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**S P E C F I L E**

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**Product Number :** ET-MWP100G  
**Product Name :** Multi Window Processor

**Description**

This processor is a device which consists of slots for mounting optional I/O boards, and which synthesizes different input signals for output to other equipment such as projectors.

- \* This processor does not operate by itself. In order to use it, you must mount an optional I/O board onto the processor.
- \* Ask a properly-qualified technician or the place of purchase to mount any optional devices.

**Specifications**

Power supply		100–240 V AC, 50/60 Hz
Power consumption		160 W max. (180 W with the ET-RPS100G)
Scanning frequency	(with the ET-MCYSD200)	
	SDI	3G-SDI signal (Level A YPbPr 4:2:2 10-bit): SMPTE ST 424 compliant: 1125(1080)/60p, 1125(1080)/50p
	(with the ET-MCYSD200/MCYSD210)	
	SDI	HD-SDI signal (YPbPr 4:2:2 10-bit): SMPTE ST 292 compliant: 750(720)/60p, 750(720)/50p, 1125(1035)/60i, 1125(1080)/60i, 1125(1080)/50i, 1125(1080)/25p, 1125(1080)/24p, 1125(1080)/24sF, 1125(1080)/30p
		SD-SDI signal (YCbCr 4:2:2 10-bit): SMPTE ST 259 compliant: 525i(480i), 625i(576i)
	(with the ET-MCYDV100)	
	DVI-U (Digital)	fH: 15.6–82.2 kHz, fV: 24.0–85.1 Hz, dot clock: 25.2–162 MHz
	DVI-U (Analog)/RGB	fH: 15.6–82.2 kHz, fV: 24.0–85.1 Hz, dot clock: 162 MHz or lower
	YPb(Cb)Pr(Cr)	525i (480i): fH 15.75 kHz; fV 60 Hz, 625i (576i): fH 15.63 kHz; fV 50 Hz, 525p (480p): fH 31.50 kHz; fV 60 Hz, 625p (576p): fH 31.25 kHz; fV 50 Hz, 750 (720)/60p: fH 45.00 kHz; fV 60 Hz, 750 (720)/50p: fH 37.50 kHz; fV 50 Hz, 1125 (1080)/60i: fH 33.75 kHz; fV 60 Hz, 1125 (1080)/50i: fH 28.13 kHz; fV 50 Hz, 1125 (1080)/25p: fH 28.13 kHz; fV 25 Hz, 1125 (1080)/24p: fH 27.00 kHz; fV 24 Hz, 1125 (1080)/30p: fH 33.75 kHz; fV 30 Hz, 1125 (1080)/60p: fH 67.50 kHz; fV 60 Hz, 1125 (1080)/50p: fH 56.25 kHz; fV 50 Hz
	Video/S-Video	fH: 15.75 kHz, fV: 60 Hz [NTSC/NTSC4.43/PAL-M/PAL60] fH: 15.63 kHz, fV: 50 Hz [PAL/SECAM/PAL-N]
Terminals	SERIAL IN	D-sub 9-pin (female) ×1, for external control (RS-232C compliant)
	LAN	RJ-45 ×1, for network connection, 100Base-TX/10Base-T
	USB	Type A (front), Type B (rear) (for service)
Board mounting slots		16 slots (including two dedicated input slot and two dedicated output slot)
	(with the ET-MCYSD200)	
	SDI IN	BNC x 2 3G-SDI signal: SMPTE ST 424 compliant HD-SDI signal: SMPTE ST 292 compliant SD-SDI signal: SMPTE ST 259 compliant
	(with the ET-MCYSD210)	
	SDI IN	BNC x 4 HD-SDI signal: SMPTE ST 292 compliant SD-SDI signal: SMPTE ST 259 compliant

	(with the ET-MCYDV100)	
	DVI-U IN	DVI-U 29-pin × 2
	Digital	DVI 1.0 compliant, HDCP compatible, for single link only 525i(480i)*1, 625i(576i)*1, 525p(480p), 625p(576p), 750(720)/60p, 750(720)50p, 1125(1080)/60i, 1125(1080)/50i, 1125(1080)/25p, 1125(1080)/24p, 1125(1080)/30p, 1125(1080)/60p, 1125(1080)/50p VGA (640 × 480)–WUXGA*2 (1,920 × 1,200), dot clock: 25 MHz–162 MHz
	RGB	<b>NOTE: Compatible with non-interlaced signals only.</b> R: 0.7 Vp-p, 75 ohms, G: 0.7 Vp-p (G: 1.0 Vp-p for sync on G), 75 ohms, B: 0.7 Vp-p, 75 ohms HD, VD/SYNC: TTL, high impedance, positive/negative automatic Y: 1.0 Vp-p (including sync signal), Pb/Pr (Cb/Cr): 0.7 Vp-p, 75 ohms
	YPbPr (YCbCr)	Y: 1.0 Vp-p (including sync signal), Pb/Pr (Cb/Cr): 0.7 Vp-p, 75 ohms
	S-Video signal	Y: 1.0 Vp-p, C: 0.286 Vp-p, 75 ohms
	Video signal	Y: 1.0 Vp-p, 75 ohms
	(with the ET-MCQDV150)	
	DVI-U OUT	DVI-U 29-pin × 2
	Digital	DVI 1.0 compliant
	RGB/YPbPr (YCbCr)	
	(With the ET-MCQDL350)	
	DIGITAL LINK OUT	RJ-45 × 2
	LAN IN	RJ-45 × 1 for network connection, 100Base-TX/10Base-T
Power cord length		3.0 m (9 ft 10 in)
Dimensions (W × H × D)		482 × 177 × 313 mm (18-31/32 × 6-31/32 × 12-5/16 inches) 4U rack size (including bosses, when rack mounting bracket is installed)
Weight		Approx. 9.6 kg (21.16 lbs)*3 (When optional devices are mounted)
Operating temperature		0–40 °C (32–104 °F)*4
Operating humidity		10%–85% (no condensation)

**Supplied accessories**

- Power cord (× 3)
- Software CD-ROM (Control Software for Multi Window Processor) (× 1)

**Optional accessories**

3G-SDI signal 2 input board	ET-MCYS200
HD/SD-SDI signal 4 input board	ET-MCYS210
DVI-U signal 2 input board	ET-MCYDV100
DVI-U signal 2 output board	ET-MCQDV150
DIGITAL LINK signal 2 output board	ET-MCQDL350
Power supply unit (for backup)	ET-RPS100G

Weights and dimensions shown are approximate. Specifications and appearance are subject to change without notice.

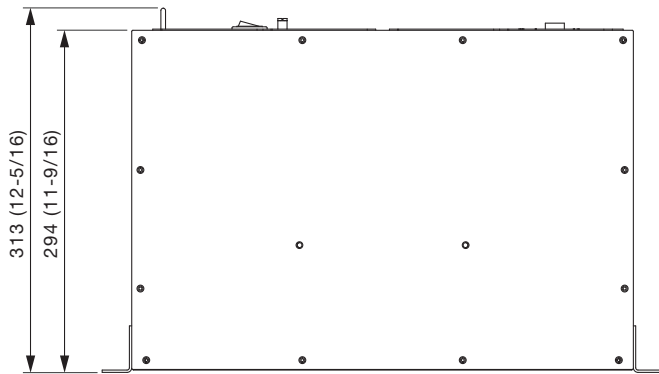
\*1 Only compatible with dot clock frequency of 27 MHz (pixel repetition signal)

\*2 Compatible with VESA CVT-RB (Reduced Blanking) signals only

\*3 Average value. May differ depending on models.

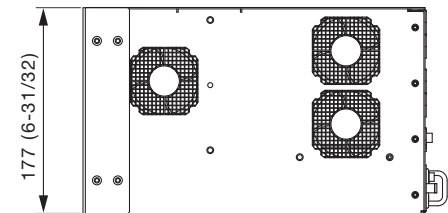
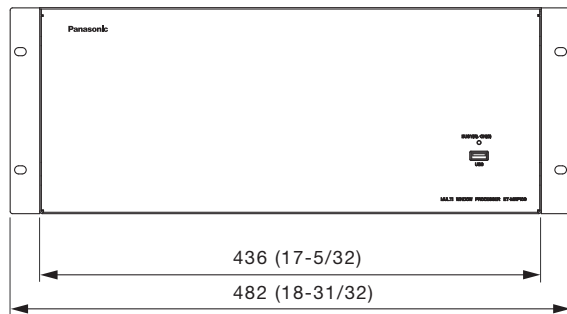
\*4 The operating temperature range is 0 °C to 35 °C (32 °F to 95 °F) when the processor used in high altitude of 1,400m (4,593 ft) or more.

**Dimensions**

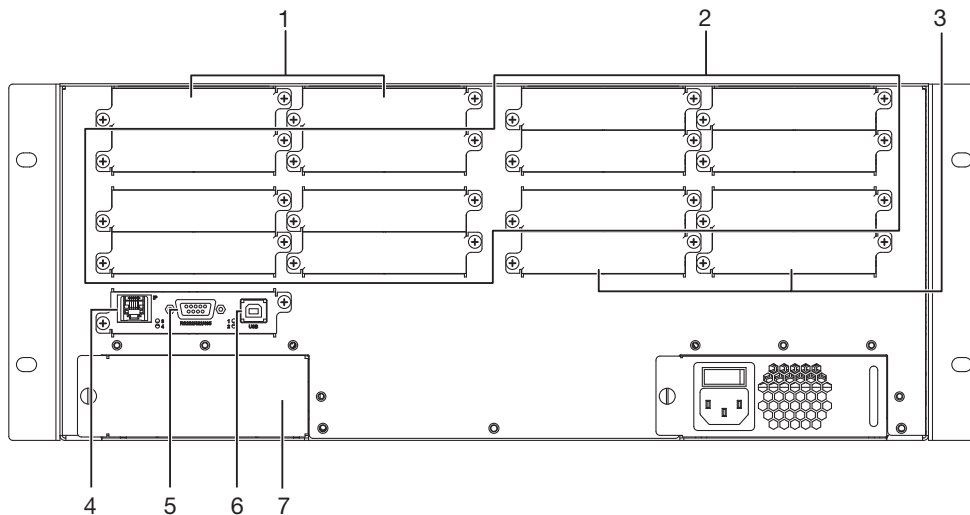


unit : mm (inch)

NOTE: This illustration is not drawn to scale.



**Terminals**



- 1 Dedicated input board slots
- 2 Dual I/O board slots
- 3 Dedicated output board slots
- 4 LAN
- 5 Serial input
- 6 USB type B
- 7 Power supply unit mount

**List of compatible signals**

The signals that can be input to this projector are shown in the table below. Horizontal scanning frequencies of 15.6 kHz to 85.1 kHz, vertical scanning frequencies of 24.0 Hz to 85.1 Hz, and a dot clock of 162 MHz maximum can be input.

Display mode	Display resolution (dots)*1	Scanning frequency		Dot clock frequency (MHz)	Format
		H (kHz)	V (Hz)		
NTSC	720 × 480i	15.7	59.9	–	VIDEO/S-VIDEO
PAL	720 × 576i	15.6	50.0		
525i (480i)	720 × 480i	15.7	59.9	13.5	YPbPr/RGB
625i (576i)	720 × 576i	15.6	50.0		SD-SDI
525i (480i)	720 (1440) × 480i*2	15.7	59.9	27.0	DVI
625i (576i)	720 (1440) × 576i*2	15.6	50.0		
525p (480p)	720 × 483	31.5	59.9		DVI/YPbPr/RGB
625p (576p)	720 × 576	31.3	50.0		
750p (720p)/60p	1280 × 720	45.0	60.0	74.3	DVI/YPbPr/RGB HD-SDI
		50.0	59.4	74.2	
750p (720p)/50p		37.5	50.0	74.3	
1125 (1080)/60i	1920 × 1080i	33.7	59.4	74.2	
		33.8	60.0	74.3	
1125 (1080)/50i		28.1	50.0		
1125 (1080)/24p	1920 × 1080	26.9	24.0	74.2	
		27.0		74.3	
1125 (1080)/25p		28.1	25.0		
1125 (1080)/30p		33.7	30.0	74.2	
		33.8		74.3	
1125 (1080)/60p		67.4	59.9	148.3	DVI/YPbPr/RGB 3G/HD-SDI
		67.5	60.0	148.5	
1125 (1080)/50p		56.3	50.0		
VGA	640 × 480	31.5	59.9	25.2	DVI/RGB
		35.0	66.7	30.2	
		37.5	75.0	31.5	
		37.9	72.8		
SVGA	800 × 600	35.2	56.3	36.0	
		37.9	60.3	40.0	
		46.9	75.0	49.5	
		48.1	72.2	50.0	
		53.7	85.1	56.3	
XGA	1024 × 768	48.4	60.0	65.0	
		60.0	75.0	78.8	
		56.5	70.1	75.0	
		68.7	85.0	94.5	
MXGA	1152 × 864	64.0	70.0	94.2	
		67.5	74.9	108.0	
1280 × 768	1280 × 768	47.8	59.9	79.5	
1280 × 800	1280 × 800	49.7	59.8	83.5	
		63.0	74.9	106.5	
		71.6	84.9	122.5	
MSXGA	1280 × 960	60.0	60.0	108.0	
SXGA	1280 × 1024	64.0			
1366 × 768	1366 × 768	47.7	59.8	84.8	
SXGA+	1400 × 1050	65.3	60.0	121.8	
		82.2	75.0	155.9	
1440 × 900	1440 × 900	55.9	59.9	106.5	
UXGA	1600 × 1200	75.0	60.0	162.0	
WSXGA+	1680 × 1050	65.3		146.3	
WUXGA*3	1920 × 1200	74.0		154.0	

\*1 The “i” appearing after the resolution indicates an interlaced signal.  
 \*2 Pixel repetition signal only.  
 \*3 Compliant with VESA CVT-RB (Coordinated Video Timing-Reduced Blanking).

**Output signal list**

The signals that can be output by this processor are as shown below.

Display mode	Display resolution (dots)*1	Scanning frequency		Dot clock frequency (MHz)	Format
		H (kHz)	V (Hz)		
525i (480i)	720 × 480i	15.7	59.9	13.5	YCbCr/RGB
625i (576i)	720 × 576i	15.6	50.0		
525p (480p)	720 × 483	31.5	59.9	27.0	DIGITAL LINK/ DVI/YCbCr/RGB
625p (576p)	720 × 576	31.3	50.0		
750p (720p)/60p	1280 × 720	45.0	60.0	74.3	
		50.0	59.4	74.2	
750p (720p)/50p:		37.5	50.0	74.3	
1125 (1080)/60i	1920 × 1080i	33.7	59.4	74.2	
		33.8	60.0	74.3	
1125 (1080)/50i		28.1	50.0		
1125 (1080)/24p	1920 × 1080	26.9	24.0	74.2	
		27.0		74.3	
1125 (1080)/25p		28.1	25.0		
1125 (1080)/30p		33.7	30.0	74.2	
		33.8		74.3	
1125 (1080)/60p		67.4	59.9	148.3	
		67.5	60.0	148.5	
1125 (1080)/50p		56.3	50.0		
VGA	640 × 480	31.5	59.9	25.2	DIGITAL LINK/ DVI/RGB
		35.0	66.7	30.2	
		37.5	75.0	31.5	
		37.9	72.8		
SVGA	800 × 600	35.2	56.3	36.0	
		37.9	60.3	40.0	
		46.9	75.0	49.5	
		48.1	72.2	50.0	
		53.7	85.1	56.3	
XGA	1024 × 768	48.4	60.0	65.0	
		60.0	75.0	78.8	
		56.5	70.1	75.0	
		68.7	85.0	94.5	
MXGA	1152 × 864	64.0	70.0	94.2	
		67.5	74.9	108.0	
1280 × 768	1280 × 768	47.8	59.9	79.5	
1280 × 800	1280 × 800	49.7	59.8	83.5	
		63.0	74.9	106.5	
		71.6	84.9	122.5	
MSXGA	1280 × 960	60.0	60.0	108.0	
SXGA	1280 × 1024	64.0			
1366 × 768	1366 × 768	47.7	59.8	84.8	
SXGA+	1400 × 1050	65.3	60.0	121.8	
		82.2	75.0	155.9	
1440 × 900	1440 × 900	55.9	59.9	106.5	
UXGA	1600 × 1200	75.0	60.0	162.0	
WSXGA+	1680 × 1050	65.3		146.3	
WUXGA60	1920 × 1200	74.0		154.0	

\* The "i" appearing after the resolution indicates an interlaced signal.