is 1400 m and higher and below 2400 m above sea level, make sure [High altitude mode] is set to [ON].

● MAIN FEATURE

Automatic Picture Position	Yes
4 Input Multi Display (up to FHD)	Yes
Screen Saver	Yes
PC Power Management	Yes
HDMI Power Management	Yes
DVI-D Power Management	Yes
ECO Mode	Yes
Button Lock	Yes
Remote-control Lock	Yes
Power-on Screen Delay	Yes
Input Search	Yes
Local Dimming	Yes
Operating Time*	24h/day

* 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.

● OPTIONAL ACCESSORIES

3G-SDI Terminal Board	TY-TBN03G*1
Pedestal	TY-ST103PF9
Wall-hanging Bracket	TY-WK103PV9
Celling-hanging Bracket	TY-CE103PS10*2
Digital Interface Box	ET-YFB100G

*1: 2 boards (total 3G-SDI x 4) required for 4K@50/60Hz,
1 board (total 3G-SDI x 2) required for up to 4K@25/30Hz
*2: Tilt angle limited to 10 degree maximum

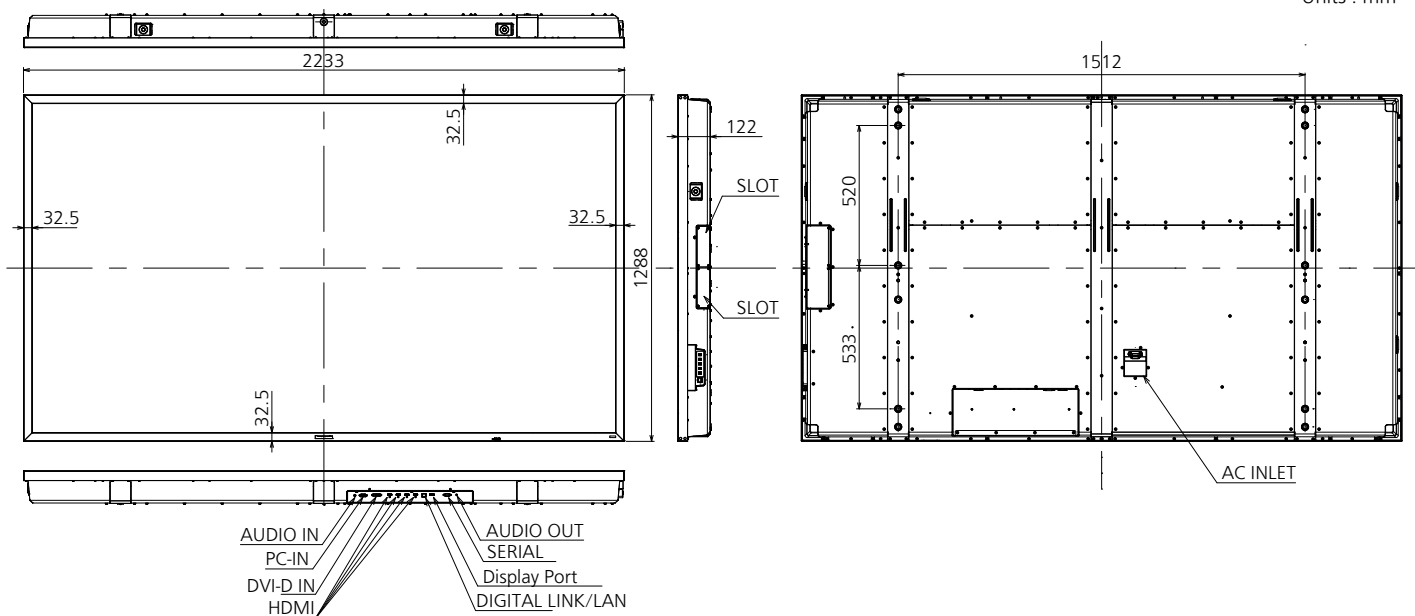
● STANDARD (CERTIFICATIONS)

Safety Regulations	Europe : EN60065, IEC60065, EAC Asia : AS / NZS60065, SASO, IEC60065 / SS, IEC60065 / PAI
Radiation Regulations	Europe : EN55022 Class-B, EN55024, EN61000-3-2, EN61000-3-3 Asia : CISPR22 Class-B

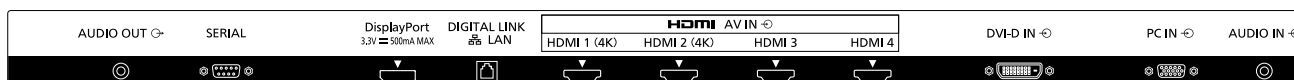
● INCLUDED ACCESSORIES

AC power cord (approx. 3 m), Operating Instructions (Book), (CD-ROM), Remote Control Transmitter, Batteries x 2, Clamper, Eyebolt cap, Eyebolt, Panasonic badge, Panasonic badge attachment plate, Allen wrench

● DIMENSIONS



● CONNECTION TERMINAL



* Specifications and appearance are subject to change without notice.

● Preset Signals

Following signal timing is preset to this unit.

These preset signals are written on EDID of the each input terminal. (Except for *6)

In many cases, it is possible to receive the signals other than below with this unit's multi scan function. (Except for 4K signal)

✓ : Preset signal

Signal name	H-Freq. (kHz)	V-Freq. (Hz)	Dot clock frequency (MHz)	PC IN	HDMI 1 HDMI 2	HDMI 3 HDMI 4 DVI-D IN	DIGITAL LINK	Display Port
525 (480) / 60i	15.73	59.94	13.5	✓				
625 (576) / 50i	15.63	50.00	13.5	✓				
525 (480) / 60i* ²	15.75	60.00	27.0		✓	✓	✓	
625 (576) / 50i	15.63	50.00	27.0		✓	✓	✓	
525 (480) / 60p* ²	31.50	60.00	27.0	✓	✓	✓	✓	
625 (576) / 50p	31.25	50.00	27.0	✓	✓	✓	✓	
750 (720) / 60p* ²	45.00	60.00	74.25	✓	✓	✓	✓	✓
750 (720) / 50p	37.50	50.00	74.25	✓	✓	✓	✓	✓
1125 (1080) / 60i* ^{1*2}	33.75	60.00	74.25	✓	✓	✓	✓	
1125 (1080) / 50i* ¹	28.13	50.00	74.25	✓	✓	✓	✓	
1125 (1080) / 24p* ^{1*2}	27.00	24.00	74.25	✓	✓	✓	✓	
1125 (1080) / 25p* ¹	28.13	25.00	74.25	✓	✓	✓	✓	
1125 (1080) / 30p* ^{1*2}	33.75	30.00	74.25	✓	✓	✓	✓	
1125 (1080) / 60p* ^{1*2}	67.50	60.00	148.5	✓	✓	✓	✓	✓
1125 (1080) / 50p* ¹	56.25	50.00	148.5	✓	✓	✓	✓	✓
640 x 480	31.47	59.94	25.18	✓	✓	✓	✓	✓
800 x 600	37.88	60.32	40.00	✓	✓	✓	✓	✓
1024 x 768	48.36	60.00	65.00	✓	✓	✓	✓	✓
1280 x 768	47.70	60.00	80.14	✓	✓* ⁶	✓	✓	✓
1366 x 768	48.39	60.04	86.71	✓	✓* ⁶	✓	✓	✓
1280 x 1024	63.98	60.02	108.0	✓	✓	✓	✓	✓
1600 x 900	60.00	60.00	108.0	✓	✓	✓	✓	✓
1920 x 1080	67.50	60.00	148.5	✓	✓	✓	✓	✓
1920 x 1200	74.04	59.95	154.0	✓	✓	✓	✓	✓
4K signal								
3840 / 24p* ²	54.00	24.00	297.0		✓		✓	✓
3840 / 25p	56.25	25.00	297.0		✓		✓	✓
3840 / 30p* ²	67.50	30.00	297.0		✓		✓	✓
4096 / 24p* ²	54.00	24.00	297.0		✓		✓	
3840 / 50p	112.5	50.00	594.0		✓		✓* ⁴	✓* ⁵
3840 / 60p* ²	135.0	60.00	594.0		✓		✓* ⁴	✓* ⁵
4096 / 50p	112.5	50.00	594.0		✓		✓* ⁴	
4096 / 60p* ²	135.0	60.00	594.0		✓		✓* ⁴	
4K (Dual Link) signal								
3840 / 50p	112.5	50.00	297.0		✓* ³			
3840 / 60p* ²	135.0	60.00	297.0		✓* ³			
4096 / 50p	112.5	50.00	297.0		✓* ^{3*6}			
4096 / 60p* ²	135.0	60.00	297.0		✓* ^{3*6}			

*1: Based on SMPTE 274M standard.

*2: Compatible with frame frequency 1/1.001

*3: The format supports Dual Link. (see page 17)

*4: Supported in YC_BC_R 4:2:0 format

*5: Supported with MST (Multi Stream Transport) only

*6: Not written on EDID

In some cases, these signals may not be displayed when setting Resolution on your PC.

Note

- Signals without above specification may not be displayed properly.
- For the signals when 3G-SDI Terminal Board with Audio is installed, refer to the manual included with it.