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**Model Name : OLMU-K4650**

**OLMU-K4670**

**OLMU-K5550**


**OLMU-K5570**

Issu. Dept. 입안 부서	Prepared By 입안자	Reviewd By 심 의 자	Reviewd By 심 의 자
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© Revisions History

Revision No. 개정 번호	Revised Date 개정된 날짜	Page 페이지	Revised Description 변경 내역
1.0	May. 05. 2016	ALL	Establishment
2	Jun. 28. 2016	5	Add 'Power Consumption'
		15	Add 'Products Label'

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## 1. Application(적용 범위)

This Specification applies to Orion's LCD video wall monitor(OLMU-K4650/OLMU-K4670/OLMU-K5550/OLMU-K5570) adopting 46"/55" Ultra Narrow Bezel LCD Panel.

본 사양은 46"/55" Ultra Narrow Bezel LCD Panel 을 적용한 Orion 의 LCD video wall monitor(OLMU-K4650/OLMU-K4670/OLMU-K5550/OLMU-K5570)에 적용된다.

## 2. Summary(개요)

OLMU-K Series are infinitely expandable LCD monitor system ready for 4K UHD(3840\*2160P@60Hz) video signal such as DisplayPort(DP 1.2) & HDMI(HDMI 2.0) along with DVI adopting Ultra Narrow Bezel and also provides various means of control such as RS-232C, LAN and IR.

OLMU-K 시리즈는 Ultra Narrow Bezel 을 적용하고, DisplayPort(DP 1.2), HDMI(HDMI2.0)와 같은 4K UHD(3840\*2160P@60Hz) 및 DVI 의 입력 신호를 지원하는 무한 확장형 LCD monitor 시스템이다.


RS-232C 와 LAN, IR 과 같은 다양한 종류의 제어를 지원한다.

## 3. Environmental Conditions(환경 조건)

Item 항목	Operating Condition 동작 조건		Storage Condition 저장 조건	
	Maximum 최대	Recommend 권장	Maximum 최대	Recommend 권장
Temperature 온도	0 ~ 50 °C	5 ~ 35 °C	-20 ~ 60 °C	0 ~ 40 °C
Humidity 습도	10 ~ 90 %RH	35 ~ 75 %RH	0 ~ 90 %RH	10 ~ 90 %RH

※ If the condition exceeds maximum ratings, it can cause malfunction or unrecoverable damage to the device.

최대 환경 조건을 초과하면 제품이 제대로 동작하지 않거나 수리가 불가능 할 수 있다.


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#### 4. General Information(일반적인 정보)

Product Name 제품명		UNB Multi-LCD Monitor			
Model Name 모델명		OLMU-K4650	OLMU-K4670	OLMU-K5550	OLMU-K5570
LCD Panel	Manufacture	SAMSUNG		LG	
	Back Light Unit Type	Direct LED			
	Module Dimension(H x V mm)	1021.98 x 576.6		1213.4 x 684.2	
	Active Display Area(H x V mm)	1018.08 x 572.7		1209.6 x 680.4	
	Number of Pixels(H x V)	1920 x 1080 (16:9)			
	Pixel Pitch(mm)	0.530 x 0.530		0.630 x 0.630	
	Display Colors	16.7M(8bit)		1.06Billion(10bits)	
	Luminance of White(Typ. cd/m <sup>2</sup> )	500	700	500	700
	Contrast Ratio(Typ.)	3,500 : 1		1,400 : 1	1,200 : 1
	Surface Treatment	Haze 44%, Anti-Glare, 3H		Haze 10%, Anti-Glare, 3H	
	Life Time(Typ. Ta : 25±°C)	50,000Hrs		60,000Hrs	
Power Supply 전원 사양		AC 100V ~ 240V±10% (50/60Hz)			
Power Consumption 소비 전력	Maximum 최대(W)	140	180	250	310
	Typ. 평균(W)	120	160	220	270
	Stand-By 대기(W)	≤ 0.5			
Seam Gap_Multi Configuration(Typ. mm)		3.7(Bezel to Bezel)		3.6(Bezel to Bezel)	
Dimension 크기 (W x H x D mm)		1022 x 576.6 x 100.8		1213.4 x 684.2 x 100.5	
Mounting (H x V mm)		580 x 340		600 x 400	
Weights 중량(kg)		23 ± 0.5		32 ± 0.5	
Orientation		Portrait / Landscape			
Input Signal 입력 신호	Support Resolution	480p, 576p, 720p, 1080p, UHD			
	HDCP	Ready			
	Frequency	H : 31~140kHz, V : 29~76Hz			
In/Output Terminal 입/출력 단자	Input 입력	DP x 1, HDMI x 1, DVI x 1, RS-232C x 1, LAN x 1, IR x 1, A/S x 1			
	Output 출력	DP x 1, RS-232C x 1			

※ Product design and specification can be changed for quality improvement without prior notice.


디자인 및 제품 규격은 제품 성능 향상을 위해 사전 예고 없이 변경될 수 있다.

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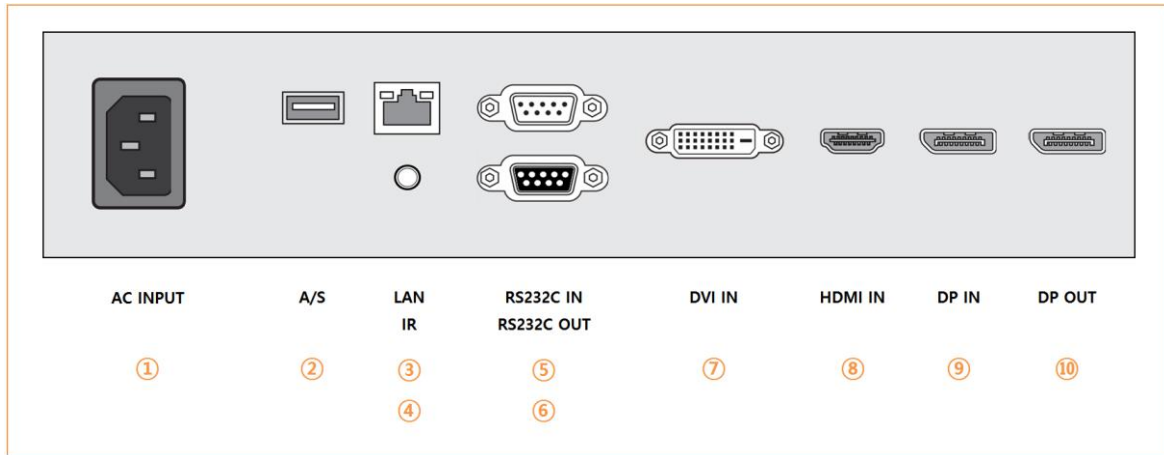
## 5. Specifications(제품 사양)

### 5.1. Input / Output Terminal Specifications(입/출력 단자 사양)


Terminal Name 단자 명	Terminal Spec. 단자 사양	Signal Spec. 신호 사양	Input 입력		Output 출력		Daisy Chain	Remark 비고
			Terminal Type 단자 형태	Q'ty 수량	Terminal Type 단자 형태	Q'ty 수량		
DP	Standard DisplayPort	DP1.2	Female	1	Female	1	6	DP only
HDMI	HDMI Type A	HDMI2.0	Female	1				
DVI	DVI-D (Dual-Link)	Digital RGB(TMDS)	Female	1				
RS-232C	D-Sub 9Pin	Single-Ended Max In/Output Voltage : ± 15V	Female	1	Male	1		Straight Type [Not Twist]
LAN	RJ45	10/100 BASE-T	Female	1				
IR	Stereo Mini Jack 3.5Φ		Female	1				
A/S	USB Type A		Female	1				For download

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## 5.2. Input / Output Terminal Description(입/출력 단자 서술)



- ① AC INPUT : Connects with the supplied power cord.
- ② A/S : Only for Firmware upgrade.
- ③ LAN : For control by Ethernet.
- ④ IR : Connecting with IR receiver for remote control.
- ⑤ RS232C IN : Connecting with RS232C cable from external equipment such as a PC in order to control RS232C functions.
- ⑥ RS232C OUT : Connecting RS232C looping through with other monitors for whole video wall control.
- ⑦ DVI IN : To input Digital RGB signal from a computer or HDTV device having a digital RGB output.
- ⑧ HDMI IN : To input HDMI video signal.
- ⑨ DP IN : To input DisplayPort video signal.
- ⑩ DP OUT : For loop through video with other monitors for sharing video signal through DisplayPort.


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### 5.3. Support Resolutions(지원 해상도)

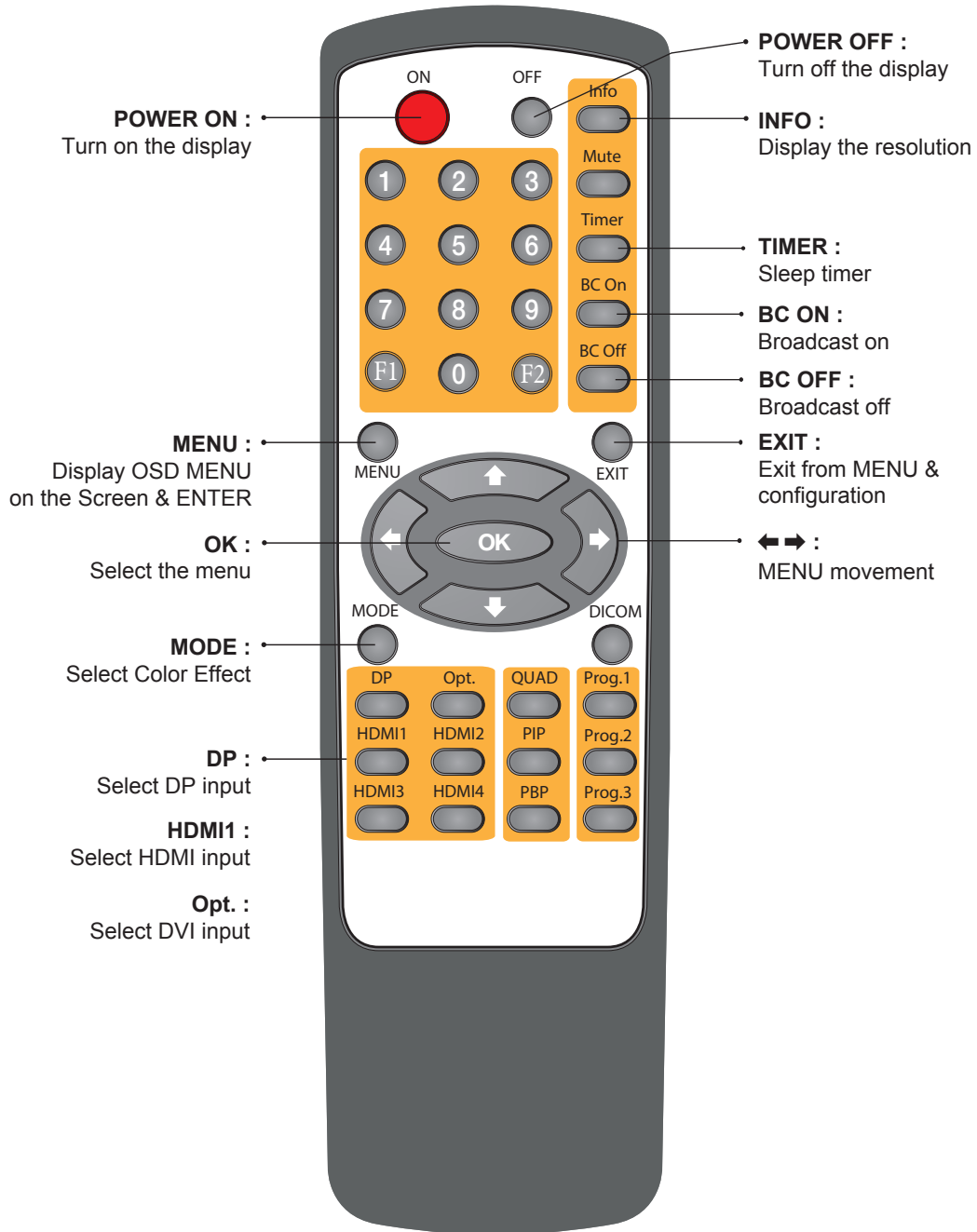
Vertical Frequency : Standard  $\pm 0.5$  Hz, Vertical Lines : Standards  $\pm 7$  Lines \* H [dot] / V [line]


Resolution	Pixel Clock [Mhz]	Horizontal [Pixels]				Vertical [Lines]				Polarity (H. / V.)	Standard Type	Input
		Total	Addr. Width	Sync. Width	Back Porch	Total	Addr. Width	Sync. Width	Back Porch			
640*480*60	25.175	800	640	96	40	525	480	2	25	- / -	DMT	DVI/ HDMI/ DP
800*600*60	40.002	1056	800	128	88	628	600	4	23	- / -	DMT	
1024*768*60	65.000	1344	1024	136	160	806	768	6	29	- / -	DMT	
1280*768*60	79.500	1664	1280	128	192	798	768	7	20	+ / +	CVT	
1360*768*60	85.500	1792	1360	112	256	795	768	6	18	+ / +	CVT	
1280*1024*60	108.000	1688	1280	112	248	1066	1024	3	38	- / -	DMT	
1600*1200*60	162.000	2160	1600	192	304	1250	1200	3	46	+ / +	DMT	
480P	27.000	858	720	62	60	525	480	6	30	- / -	CEA-861	HDMI/ DP
576P	27.000	864	720	64	68	625	576	5	39	- / -	CEA-861	
720P24	59.400	3300	1280	40	220	750	720	5	20	+ / +	CEA-861	
720P25	74.250	3960	1280	40	220	750	720	5	20	+ / +	CEA-861	
720P30	74.250	3300	1280	40	220	750	720	5	20	+ / +	CEA-861	
720P50	74.250	1980	1280	40	220	750	720	5	20	+ / +	CEA-861	
720P60	74.250	1650	1280	40	220	750	720	5	20	+ / +	CEA-861	
1080P24	74.250	2750	1920	44	148	1125	1080	5	36	+ / +	CEA-861	DVI/ HDMI/ DP
1080P25	74.250	2640	1920	44	148	1125	1080	5	36	+ / +	CEA-861	
1080P30	74.250	2200	1920	44	148	1125	1080	5	36	+ / +	CEA-861	
1080P50	148.500	2640	1920	44	148	1125	1080	5	36	+ / +	CEA-861	
1080P60	148.500	2200	1920	44	148	1125	1080	5	36	+ / +	CEA-861	
3840*2160*30	297.000	4400	3840	88	296	2250	2160	10	72	+ / +		HDMI/ DP
3840*2160*60	594.000	4400	3840	88	296	2250	2160	10	72	+ / +		



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## 5.4. Remote Control(원격 조정)



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## 5.5. Optical Characteristics(광학적 특성)

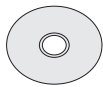
Parameter 요소	Condition 검사 조건	Sym. 심볼	Model	Spec. 사양			Unit
				Min.	Typ.	Max.	단위
Luminance 휘도	Pattern : Full White Color Temperature : 10,000K	Y <sub>L</sub>	K4650	400	500	-	cd/m <sup>2</sup>
			K4670	550	700	-	
			K5550	400	500	-	
			K5570	560	700	-	
Contrast Ratio 명암비	Pattern : Full White Pattern : Full Black	C/R	K4650/K4670	2,500	3,500	-	-
			K5550	1,000	1,400	-	-
			K5570	800	1,200	-	-
Color Coordinate & Uniformity 색 좌표 & 색 균일도	Pattern : Full White Color Temperature : 10,000K	x	K4650/K4670	Typ. -0.03	0.280	Typ. +0.03	-
			K5550/K5570		0.279		-
		y	K4650/K4670		0.290		-
			K5550/K5570		0.292		-
Color Gamut 색 재현률			All	-	72	-	%
Response Time 응답 속도	G-to-G	T <sub>g</sub>	K4650/K4670	-	8	16	msec
			K5550/K5570	-	12	18	
Brightness Uniformity 휘도 균일도	Pattern : Full White	δ <sub>White</sub>	K4650/K4670		10	15	%
			K5550/K5570	80	90	-	
Viewing Angle 시야 각	Pattern : Full White (C/R ≥ 10)	θ <sub>L-R</sub>	K4650/K4670	158	178	-	Degree
		θ <sub>U-D</sub>	K4650/K4670	158	178	-	
		θ <sub>L-R</sub>	K5550/K5570	178	-	-	
		θ <sub>U-D</sub>	K5550/K5570	178	-	-	

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## 6. Accessory(부속품)

### 6.1. Accessory(부속품)

- 1) CD with User's Manual : 1ea
- 2) Guide Pin : 4pcs
- 3) Power Cable : 1ea
- 4) DP Cable : 1ea
- 5) RS232C Cable : 1ea
- 6) Remote Controller : 1ea
- 7) Battery(AAA) : 2ea
- 8) IR Receiver : 1ea



User's manual CD  
(Included MSCS)



Guide Pin(4pcs)



Power Cable



DP Cable



RS-232C Cable



Remote Controller



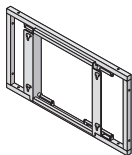
Battery (AAA X2)




IR Receiver

### 6.2. Optional Accessory(별매품)

- 1) Main Frame

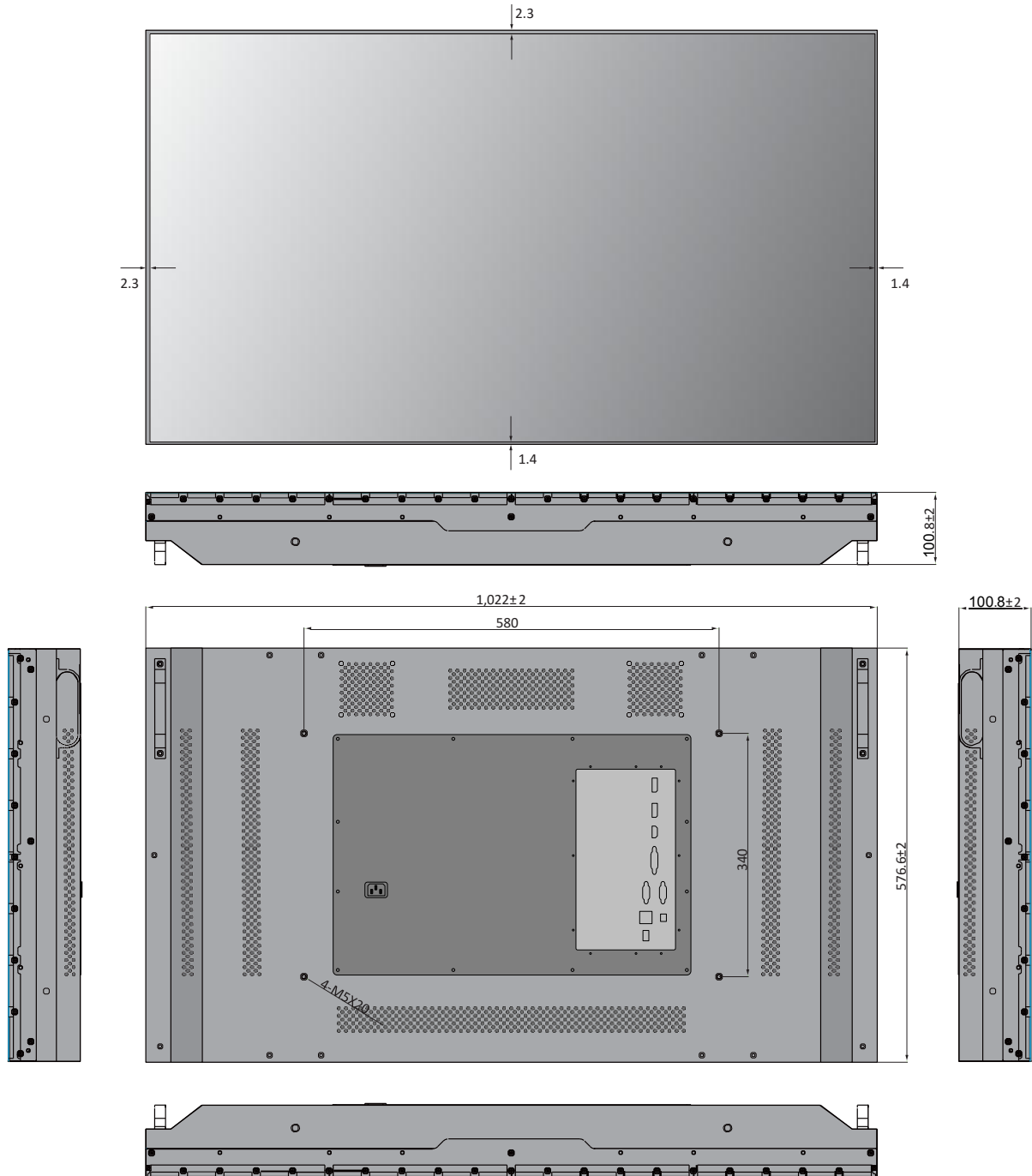



Main Frame

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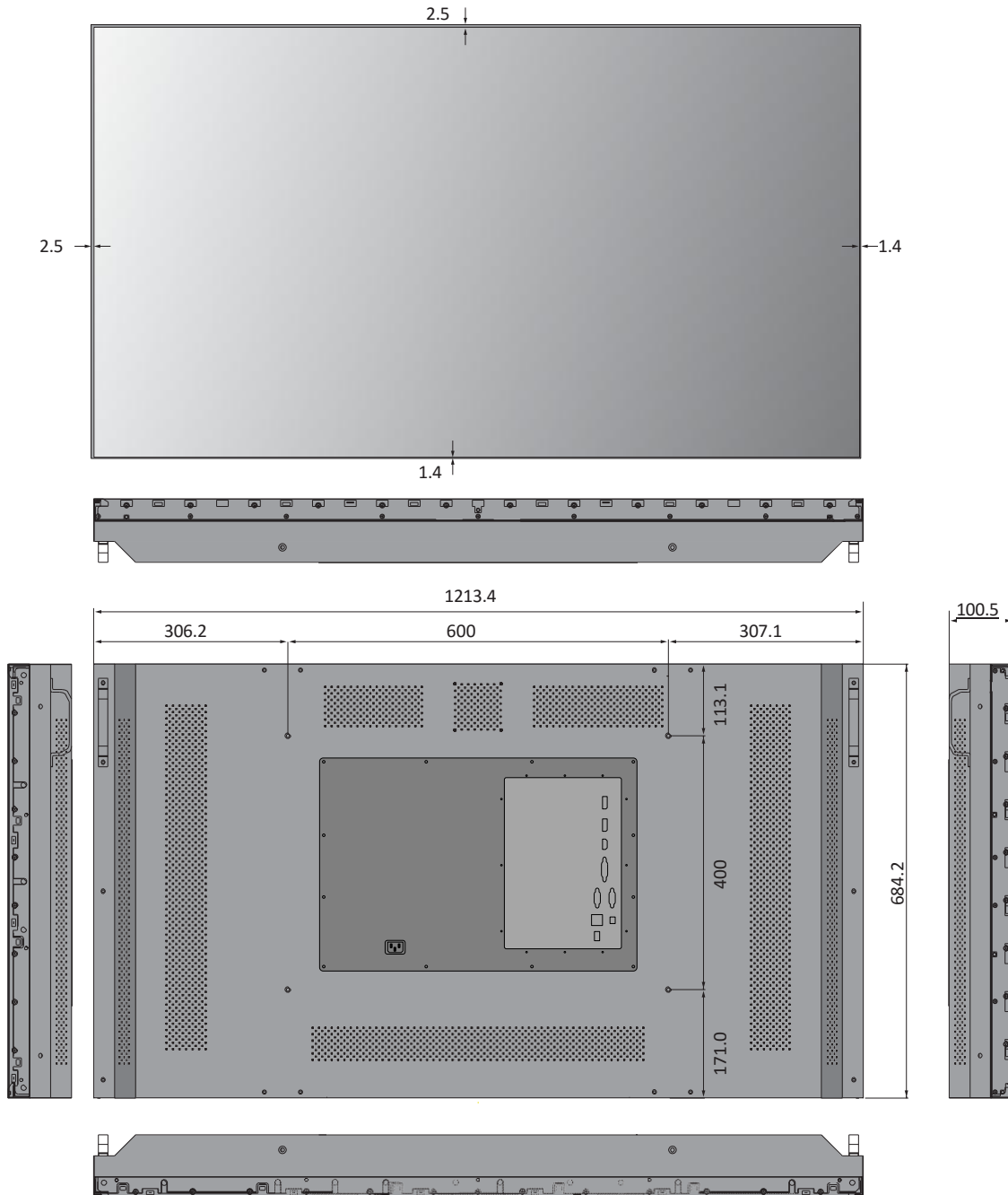
## 7. Product Drawing & Dimension(제품 외관 및 치수)


### 7.1. OLMU-K4650/OLMU-K4670 Drawing.(OLMU-K4650/OLMU-K4670 외관)



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7.2. OLMU-K5550/OLMU-K5570 Drawing.(OLMU-K5550/OLMU-K5570 외관)

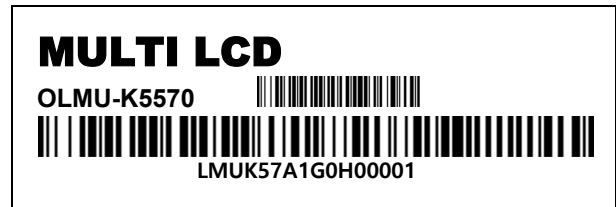
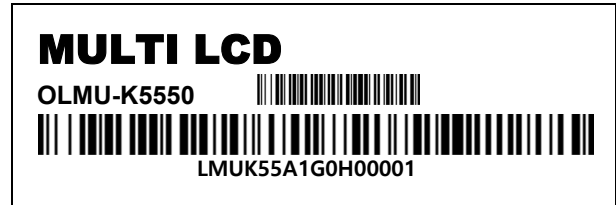


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## 8. Label(라벨)

### 8.1. Box Label(Box 라벨)

(80mm x 25mm, Barcode Type : Code-128)



### 8.2. Serial Label(일련 라벨)

(45mm x 9mm, Barcode Type : Code-128)

S/N : LMUK45A1G0H00001



S/N : LMUK47A1G0H00001




S/N : LMUK55A1G0H00001



S/N : LMUK57A1G0H00001





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## 9. Packing(포장)

### 9.1. Product Packing(제품 포장)

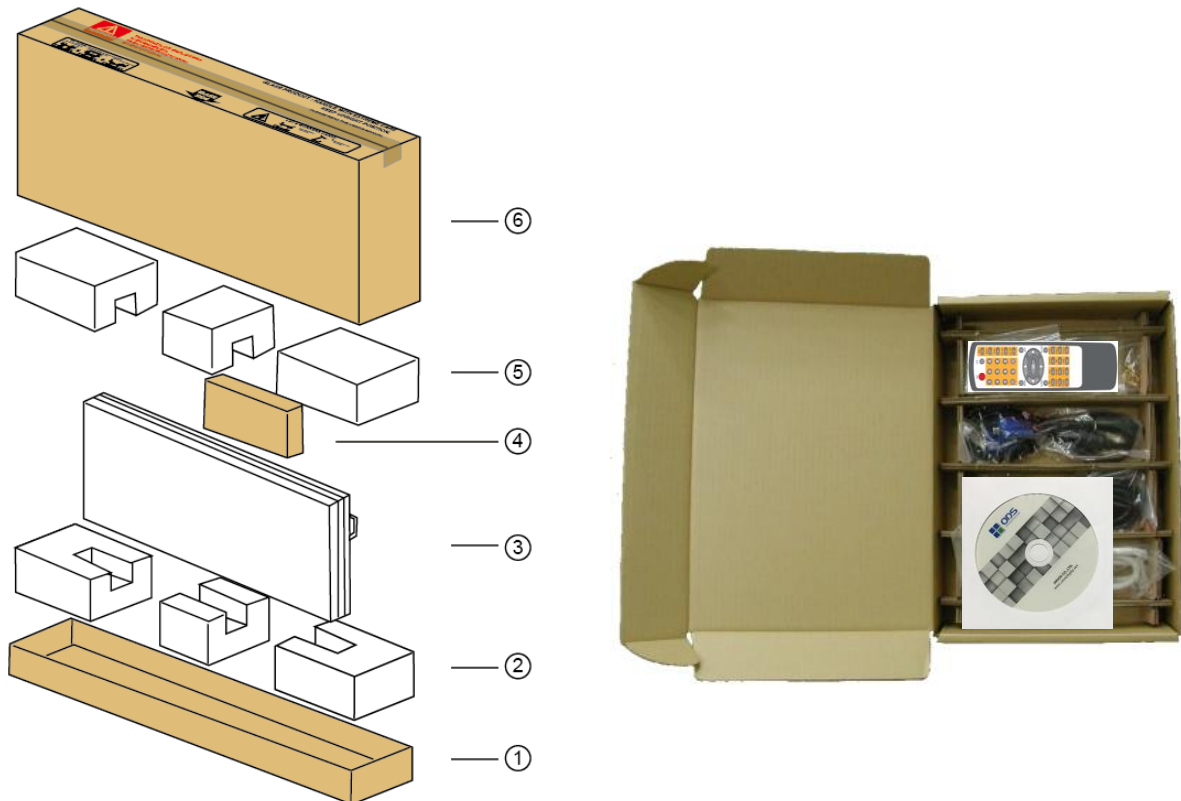
#### 1) Box Packing Specifications(박스 포장 사양)

- 1 Box : 1 Monitor


Model Name	OLMU-K4650 / OLMU-K4670	OLMU-K5550 / OLMU-K5570
Dimension (L x W x H mm)	1,170 x 255 x 700	1,400 x 340 x 840
Weight (Kg)	27 ± 0.5	39.6 ± 0.5

#### 2) Box Packing Assembly Drawing(박스 포장 외관)

No.	Item
1	Carton Box Bottom
2	Bottom Pad Left, Bottom Pad Middle, Bottom Pad Right
3	MLCD Set
4	Accessory Box
5	Top Pad Left, Top Pad Middle, Top Pad Right
6	Carton Box Top





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## 9.2. Pallet Packing(파렛트 포장)

### 1) Pallet Packing Specifications(파렛트 포장 사양)

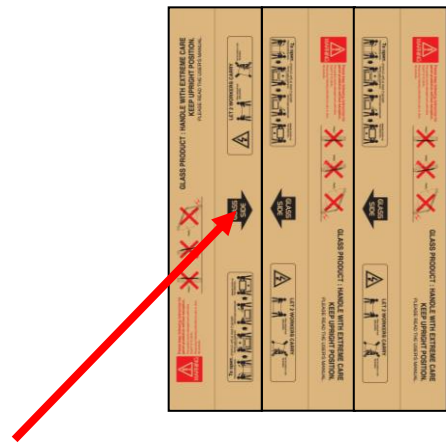
ITEM	OLMU-K4650 / OLMU-K4670		OLMU-K5550 / OLMU-K5570	
	FCL	LCL or Air	FCL	LCL or Air
Number of boxes in 1 pallet	4 boxes(4 monitors)		3 boxes(3 monitors)	
Dimension (L x W x H mm)	1,230 x 1,130 x 825	1,195 x 1,095 x 760	1,460 x 1,130 x 950	1,460 x 1,130 x 1,000
Weight(Kg)	126 ± 2	131 ± 2	130.7 ± 1	139.6 ± 2

### 2) Pallet Packing Assembly Drawing(파렛트 포장 외관)

- FCL Packing



- The loading direction of MLCD on the pallet  
(파렛트 위, MLCD 적재 방향)



- LCL or Air Packing



오리온퍼디피 : 02-6678-8509 / 054-460-5956

구매자		Buyer	
수출국		Country	
모델명		Model #	
수량		Quantity	
파렛트번호		Production	
총파렛트		Serial #	