Legamaster

We make communication visible

Supreme Touchscreen display
Integration Manual

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Integration Manual - Version 1.1

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PRODUCT SPECIFICATIONS

1. PRODUCT SPECIFICATIONS

PRODUCT SPECIFICATIONS			
Screen Size	65”	75”	85”
Panel Technology	PID	PID	PID
Display Resolution	3840 x 2160	3840 x 2160	3840 x 2160
Brightness	500 cd/m2	500 cd/m2	500 cd/m2
Contrast	5000:1	5000:1	5000:1
Response Time	9ms	9ms	9ms
Frame Rate	60Hz	60Hz	60Hz
Viewing Angle	178°	178°	178°
Display Colors	1.07G	1.07G	1.07G
Backlight Type	Direct LED	Direct LED	Direct LED
Service Life	50.000Hrs	50.000Hrs	50.000Hrs
Orientation	Landscape	Landscape	Landscape
Operating System	Android 8.0	Android 8.0	Android 8.0
Detection Method	InGlass M5	InGlass M5	InGlass M5
Touch Points	20	20	20
Response Time	<= 5ms	<= 5ms	<= 5ms
Minimum Response Size	2mm	2mm	2mm
Input Connectors	USB-C, IR IN, USB-A 2.0 x1, USB 3.0x3, Ethernet, DP 1.2 x1, HDMI 2.0 x3, RS-232, Touch USB-B x4		
Output Connectors	HDMI x1, Audio Out, S/PDif Out, Ethernet		
OPS Slot	YES	YES	YES
Wi-Fi Module	Optional	Optional	Optional
Audio Power Output	2 x 12W	2 x 12W	2 x 12W
VESA 100x100	YES	YES	YES
Front Glass	3.2mm Tempered	3.2mm Tempered	3.2mm Tempered
Glass Coating	AG + AF	AG + AF	AG + AF
Power Supply	AC 100-240V 50/60Hz	AC 100-240V 50/60Hz	AC 100-240V 50/60Hz
Presence Sensor	Optional	Optional	Optional
Operation Temperature	0 – 40°C	0 – 40°C	0 – 40°C
Operation Humidity	35 – 85% RH (No Cond.)	35 – 85% RH (No Cond.)	35 – 85% RH (No Cond.)
VESA Standard	400 x 400	600 x 400	600 x 600

PRODUCT SPECIFICATIONS

1.1 SUPPORTED TIMINGS

	HDMI Timings		DP Timings		Type-C Timings
1	640x480/60Hz	1	640x480/60Hz	1	640x480/60Hz
2	640x480/75Hz	2	640x480/75Hz	2	640x480/75Hz
3	720x576P/50Hz	3	720x576P/50Hz	3	720x576P/50Hz
4	720x480P/60Hz	4	720x480P/60Hz	4	720x480P/60Hz
5	800x600/60Hz	5	800x600/60Hz	5	800x600/60Hz
6	800x600/75Hz	6	800x600/75Hz	6	800x600/75Hz
7	1024x768/60Hz	7	1024x768/60Hz	7	1024x768/60Hz
8	1024x768/75Hz	8	1024x768/75Hz	8	1024x768/75Hz
9	1280x960/60Hz	9	1280x960/60Hz	9	1280x960/60Hz
10	1280x1024/60Hz	10	1280x1024/60Hz	10	1280x1024/60Hz
11	1280x1024/75Hz	11	1280x1024/75Hz	11	1280x1024/75Hz
12	1600x1200/60Hz	12	1600x1200/60Hz	12	1600x1200/60Hz
13	1280x720P/50Hz	13	1280x720P/50Hz	13	1280x720P/50Hz
14	1280x720P/60Hz	14	1280x720P/60Hz	14	1280x720P/60Hz
15	1920x1080I/50Hz	15	1920x1080I/50Hz	15	1920x1080I/50Hz
16	1920x1080I/60Hz	16	1920x1080I/60Hz	16	1920x1080I/60Hz
17	1920x1080P/50Hz	17	1920x1080P/50Hz	17	1920x1080P/50Hz
18	1920x1080P/60Hz	18	1920x1080P/60Hz	18	1920x1080P/60Hz
19	3840x2160/30Hz	19	3840x2160/30Hz	19	3840x2160/30Hz
20	3840x2160/60Hz	20	3840x2160/60Hz	20	3840x2160/60Hz

SERIAL COMMUNICATIONS

2. SERIAL COMMUNICATIONS

The display uses a simple text-based control protocol to take requests from control devices and to provide responses to such devices. This section describes how to send control messages over a serial link between the display and an automation/control system or a PC running a terminal emulation program such as Windows® HyperTerminal or Tera Term.

2.1 RS-232 CONNECTION AND PORT CONFIGURATION

Connect your control system or PC to the RS-232 input of the display.

Configure the RS-232 controller or PC serial port as follows:

- Baud rate: 115200 (as a default), you can also configure this parameter on the screen.
- 8bit
- non parity
- 1 stop bit

2.2 RS-232 INTERFACE

- STX: Start Byte = 07
- IDT: 00
- Type:
    - Write = 01
    - Read = 02
    - Return to Host = 00
- CMD: Command
- Value: Setting value on “Write” Command
- Reply: Response from Screen
- ETX: 08

Read Command Example: 07 00 01 CMD 08

Write/Setting Command Example: 07 00 02 CMD VAL 08

Complete Command Structure

STX + 00 + Type + CMD + [Value/Reply] + ETX

SERIAL COMMUNICATIONS

Main Item	Control Item	Type	Value (HEX)	Reply (HEX)	Content	CMD (HEX)
Power Control & Input Source	Power Control	W/R	00	00	OFF	50 4F 57
			01	01	ON	
	Source Selecction		09	09	HDMI 1	4D 49 4E
			0A	0A	HDMI 2	
			0B	0B	HDMI 3	
			0D	0D	DisplayPort	
			0E	0E	OPS	
			14	14	USB Type-C	
Display Configurations	Display Adjustments		00 - 64	00 - 64	Backlight Brightness	42 52 49
			00 - 64	00 - 64	Digital Brightness level	42 52 4C
			00	00	Backlight OFF	42 4C 43
			01	01	Backlight ON	
			00 - 64	00 - 64	Contrast	43 4F 4E
			00 - 64	00 - 64	Hue	48 55 45
			00 - 64	00 - 64	Saturation	53 41 54
			01	01	6500K	
			02	02	9300K	
			06	06	5000K	
			07	07	7500K	
			00	00	Gamma OFF	47 41 43
			01	01	Gamma 2.2	
	Sharpness		00 - 64	00 - 64	Adjust Sharpness	53 48 41
	Remote Control Keys	W	00	00	MENU Key	52 43 55
			02	02	Up Key	
			03	03	Down Key	
			04	04	Left Key	
			05	05	Right Key	
			06	06	Enter Key	
			07	07	Back Key	
			12	12	Source Key	
			1D	1D	Volume + Key	
			1E	1E	Volume - Key	
			2F	2F	Home Screen Key	
	Others	W	00	00	Reset All	41 4C 4C
		W/R	00	00	Un-Lock Keys	4B 4C 43
			01	01	Lock Keys	
		R		13 Bytes	Get Serial Number	53 45 52
				13 Bytes	Get Model Name	4D 4E 41
				6 Bytes	Get Firmware Version	47 56 45

SERIAL COMMUNICATIONS

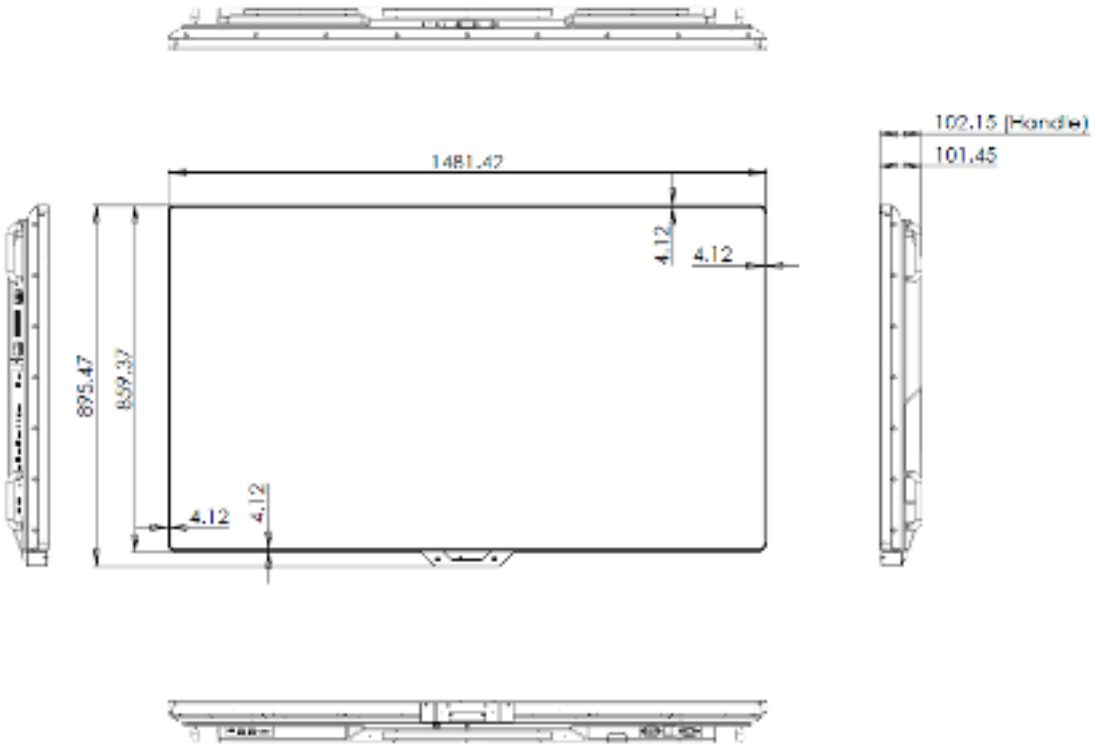
Main Item	Control Item	Type	Value (HEX)	Reply (HEX)	Content	CMD (HEX)
Display Configurations	Audio	W/R	00 - 64	00 - 64	Volume	56 4F 4C
			00 - 0D	00 - 0	Bass	42 41 53
			00 - 0D	00 - 0D	Treble	54 52 45
			00	00	Auto	41 55 53
			01	01	Default	
			02	02	USB Audio	
			00	00	Internal Speaker OFF	49 4E 53
			01	01	Internal Speaker ON	
	Scheme Selection	W/R	01	01	Standard	53 43 4D
			02	02	Soft	
			03	03	Vivid	
			04	04	Natural	
			05	05	Sports	
	Eco Mode & Wake Up	W/R	00	00	Eco	57 46 53
			01	01	Wake On All	
			02	02	Always ON	
			03	03	Wake on LAN	
	Date & Time Configuration	W/R	00 - 63	00 - 63	Set Year	52 54 59
			01 - 0C	01 - 0C	Set Month	52 54 4D
			01 - 1F	01 - 1F	Set Day	52 54 44
			00 - 17	00 - 17	Set Hour	52 54 48
			00 - 3B	00 - 3B	Set Minutes	52 54 4E
	Auto Source Scan	W/R	00	00	OFF	41 54 53
			01	01	ON	
	Smart Light Control	W/R	00	00	OFF	53 4C 43
			02	02	Light Sensor	
	HDMI RGB Color Range	W/R	00	00	Auto Detect	48 43 52
			01	01	Full Range (0-255)	
			02	02	Limited Range (16-255)	

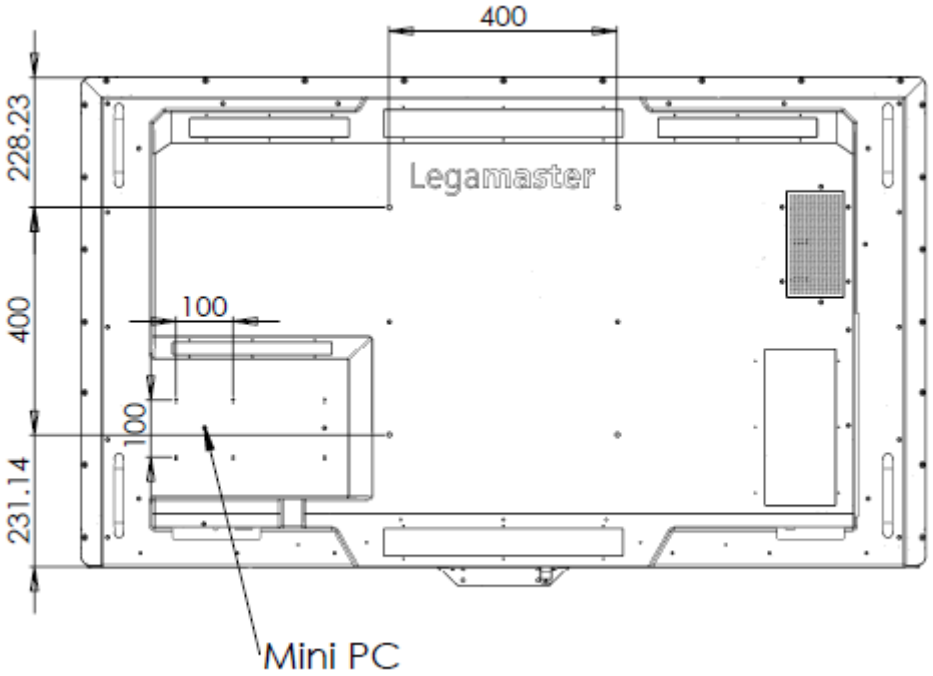
SERIAL COMMUNICATIONS

Main Item	Control Item	Type	Value (HEX)	Reply (HEX)	Content	CMD (HEX)
OSD Control	OSD Language	W/R	00	00	English	4F 53 4C
			01	01	French	
			02	02	German	
			03	03	Nederland	
			10	10	Spanish	
	OSD TimeOut	W/R	00	00	OFF	4F 53 4F
			01	01	5 Sec.	
			02	02	10 Sec.	
			03	03	20 Sec.	
			04	04	30 Sec.	
			05	05	60 Sec.	
Network	Dynamic IP	W/R	00	00	Disable	44 49 50
			01	01	Enable	
	MAC Address	W	00 - 05	00 - FF	Querying MAC ID	4D 41 43
OPS	OPS Power	W/R	00	00	OPS power follows display power	4F 41 50
			01	01	OPS Power allways ON	
	OPS Boot		00	00	OPS Will not boot with the Display	4F 50 42
			01	01	OPS Will boot with the Display	

TECHNICAL DRAWINGS

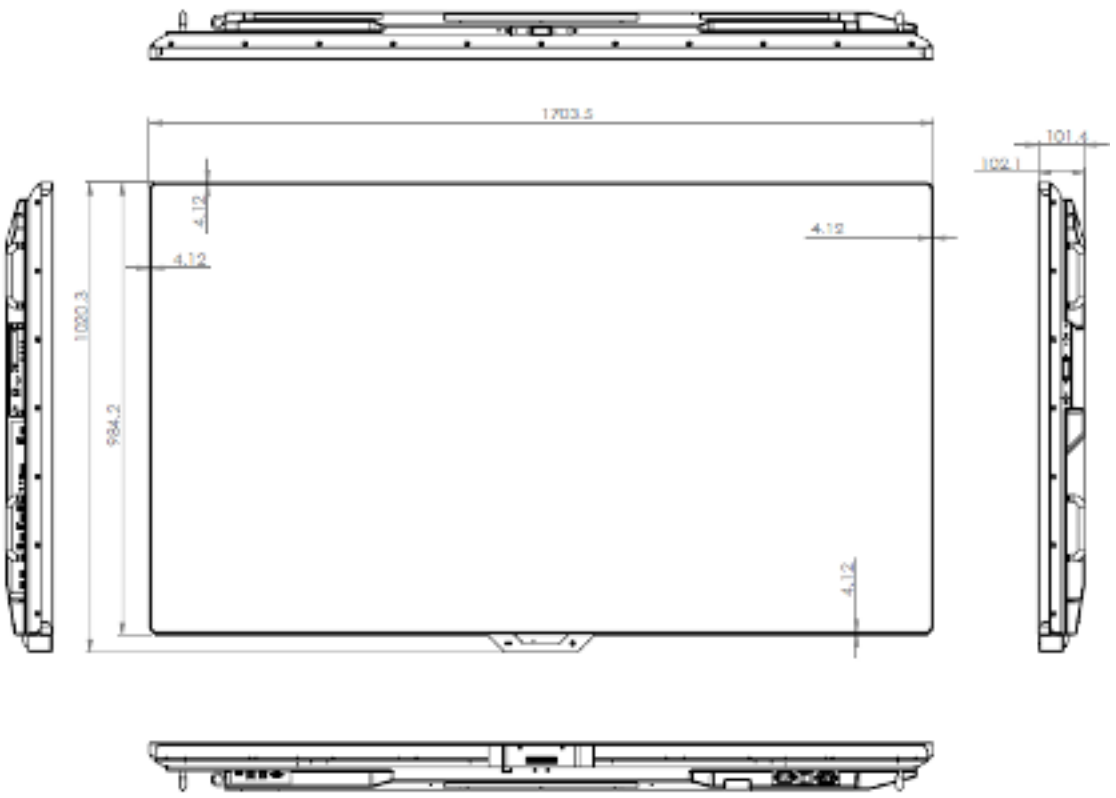
3.1 SUP-6500

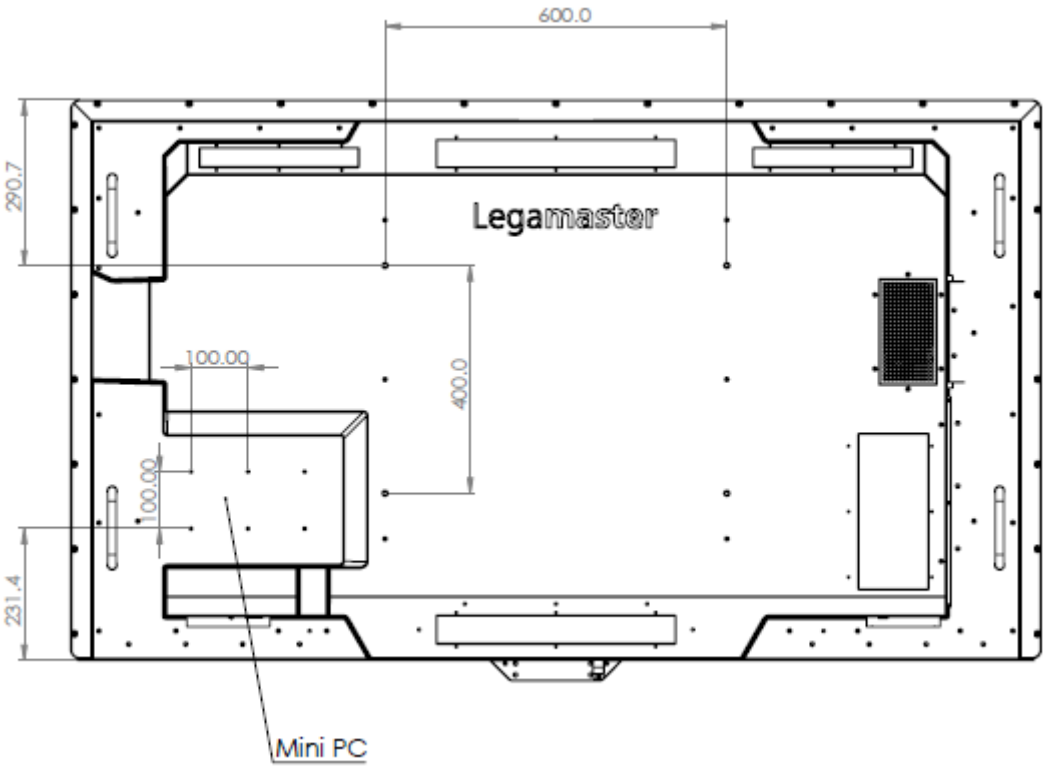




TECHNICAL DRAWINGS

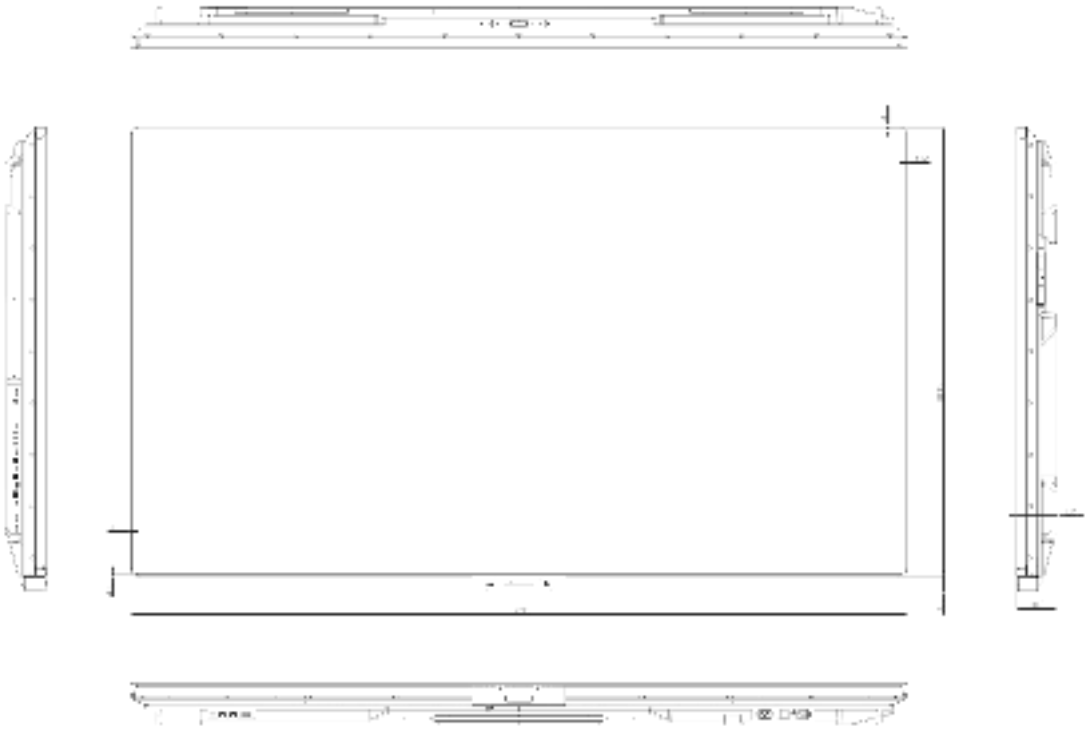
3.2 SUP-7500

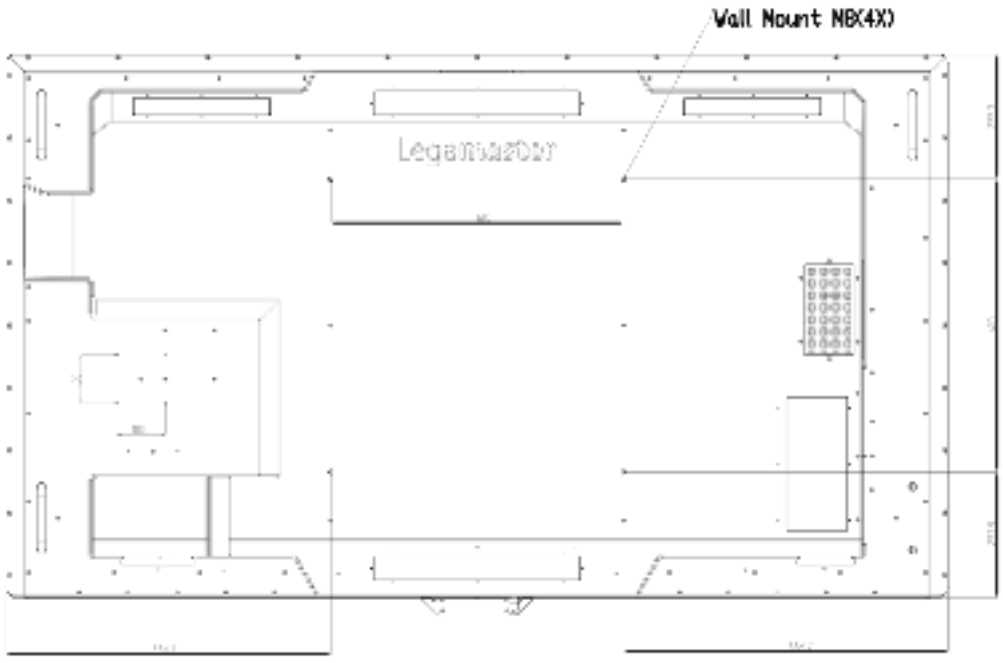




TECHNICAL DRAWINGS

3.3 SUP-8500

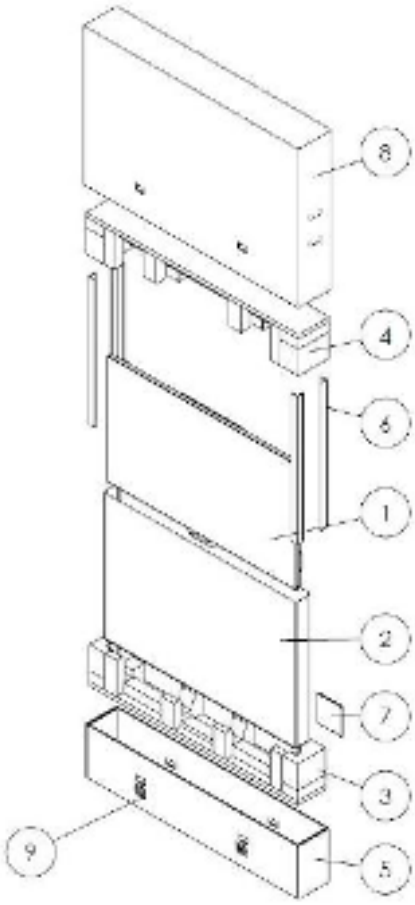




TECHNICAL DRAWINGS

3.4 PACKING

Item	Description	Qu.
1	Screen	1
2	Anti-Static Bag	1
3	EPE Cushion Bottom	1
4	EPE Cushion Top	1
5	Cardboard Tray	1
6	Corner Plate	4
7	Accessory Bag	1
8	Carton	1
9	Carton Lock	4 - 6



SUP-6500	
Product Dimentions	1481.42 x 895.47 x 102.15 (mm)
Packing Dimentions	1672 x 1082 x 254 (mm)
Net Weight	55 (kg)
Gross Weight	68 (kg)
SUP-7500	
Product Dimentions	1703.5 x 1019.3 x 102 (mm)
Packing Dimentions	1997 x 1184 x 278 (mm)
Net Weight	69 (kg)
Gross Weight	88(kg)
SUP-8500	
Product Dimentions	1929.3 x 1149.5 x 101.6 (mm)
Packing Dimentions	2117 x 1315 x 280 (mm)
Net Weight	89 (kg)
Gross Weight	101 (kg)