Legamaster

We make communication visible



Evolve 2 ETX 40 Series Touchscreen display

Integration Handbuch

English | **Deutsch** | Nederlands | Français | Español

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TECHNISCHE DATEN

1. TECHNISCHE DATEN

TECHNISCHE DATEN				
Bildiagonale	55”	65”	75”	86”
Display	LED LCD	LED LCD	LED LCD	LED LCD
Display-Auflösung	3840 x 2160	3840 x 2160	3840 x 2160	3840 x 2160
Helligkeit	450 cd/m2	450 cd/m2	500 cd/m2	500 cd/m2
Kontrastverhältnis	5000:1	5000:1	1200:1	4000:1
Reaktionszeit	8ms	8ms	9ms	9ms
Bildfrequenz	60Hz	60Hz	60Hz	60Hz
Betrachtungswinkel	178°	178°	178°	178°
Unterstützte Farben	1.07G	1.07G	1.07G	1.07G
Hintergrundbeleuchtung	Direct LED	Direct LED	Direct LED	Direct LED
Lebensdauer	50.000Hrs	50.000Hrs	50.000Hrs	50.000Hrs
Bildschirmausrichtung	Querformat	Querformat	Querformat	Querformat
Betriebssystem	Android 13	Android 13	Android 13	Android 13
Touch-Technologie	IR	IR	IR	IR
Anzahl Berührungspunkte	50	50	50	50
Reaktionszeit	<= 5ms	<= 5ms	<= 5ms	<= 5ms
Mindest-Eingabegröße	1mm	1mm	1mm	1mm
Eingangsanschlüsse	USB-C x2, USB-A 2.0 x3, USB 3.0x5, Ethernet, DP 1.2 x1, HDMI 2.0 x3, RS-232, Touch USB-B x3			
Ausgangsanschlüsse	HDMI 2.1 x1, Audio Out, S/PDif Out, Ethernet, USB-C			
OPS-Steckplatz	Ja			
Wi-Fi Modul	Optional			
Lautsprecher	2 x 15W + 1x 15W			
VESA 100x100	Ja			
Glas	3 mm Tempered			
Glas-Beschichtung	AG + AF			
Stromversorgung	AC 100-240V 50/60Hz			
ECO Sensor	Optional			
Betriebstemperatur	0 – 40°C			
Betrieb Luftfeuchtigkeit	35 – 85% RH (No Cond.)			
VESA Standard	400 x 400	600 x 400	800 x 600	800 x 600

TECHNISCHE DATEN

1.1 UNTERSTÜTZTE TAKTFREQUENZEN

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

SERIELLE KOMMUNIKATION

2. SERIELLE KOMMUNIKATION

Der Monitor verwendet ein einfaches textbasiertes Steuerprotokoll, mit dessen Hilfe Anfragen von Steuerungsgeräten angenommen und Antworten an diese Geräte zurückgegeben werden. In diesem Abschnitt wird beschrieben, wie Steuermeldungen über eine serielle Verbindung zwischen dem Monitor und einem Automations-/Steuersystem oder einem PC gesendet werden, auf dem ein Terminalemulationsprogramm wie Windows® HyperTerminal oder Tera Term läuft.

2.1 RS-232-ANSCHLUSS UND PORT-KONFIGURATION

Schließen Sie Ihr Steuersystem oder den PC an den RS-232-Eingang des Monitors an.

Konfigurieren Sie den RS-232-Controller oder den seriellen Port des PCs wie folgt:

- Baud rate: 115200 (as a default), können Sie diesen Parameter auch auf dem Bildschirm konfigurieren.
- 8bit
- non parity
- 1 stop bit

Direct Input Commands		
Mode	Code	Description
POWER OFF	02 50 57 44 3A 30 30 30 03	Power ON Direct Command
POWER ON	02 50 57 44 3A 30 30 31 03	Power OFF Direct Command
ANDROID	02 49 4E 50 3A 30 30 30 03	Input Switch to Android Command
PC	02 49 4E 50 3A 30 30 34 03	Input Switch to OPS Command
VGA	02 49 4E 50 3A 30 30 35 03	Input Switch to VGA Command
HDMI 1	02 49 4E 50 3A 30 30 38 03	Input Switch to HDMI 1 Command
HDMI 2	02 49 4E 50 3A 30 31 30 03	Input Switch to HDMI 2 Command
DP	02 49 4E 50 3A 30 31 32 03	Input Switch to DP Command
HDMI In	02 49 4E 50 3A 30 30 39 03	Switch to HDMI In Command
USB C1	02 49 4E 50 3A 30 31 36 03	Input Switch to USB C Side Command
USB C2	02 49 4E 50 3A 30 31 30 03	Input Switch to USB C Bottom Command

SERIELLE KOMMUNIKATION

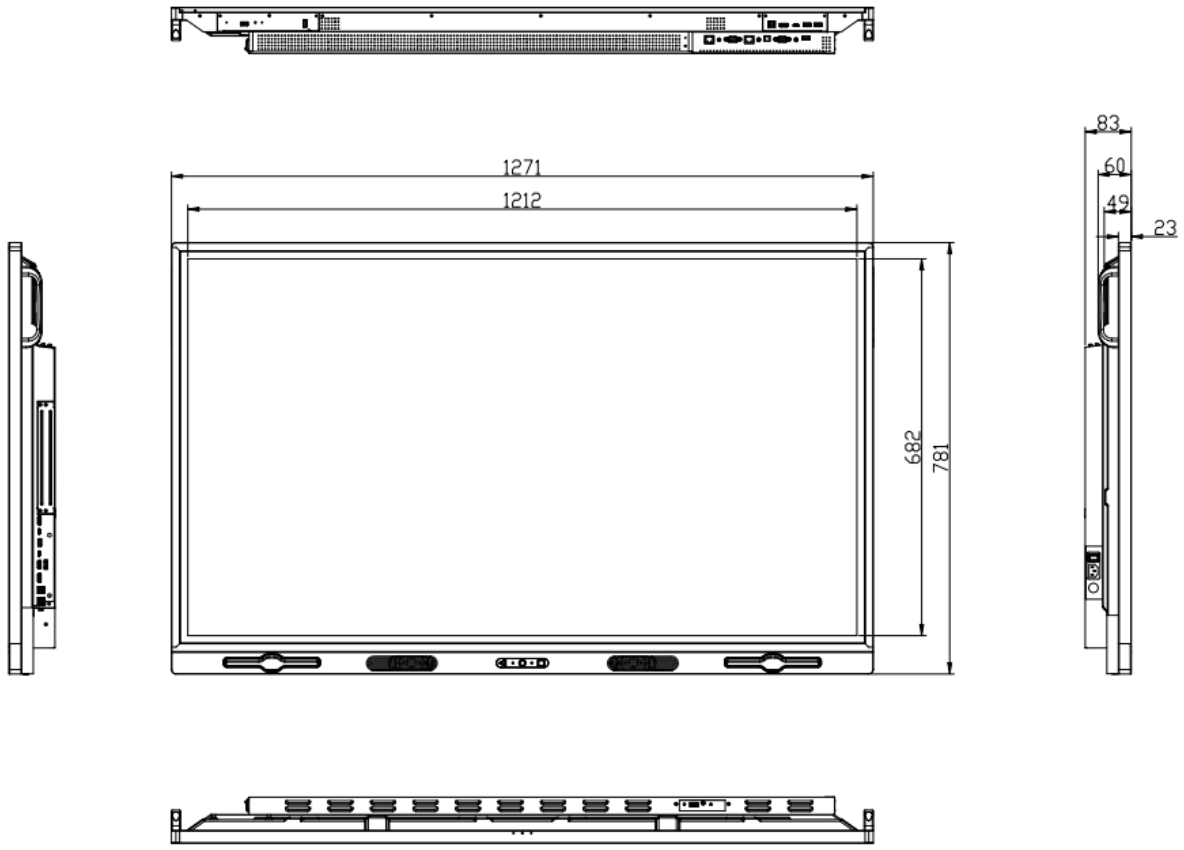
Remote Control Key Commands		
Mode	Code	Description
REMOTE KEY 0	02 4B 45 59 3A 30 30 30 03	Remote control Key 0
REMOTE KEY 1	02 4B 45 59 3A 30 30 31 03	Remote control Key 1
REMOTE KEY 2	02 4B 45 59 3A 30 30 32 03	Remote control Key 2
REMOTE KEY 3	02 4B 45 59 3A 30 30 33 03	Remote control Key 3
REMOTE KEY 4	02 4B 45 59 3A 30 30 34 03	Remote control Key 4
REMOTE KEY 5	02 4B 45 59 3A 30 30 35 03	Remote control Key 5
REMOTE KEY 6	02 4B 45 59 3A 30 30 36 03	Remote control Key 6
REMOTE KEY 7	02 4B 45 59 3A 30 30 37 03	Remote control Key 7
REMOTE KEY 8	02 4B 45 59 3A 30 30 38 03	Remote control Key 8
REMOTE KEY 9	02 4B 45 59 3A 30 30 39 03	Remote control Key 9
R.KEY VOLUMEUP +	02 4B 45 59 3A 30 31 32 03	Remote Control Volume Key +
R.KEY VOLUMEDOWN -	02 4B 45 59 3A 30 31 33 03	Remote Control Volume Key -
REMOTE KEY MENU	02 4B 45 59 3A 30 31 34 03	Remote Control Menu Key
REMOTE KEY SELECT	02 4B 45 59 3A 30 31 35 03	Remote Control Select Key
REMOTE KEY EXIT	02 4B 45 59 3A 30 31 36 03	Remote Control Exit Key
REMOTE KEY UP	02 4B 45 59 3A 30 31 37 03	Remote Control UP Key
REMOTE KEY DOWN	02 4B 45 59 3A 30 31 38 03	Remote Control DOWN Key
REMOTE KEY LEFT	02 4B 45 59 3A 30 31 39 03	Remote Control LEFT Key
REMOTE KEY RIGHT	02 4B 45 59 3A 30 32 30 03	Remote Control RIGHT Key
R.KEY POWER(ON)	02 4B 45 59 3A 30 32 31 03	Remote Control Power ON Key
REMOTE KEY INPUT	02 4B 45 59 3A 30 32 32 03	Remote Control Input Key
REMOTE KEY MUTE	02 4B 45 59 3A 30 32 33 03	Remote Control MUTE Key
REMOTE KEY INFO	02 4B 45 59 3A 30 32 34 03	Remote Control INFO Key
R.KEY PICTUREMODE	02 4B 45 59 3A 30 32 35 03	Remote Control Change Picture Mode Key
R.KEY AUDIOMODE	02 4B 45 59 3A 30 32 36 03	Remote Control Change Audio Mode Key
REMOTE KEY SLEEP	02 4B 45 59 3A 30 32 38 03	Remote Control Sleep Key
REMOTE KEY RETURN	02 4B 45 59 3A 30 33 31 03	Remote Control Return/Back Key
REMOTE KEY FREEZE	02 4B 45 59 3A 30 33 35 03	Remote Control Freeze Tool Key
R.KEY POWER(OFF)	02 4B 45 59 3A 30 34 38 03	Remote Control Power OFF Key
REMOTE KEY HOME	02 4B 45 59 3A 30 36 30 03	Remote Control HOME Key
REMOTE KEY PC (OPS)	02 4B 45 59 3A 30 36 31 03	Remote Control Switch to OPS Key

SERIELLE KOMMUNIKATION

e-Screen Control Commands		
Mode	Code	Description
CMD BLU OFF	02 42 4C 54 3A 30 30 30 03	Turn Backlight OFF Command
CMD BLU ON	02 42 4C 54 3A 30 30 31 03	Turn Backlight ON Command
CMD SET VOL	02 56 4F 4C 3A 30 30 31 03	Set Volume to 001 Ex: 02 56 4F 4C 3A 3X 3X 3X 03
	02 56 4F 4C 3A 31 30 30 03	Set Volume to 100 Ex: 02 56 4F 4C 3A 3X 3X 3X 03
CMD SET MUTE	02 4D 55 54 3A 30 30 31 03	Activate MUTE Command
CMD SET UNMUTE	02 4D 55 54 3A 30 30 30 03	Deactivate MUTE Command
CMD SET LOCKON	02 50 41 44 3A 30 30 31 03	Activate Lock Command
CMD SET LOCKOFF	02 50 41 44 3A 30 30 30 03	Deactivate Lock Command
CMD SET DYNAMIC	02 50 49 43 3A 30 30 30 03	Switch Picture Mode to Dyamic Command
CMD SET STANDARD	02 50 49 43 3A 30 30 31 03	Switch Picture Mode to Standard Command
CMD SET SOFT	02 50 49 43 3A 30 30 32 03	Switch Picture Mode to Soft Command
CMD SET USER	02 50 49 43 3A 30 30 33 03	Switch Picture Mode to USER Command
CMD SET WRITING	02 50 49 43 3A 30 30 36 03	Switch Picture Mode to Writing Command
CMD SET STANDARD	02 53 4E 44 3A 30 30 30 03	Switch Audio Mode to Standard Command
CMD SET MUSIC	02 53 4E 44 3A 30 30 31 03	Switch Audio Mode to Music Command
CMD SET MOVIE	02 53 4E 44 3A 30 30 32 03	Switch Audio Mode to Movie Command
CMD SET USER	02 53 4E 44 3A 30 30 34 03	Switch Audio Mode to USER Command
CMD SET FULL	02 50 41 4D 3A 30 30 30 03	Set Aspect Ratio to 16:9 Command
CMD SET REAL	02 50 41 4D 3A 30 30 32 03	Set Aspect Ratio to Per to Per Command
CMD FREEZE OFF	02 46 52 45 3A 30 30 30 03	Freeze the current screen Frame Command
CMD FREEZE ON	02 46 52 45 3A 30 30 31 03	De-freeze the current screen Frame Command
CMD SET CON	02 43 4F 4E 3A 30 30 30 03	Set Contrast to 001 Ex: 02 56 4F 4C 3A 3X 3X 3X 03
	02 43 4F 4E 3A 31 30 30 03	Set Contrast to 100 Ex: 02 56 4F 4C 3A 3X 3X 3X 03
CMD SET BRT	02 42 52 54 3A 30 30 30 03	Set Brightness to 001 Ex: 02 56 4F 4C 3A 3X 3X 3X 03
	02 42 52 54 3A 31 30 30 03	Set Brightness to 100 Ex: 02 56 4F 4C 3A 3X 3X 3X 03
CMD SET SHA	02 53 48 41 3A 30 30 30 03	Set Sharpness to 001 Ex: 02 56 4F 4C 3A 3X 3X 3X 03
	02 53 48 41 3A 31 30 30 03	Set Sharpness to 100 Ex: 02 56 4F 4C 3A 3X 3X 3X 03
CMD SET SAT	02 53 41 54 3A 30 30 30 03	Set Saturation to 001 Ex: 02 56 4F 4C 3A 3X 3X 3X 03
	02 53 41 54 3A 31 30 30 03	Set Saturation to 100 Ex: 02 56 4F 4C 3A 3X 3X 3X 03

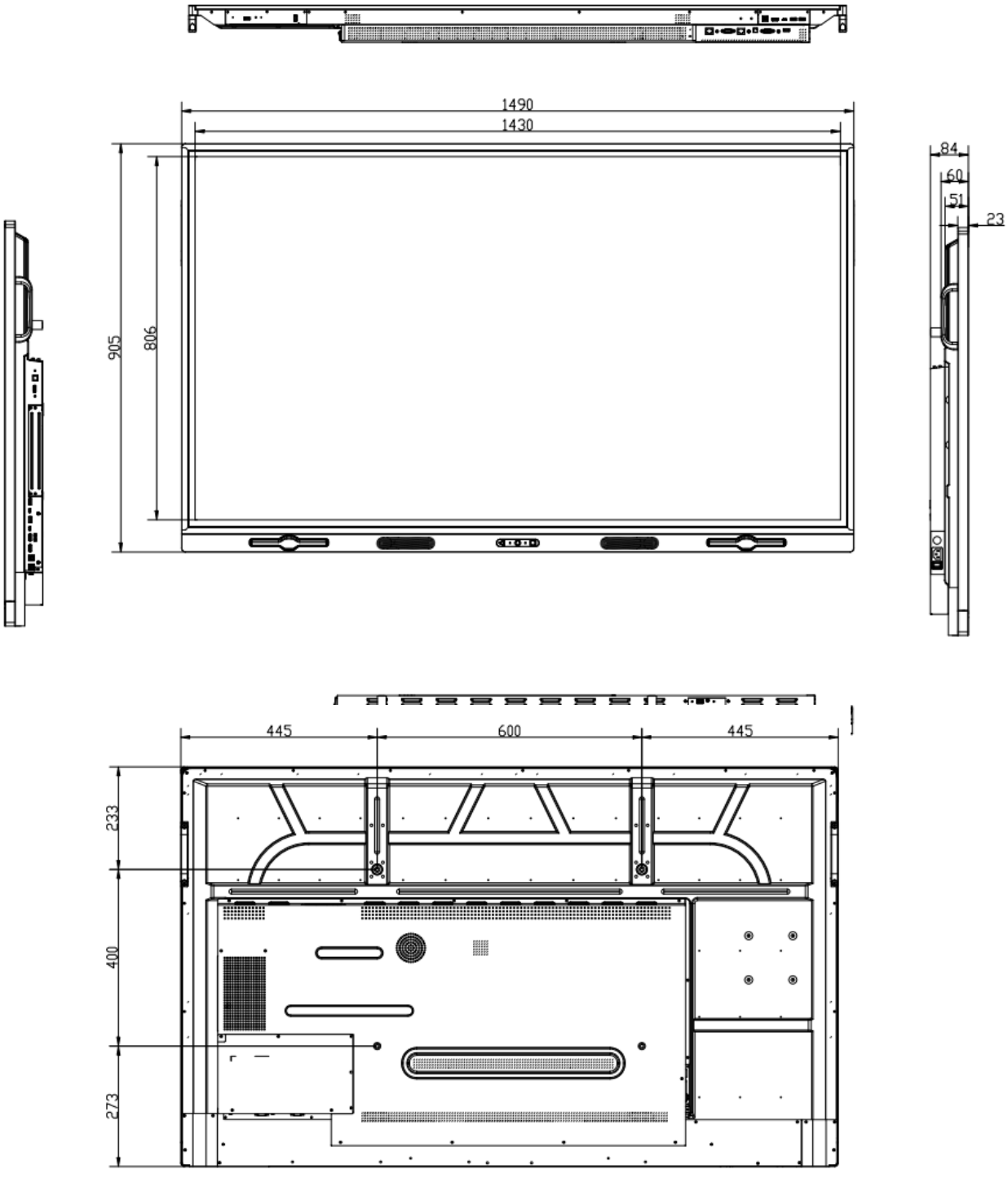
ABMESSUNGEN

3.1 ETX-5540



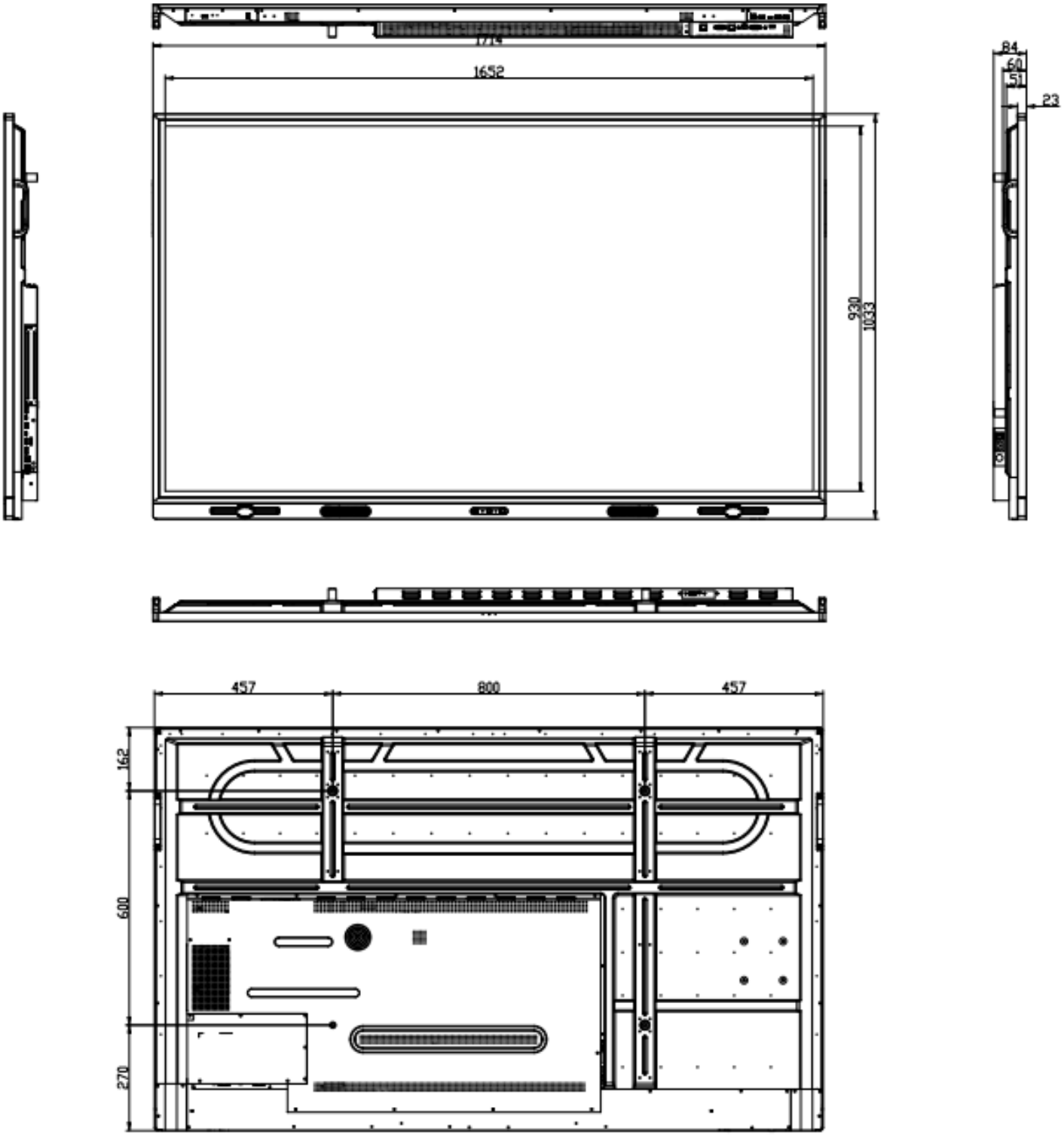
ABMESSUNGEN

3.2 ETX-6540



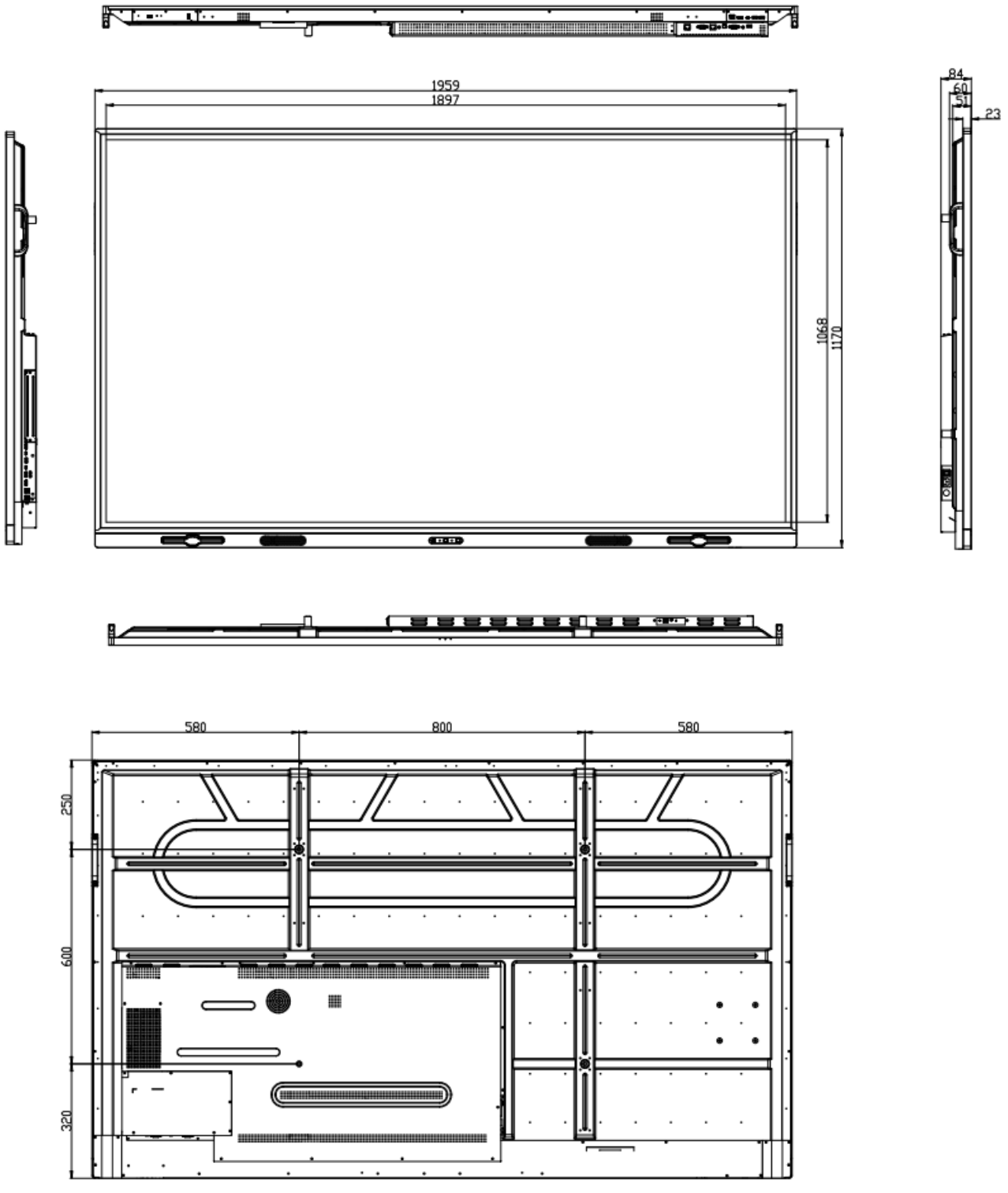
ABMESSUNGEN

3.3 ETX-7540



ABMESSUNGEN

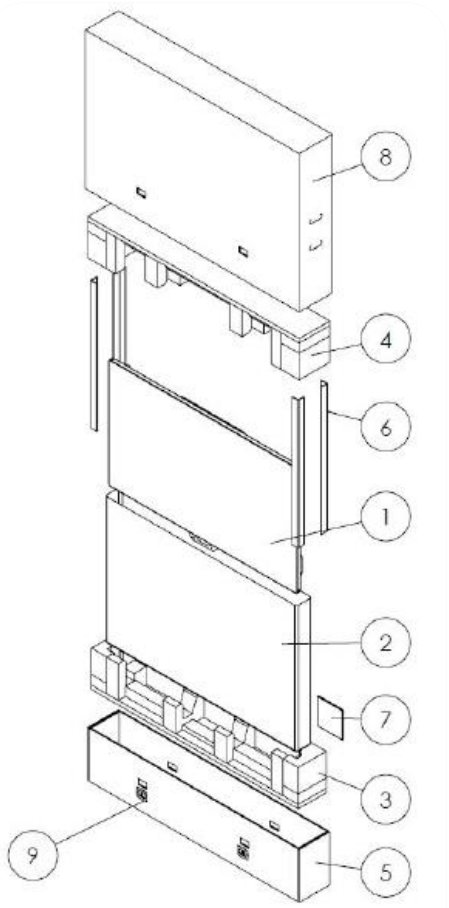
3.4 ETX-8630



ABMESSUNGEN

3.5 VERPACKUNG

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



ETX-5540	
Produktabmessungen	1271 x 781 x 83 (mm)
Verpackung	1395 x 875 x 230 (mm)
Nettogewicht	27.3 (kg)
Bruttogewicht	32.8 (kg)
ETX-6540	
Produktabmessungen	1490.5 x 905.5 x 84 (mm)
Verpackung	1615 x 1000 x 230 (mm)
Nettogewicht	38.9 (kg)
Bruttogewicht	45.5 (kg)
ETX-7540	
Produktabmessungen	1714 x 1033 x 84 (mm)
Verpackung	1839 x 1127 x 230 (mm)
Nettogewicht	48.9 (kg)
Bruttogewicht	56.5 (kg)
ETX-8640	
Produktabmessungen	1959 x 1170 x 84 (mm)
Verpackung	2084 x 1264 x 230 (mm)
Nettogewicht	60.9 (kg)
Bruttogewicht	70.6 (kg)