



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 <sup>2</sup>
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 x2 (Up to 4K@50/60Hz)* <sup>1</sup> HDMI TYPE A Connector x2 (Up to 2K@50/60Hz)* <sup>1</sup>
DisplayPort IN	DisplayPort x 1 (DP1.2a)* <sup>1</sup>
DVI-D IN	DVI-D 24pin x 1
AUDIO IN (L/R)	Stereo mini jack (M3) x 1 set (shared with PC IN)
PC IN	Mini D-sub 15pin x 1 (Female)* <sup>2</sup>
AUDIO IN (L/R)	Stereo mini jack (M3) x 1 set (shared with DVI-D IN)
Function Slot	SLOT NX x 2* <sup>3</sup> (Vacant)

\*<sup>1</sup>: HDCP supported, Embedded audio supported

\*<sup>2</sup>: RGB / YPbPr switchable

\*<sup>3</sup>: Option 3G-SDI terminal board TY-TBN03G: (w/ active through)

#### ■ CONTROL

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

\*<sup>1</sup>: RS-232C compatible

\*<sup>2</sup>: PLink 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* <sup>1</sup> : 0°C to 35°C* <sup>2</sup>
	Humidity	: 20% to 80% (Non condensation)
	Altitude	: 0 to 2400 m* <sup>3</sup>
Storage Environment	Temperature	: -20°C to 60 °C
	Humidity	: 20% to 80% (Non condensation)

\*<sup>1</sup>: for up to 1400 m altitude

\*<sup>2</sup>: for between 1400 m and 2400 m altitude

\*<sup>3</sup>: 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

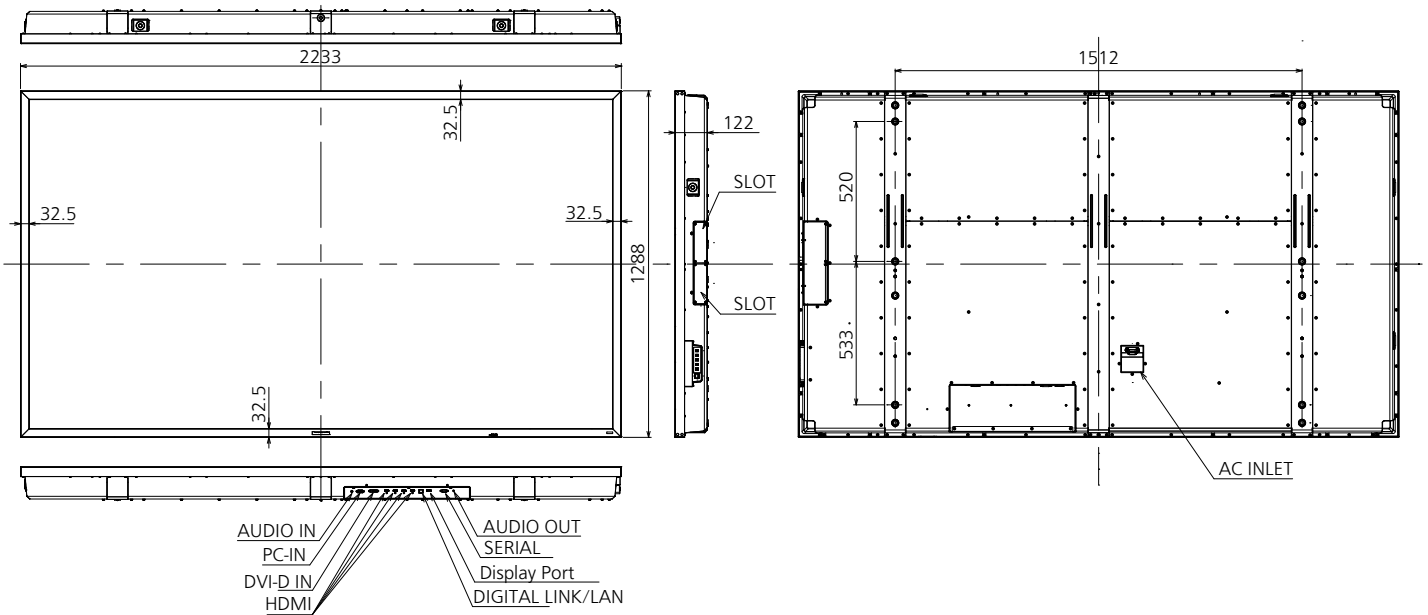
**STANDARD (CERTIFICATIONS)**

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* <sup>2</sup>	15.75	60.00	27.0		✓	✓	✓	
625 (576) / 50i	15.63	50.00	27.0		✓	✓	✓	
525 (480) / 60p* <sup>2</sup>	31.50	60.00	27.0	✓	✓	✓	✓	
625 (576) / 50p	31.25	50.00	27.0	✓	✓	✓	✓	
750 (720) / 60p* <sup>2</sup>	45.00	60.00	74.25	✓	✓	✓	✓	✓
750 (720) / 50p	37.50	50.00	74.25	✓	✓	✓	✓	✓
1125 (1080) / 60i* <sup>1*2</sup>	33.75	60.00	74.25	✓	✓	✓	✓	
1125 (1080) / 50i* <sup>1</sup>	28.13	50.00	74.25	✓	✓	✓	✓	
1125 (1080) / 24p* <sup>1*2</sup>	27.00	24.00	74.25	✓	✓	✓	✓	
1125 (1080) / 25p* <sup>1</sup>	28.13	25.00	74.25	✓	✓	✓	✓	
1125 (1080) / 30p* <sup>1*2</sup>	33.75	30.00	74.25	✓	✓	✓	✓	
1125 (1080) / 60p* <sup>1*2</sup>	67.50	60.00	148.5	✓	✓	✓	✓	✓
1125 (1080) / 50p* <sup>1</sup>	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	✓	✓* <sup>6</sup>	✓	✓	✓
1366 x 768	48.39	60.04	86.71	✓	✓* <sup>6</sup>	✓	✓	✓
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	✓	✓	✓	✓	✓
<b>4K signal</b>								
3840 / 24p* <sup>2</sup>	54.00	24.00	297.0		✓		✓	✓
3840 / 25p	56.25	25.00	297.0		✓		✓	✓
3840 / 30p* <sup>2</sup>	67.50	30.00	297.0		✓		✓	✓
4096 / 24p* <sup>2</sup>	54.00	24.00	297.0		✓		✓	
3840 / 50p	112.5	50.00	594.0		✓		✓* <sup>4</sup>	✓* <sup>5</sup>
3840 / 60p* <sup>2</sup>	135.0	60.00	594.0		✓		✓* <sup>4</sup>	✓* <sup>5</sup>
4096 / 50p	112.5	50.00	594.0		✓		✓* <sup>4</sup>	
4096 / 60p* <sup>2</sup>	135.0	60.00	594.0		✓		✓* <sup>4</sup>	
<b>4K (Dual Link) signal</b>								
3840 / 50p	112.5	50.00	297.0		✓* <sup>3</sup>			
3840 / 60p* <sup>2</sup>	135.0	60.00	297.0		✓* <sup>3</sup>			
4096 / 50p	112.5	50.00	297.0		✓* <sup>3*6</sup>			
4096 / 60p* <sup>2</sup>	135.0	60.00	297.0		✓* <sup>3*6</sup>			

\*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<sub>B</sub>C<sub>R</sub> 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.