



2015 **Manual Series** Product Brochure

The Elite Manual Pull-down series front projection screen is a great cost effective retractable screen with a dual case design for wall or ceiling installation.



Manual Series

Scan for product



video

The Elite Manual Pull-down series front projection screen is a great cost effective retractable screen with a dual case design for wall or ceiling installation.

Screen Material

- MaxWhite 1.1 Gain Screen Material is durable and easy to clean
- 180° wide viewing angle for commercial and residential presentations
- Black backed screen material eliminates light penetration for superior color reproduction
- Black masking enhances picture contrast

Casing & Installation

- Durable metal casing
- Suitable for wall/ceiling installations
- Optional 6" & 12" brackets available

Control System

- Auto-locking mechanism with variable height settings
- Manually operated (lanyard included)

Warranty

- 2-year parts and labor
- 3-year warranty for ENR-G (Educational, Non-profit, Religious or Government/Military) - US only

Certified

- GREENGUARD® and GREENGUARD® Gold Certified | UL 2818



Black-Backed Screen Material



Lanyard included



Optional 6" or 12" Brackets provide more flexibility with an installation.



Available in Black and White Casing Colors.

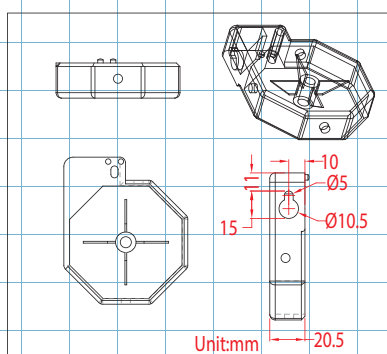
Manual Series

Model	Screen Diag. & Aspect Ratio	View Height (in)	View Width (in)	View Height (cm)	View Width (cm)	N.W. (lbs.)	G.W. (lbs.)	N.W. (Kgs)	G.W. (Kgs)	Packaging Dimensions (LxHxW)	Gain	Screen Material	Case Color
M71UWS1	71"(1:1)	50.0	50.0	127.0	127.0	10.1	12.6	4.6	5.7	59.1"x4.3"x4.7"	1.1	MaxWhite	Black
M71XWS1	71"(1:1)	50.0	50.0	127.0	127.0	10.1	12.6	4.6	5.7	59.1"x4.3"x4.7"	1.1	MaxWhite	White
M85UWS1	85"(1:1)	60.0	60.0	152.4	152.4	12.6	14.8	5.7	6.7	68.9"x4.3"x4.7"	1.1	MaxWhite	Black
M85XWS1	85"(1:1)	60.0	60.0	152.4	152.4	12.6	14.8	5.7	6.7	68.9"x4.3"x4.8"	1.1	MaxWhite	White
M99NWS1	99"(1:1)	70.0	70.0	177.8	177.8	16.7	19.2	7.6	8.7	80.3"x4.3"x4.7"	1.1	MaxWhite	White
M99UWS1	99"(1:1)	70.0	70.0	177.8	177.8	16.7	19.2	7.6	8.7	80.3"x4.3"x4.7"	1.1	MaxWhite	Black
M113NWS1	113"(1:1)	80.0	80.0	203.2	203.2	19.3	23.2	8.8	10.6	90.6"x5.5"x5.9"	1.1	MaxWhite	White
M113UWS1	113"(1:1)	80.0	80.0	203.2	203.2	19.3	23.2	8.8	10.6	90.6"x5.5"x5.9"	1.1	MaxWhite	Black
M119UWS1	119"(1:1)	84.0	84.0	213.4	213.4	20.9	24.5	9.5	11.1	94.5"x5.5"x5.9"	1.1	MaxWhite	Black
M119XWS1	119"(1:1)	84.0	84.0	213.4	213.4	20.9	24.5	9.5	11.1	94.5"x5.5"x5.9"	1.1	MaxWhite	White
M136UWS1	136"(1:1)	96.0	96.0	243.8	243.8	23.9	28.3	10.8	12.9	106.3"x5.5"x5.9"	1.1	MaxWhite	Black
M136XWS1	136"(1:1)	96.0	96.0	243.8	243.8	23.9	28.3	10.8	12.9	106.3"x5.5"x5.9"	1.1	MaxWhite	White
M170XWS1	170"(1:1)	120.0	120.0	304.8	304.8	35.7	42.3	16.2	19.2	130.7"x6.3"x6.7"	1.1	MaxWhite	White
M80NWX	80"(4:3)	48.0	64.0	121.9	162.6	12.6	15.0	5.7	6.8	73.2"x4.7"x4.7"	1.1	MaxWhite	White
M84NWX	84"(4:3)	50.3	67.0	127.8	170.2	12.8	15.9	5.8	7.2	76.4"x4.7"x4.7"	1.1	MaxWhite	White
M100NWX1	100"(4:3)	60.0	80.0	152.4	203.2	16.5	19.0	7.5	8.6	88.2"x4.7"x5.1"	1.1	MaxWhite	White
M100UWX1	100"(4:3)	60.0	80.0	152.4	203.2	16.5	19.0	7.5	8.6	88.2"x4.7"x5.1"	1.1	MaxWhite	Black
M120UWX2	120"(4:3)	72.0	96.0	182.9	243.8	22.0	26.3	10.0	12.0	106.3"x5"x5"	1.1	MaxWhite	Black
M120XWX2	120"(4:3)	72.0	96.0	182.9	243.8	22.0	26.3	10.0	12.0	106.3"x5"x5"	1.1	MaxWhite	White
M135UWX2	135"(4:3)	81.0	108.0	205.7	274.3	31.2	36.7	14.2	16.7	119"x5.8"x6.3"	1.1	MaxWhite	Black
M135XWX2	135"(4:3)	81.0	108.0	205.7	274.3	31.2	36.7	14.2	16.7	119"x5.8"x6.3"	1.1	MaxWhite	White
M150UWX2	150"(4:3)	90.0	120.0	228.6	304.8	35.3	41.9	16.0	19.0	130.7"x5.9"x6.3"	1.1	MaxWhite	Black
M150XWX2	150"(4:3)	90.0	120.0	228.6	304.8	35.3	41.9	16.0	19.0	130.7"x5.9"x6.3"	1.1	MaxWhite	White
M80UWH	80"(16:9)	39.0	70.0	99.1	177.8	15.1	18.8	6.9	8.6	80"x5.5"x5.8"	1.1	MaxWhite	Black
M84UWH	84"(16:9)	41.0	73.0	104.1	185.4	13.7	16.8	6.2	7.6	82"x4.5"x5"	1.1	MaxWhite	Black
M84UWH-E30	84"(16:9)	41.0	73.0	104.1	185.4	15.3	18.0	7.0	8.2	82"x4.5"x5"	1.1	MaxWhite	Black
M84XWH-E30	84"(16:9)	41.0	73.0	104.1	185.4	15.3	18.0	7.0	8.2	82"x4.5"x5"	1.1	MaxWhite	White
M92UWH	92"(16:9)	45.1	80.2	114.6	203.7	15.4	17.6	7.0	8.0	88.3"x4.5"x5"	1.1	MaxWhite	Black
M100UWH	100"(16:9)	49.0	87.0	124.5	221.0	19.8	22.7	9.0	10.3	97.5"x5.5"x5.5"	1.1	MaxWhite	Black
M100XWH	100"(16:9)	49.0	87.0	124.5	221.0	19.8	22.7	9.0	10.3	97.5"x5.5"x5.5"	1.1	MaxWhite	White
M100XWH-E24	100"(16:9)	49.1	87.2	124.7	221.5	19.8	22.7	9.0	10.3	97.5"x5.5"x5.5"	1.1	MaxWhite	White
M106UWH	106"(16:9)	52.0	92.4	132.1	234.7	20.7	24.9	9.4	11.3	102.8"x5.5"x5.5"	1.1	MaxWhite	Black
M106UWH-E24	106"(16:9)	52.0	92.4	132.1	234.7	20.7	24.9	9.4	11.3	102.8"x5.5"x5.5"	1.1	MaxWhite	Black
M120UWH2	120"(16:9)	58.8	104.6	149.4	265.7	22.9	27.1	10.4	12.3	115"x 5.5"x5.5"	1.1	MaxWhite	Black
M120XWH2	120"(16:9)	58.8	104.6	149.4	265.7	22.9	27.1	10.4	12.3	115"x 5.5"x5.5"	1.1	MaxWhite	White
M120XWH2-E24	120"(16:9)	58.5	104.0	148.6	264.2	22.9	27.1	10.4	12.3	115"x 5.5"x5.5"	1.1	MaxWhite	White
M135UWH2	135"(16:9)	66.0	117.3	167.6	298.0	31.1	37.6	14.1	17.1	127.8"x5.83"x6.3"	1.1	MaxWhite	Black
M135XWH2	135"(16:9)	66.2	117.7	168.1	299.0	31.1	37.6	14.1	17.1	127.8"x5.83"x6.3"	1.1	MaxWhite	White
M150UWH2	150"(16:9)	73.5	130.7	186.7	332.0	35.9	42.2	16.3	19.2	140.9"x5.83"x6.3"	1.1	MaxWhite	Black
M150XWH2	150"(16:9)	73.5	130.7	186.7	332.0	35.9	42.2	16.3	19.2	140.9"x5.83"x6.3"	1.1	MaxWhite	White
M86UWX	86"(16:10)	45.6	73.0	115.8	185.4	13.7	16.5	6.2	7.5	82"x4.3"x5.1"	1.1	MaxWhite	Black
M94UWX	94"(16:10)	49.8	79.7	126.5	202.4	15.7	18.6	7.1	8.4	88.2"x4.3"x5.1"	1.1	MaxWhite	Black
M109UWX	109"(16:10)	57.8	92.4	146.7	234.7	20.3	24.7	9.2	11.2	102.7"x5.5"x5.4"	1.1	MaxWhite	Black
M128UWX	128"(16:10)	67.8	108.4	172.2	275.3	28.8	34.3	13.1	15.6	119.3"x5.9"x6.3"	1.1	MaxWhite	Black
M139UWX	139"(16:10)	73.3	117.3	186.2	297.9	33.3	38.9	15.1	17.7	127.8"x5.9"x6.3"	1.1	MaxWhite	Black
M95UWC-E18	95"(2.35:1)	37.0	87.0	94.0	221.0	17.9	21.9	8.1	9.9	97.6"x5.5"x5.5"	1.1	MaxWhite	Black
M114UWC-E18	114"(2.35:1)	44.5	104.6	113.0	265.7	21.7	25.4	9.8	11.5	114"x5.5"x5.5"	1.1	MaxWhite	Black
M128UWC-E20	128"(2.35:1)	49.5	117.3	125.7	297.9	29.3	35.9	13.3	16.3	127.8"x6.3"x6.3"	1.1	MaxWhite	Black
M142UWC-E19	142"(2.35:1)	55.6	130.7	141.2	332.0	35.9	42.3	16.3	19.2	141"x6.3"x6.3"	1.1	MaxWhite	Black

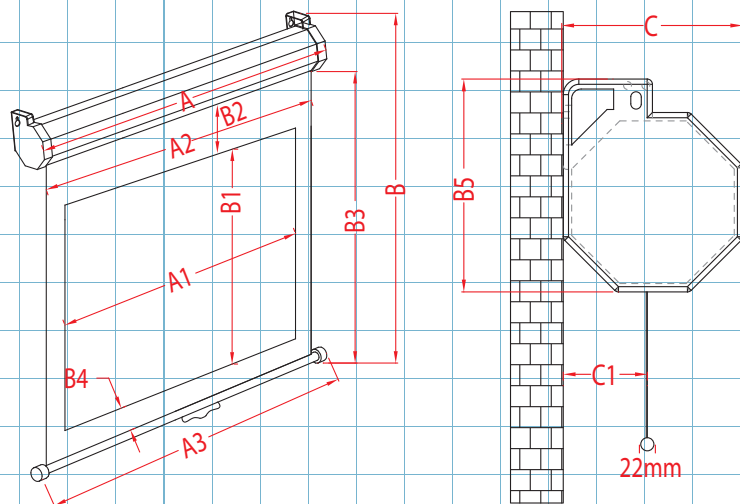
Manual Series Dimensions Table

Model	Screen Diag. & Aspect Ratio	Case Length (A)	View Width (A1)	Screen Width (A2)	Weight Bar Length (A3)	Overall Height (B)	View Height (B1)	Top Black Masking (B2)	B3	B4	End Cap Height (B5)	End Cap Width (C)	C1
M71UWS1	71" (1:1)	1432	1275	1351	1428	1533	1275	114	1451	62	82	69	20
M71XWS1	71" (1:1)	1432	1275	1351	1428	1533	1275	114	1451	62	82	69	20
M85UWS1	85" (1:1)	1686	1527	1603	1682	1785	1527	114	1703	62	82	69	20
M85XWS1	85" (1:1)	1686	1527	1603	1682	1785	1527	114	1703	62	82	69	20
M99UWS1	99" (1:1)	1938	1778	1854	1934	2008	1778	76	1916	62	92	80	20
M99NWS1	99" (1:1)	1938	1778	1854	1934	2008	1778	76	1916	62	92	80	20
M113UWS1	113" (1:1)	2192	2030	2106	2188	2298	2030	114	2206	62	92	80	20
M113NWS1	113" (1:1)	2192	2030	2106	2188	2298	2030	114	2206	62	92	80	20
M119UWS1	119" (1:1)	2294	2137	2213	2290	2392	2137	101	2300	62	92	80	20
M119XWS1	119" (1:1)	2294	2137	2213	2290	2392	2137	101	2300	62	92	80	20
M136XWS1	136" (1:1)	2598	2443	2519	2594	2711	2443	114	2619	62	92	80	20
M136UWS1	136" (1:1)	2598	2443	2519	2594	2711	2443	114	2619	62	92	80	20
M170XWS1	170" (1:1)	3212	3053	3129	3208	3334	3053	114	3229	62	105	88	20
M80NNV	80" (4:3)	1786	1626	1702	1782	1467	1219	114	1385	52	82	69	20
M84NNV	84" (4:3)	1867	1707	1783	1863	1490	1280	76	1408	52	82	69	20
M100NNV1	100" (4:3)	2166	2032	2088	2162	1782	1524	114	1700	62	82	69	20
M100UWV1	100" (4:3)	2166	2032	2088	2162	1782	1524	114	1700	62	82	69	20
M120XWV2	120" (4:3)	2598	2438	2514	2594	2097	1829	114	2005	62	92	80	20
M120UWV2	120" (4:3)	2598	2438	2514	2594	2097	1829	114	2005	62	92	80	20
M135XWV2	135" (4:3)	2907	2743	2819	2903	2338	2057	114	2233	62	105	88	20
M135UWV2	135" (4:3)	2907	2743	2819	2903	2338	2057	114	2233	62	105	88	20
M150XWV2	150" (4:3)	3212	3048	3124	3208	2567	2286	114	2462	62	105	88	20
M150UWV2	150" (4:3)	3212	3048	3124	3208	2567	2286	114	2462	62	105	88	20
M80UWH	80" (16:9)	1931	1771	1847	1927	1254	996	114	1172	62	82	69	20
M84UWH	84" (16:9)	2014	1860	1936	2010	1304	1046	114	1222	62	82	69	20
M84UWH-E30	84" (16:9)	2014	1860	1936	2010	1952	1046	762	1870	62	82	69	20
M84XWH-E30	84" (16:9)	2014	1860	1936	2010	1952	1046	762	1870	62	82	69	20
M92UWH	92" (16:9)	2166	2037	2093	2162	1404	1146	114	1322	62	82	69	20
M100UWH	100" (16:9)	2374	2214	2290	2370	1513	1245	114	1421	62	92	80	20
M100XWH	100" (16:9)	2374	2214	2290	2370	1513	1245	114	1421	62	92	80	20
M100XWH-E24	100" (16:9)	2374	2214	2290	2370	2009	1245	610	1917	62	92	80	20
M106UWH	106" (16:9)	2506	2347	2423	2502	1588	1320	114	1496	62	92	80	20
M106UWH-E24	106" (16:9)	2506	2347	2423	2502	2084	1320	610	1992	62	92	80	20
M120XWH2	120" (16:9)	2816	2657	2733	2812	1762	1494	114	1670	62	92	80	20
M120UWH2	120" (16:9)	2816	2657	2733	2812	1762	1494	114	1670	62	92	80	20
M120XWH2-E24	120" (16:9)	2816	2657	2733	2812	2258	1494	610	2166	62	92	80	20
M135XWH2	135" (16:9)	3148	2989	3065	3144	1962	1681	114	1857	62	105	88	20
M135UWH2	135" (16:9)	3148	2989	3065	3144	1962	1681	114	1857	62	105	88	20
M150XWH2	150" (16:9)	3484	3321	3397	3480	2149	1868	114	2044	62	105	88	20
M150UWH2	150" (16:9)	3484	3321	3397	3480	2149	1868	114	2044	62	105	88	20
M86UWX	86" (16:10)	2014	1852	1928	2010	1416	1158	114	1334	62	82	69	20
M94UWX	94" (16:10)	2166	2025	2101	2162	1523	1265	114	1441	62	82	69	20
M109UWX	109" (16:10)	2506	2348	2424	2502	1735	1467	101	1630	62	92	80	20
M128UWX	128" (16:10)	2917	2757	2833	2913	1991	1723	114	1899	62	92	80	20
M139UWX	139" (16:10)	3148	2994	3070	3144	2139	1871	114	2047	62	92	80	20
M95UWC-E18	95" (2.35:1)	2374	2214	2290	2370	1556	945	457	1464	62	92	80	20
M114UWC-E18	114" (2.35:1)	2816	2657	2733	2812	1745	1134	457	1653	62	92	80	20
M128UWC-E20	128" (2.35:1)	3148	2989	3065	3144	1948	1273	508	1843	62	105	88	20
M142UWC-E19	142" (2.35:1)	3484	3321	3397	3480	2062	1412	483	1957	62	105	88	20

Unit: mm



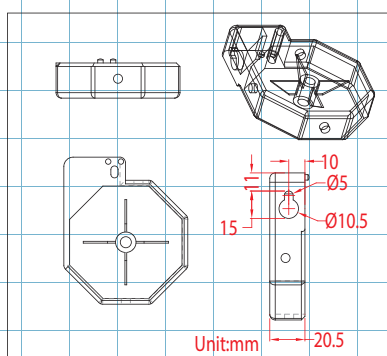
Note: Data Error ±1". The listed measurements are for general reference only. Please contact Elite Screens to verify product design and dimensions before attempting to integrate its products with any structural or furniture modification. Although a manufacturer may offer product advice, it may be taken or disregarded at the integrator's discretion. Elite Screens will not be held responsible or be otherwise liable for faulty installations.



Manual Series Dimensions Table

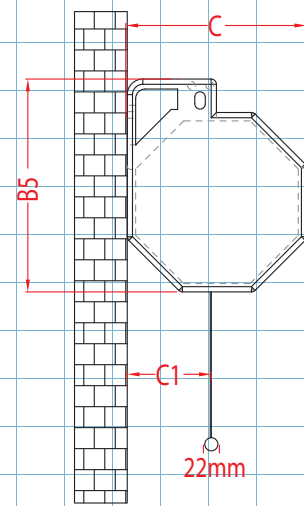
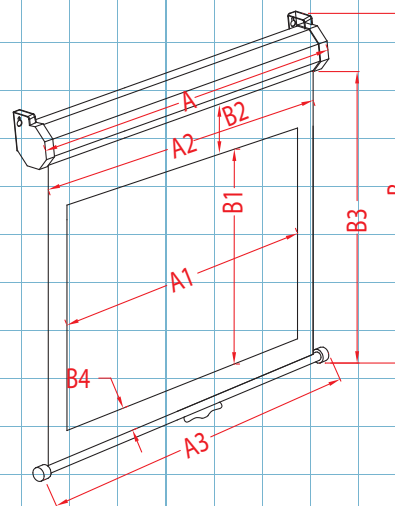
Model	Screen Diag. & Aspect Ratio	Case Length (A)	View Width (A1)	Screen Width (A2)	Weight Bar Length (A3)	Overall Height (B)	View Height (B1)	Top Black Masking (B2)	B3	B4	End Cap Height (B5)	End Cap Width (C)	C1
M71UWS1	71"(1:1)	56.4	50.2	53.2	56.2	60.4	50.2	4.5	57.1	2.4	3.2	2.7	0.8
M71XWS1	71"(1:1)	56.4	50.2	53.2	56.2	60.4	50.2	4.5	57.1	2.4	3.2	2.7	0.8
M85UWS1	85"(1:1)	66.4	60.1	63.1	66.2	70.3	60.1	4.5	67.0	2.4	3.2	2.7	0.8
M85XWS1	85"(1:1)	66.4	60.1	63.1	66.2	70.3	60.1	4.5	67.0	2.4	3.2	2.7	0.8
M99UWS1	99"(1:1)	76.3	70.0	73.0	76.1	79.1	70.0	3.0	75.4	2.4	3.6	3.1	0.8
M99NWS1	99"(1:1)	76.3	70.0	73.0	76.1	79.1	70.0	3.0	75.4	2.4	3.6	3.1	0.8
M113UWS1	113"(1:1)	86.3	79.9	82.9	86.1	90.5	79.9	4.5	86.9	2.4	3.6	3.1	0.8
M113NWS1	113"(1:1)	86.3	79.9	82.9	86.1	90.5	79.9	4.5	86.9	2.4	3.6	3.1	0.8
M119UWS1	119"(1:1)	90.3	84.1	87.1	90.2	94.2	84.1	4.0	90.6	2.4	3.6	3.1	0.8
M119XWS1	119"(1:1)	90.3	84.1	87.1	90.2	94.2	84.1	4.0	90.6	2.4	3.6	3.1	0.8
M136UWS1	136"(1:1)	102.3	96.2	99.2	102.1	106.7	96.2	4.5	103.1	2.4	3.6	3.1	0.8
M136XWS1	136"(1:1)	102.3	96.2	99.2	102.1	106.7	96.2	4.5	103.1	2.4	3.6	3.1	0.8
M170XWS1	170"(1:1)	126.5	120.2	123.2	126.3	131.3	120.2	4.5	127.1	2.4	4.1	3.5	0.8
M80NWX	80"(4:3)	70.3	64.0	67.0	70.2	57.8	48.0	4.5	54.5	2.0	3.2	2.7	0.8
M84NWX	84"(4:3)	73.5	67.2	70.2	73.3	58.7	50.4	3.0	55.4	2.0	3.2	2.7	0.8
M100NWX1	100"(4:3)	85.3	80.0	82.2	85.1	70.2	60.0	4.5	66.9	2.4	3.2	2.7	0.8
M100UWX1	100"(4:3)	85.3	80.0	82.2	85.1	70.2	60.0	4.5	66.9	2.4	3.2	2.7	0.8
M120XWX2	120"(4:3)	102.3	96.0	99.0	102.1	82.6	72.0	4.5	78.9	2.4	3.6	3.1	0.8
M120UWX2	120"(4:3)	102.3	96.0	99.0	102.1	82.6	72.0	4.5	78.9	2.4	3.6	3.1	0.8
M135XWX2	135"(4:3)	114.4	108.0	111.0	114.3	92.0	81.0	4.5	87.9	2.4	4.1	3.5	0.8
M135UWX2	135"(4:3)	114.4	108.0	111.0	114.3	92.0	81.0	4.5	87.9	2.4	4.1	3.5	0.8
M150XWX2	150"(4:3)	126.5	120.0	123.0	126.3	101.1	90.0	4.5	96.9	2.4	4.1	3.5	0.8
M150UWX2	150"(4:3)	126.5	120.0	123.0	126.3	101.1	90.0	4.5	96.9	2.4	4.1	3.5	0.8
M80UWH	80"(16:9)	76.0	69.7	72.7	75.9	49.4	39.2	4.5	46.1	2.4	3.2	2.7	0.8
M84UWH	84"(16:9)	79.3	73.2	76.2	79.1	51.3	41.2	4.5	48.1	2.4	3.2	2.7	0.8
M84UWH-E30	84"(16:9)	79.3	73.2	76.2	79.1	76.9	41.2	30.0	73.6	2.4	3.2	2.7	0.8
M84XWH-E30	84"(16:9)	79.3	73.2	76.2	79.1	76.9	41.2	30.0	73.6	2.4	3.2	2.7	0.8
M92UWH	92"(16:9)	85.3	80.2	82.4	85.1	55.3	45.1	4.5	52.0	2.4	3.2	2.7	0.8
M100XWH	100"(16:9)	93.5	87.2	90.2	93.3	59.6	49.0	4.5	55.9	2.4	3.6	3.1	0.8
M100UWH	100"(16:9)	93.5	87.2	90.2	93.3	59.6	49.0	4.5	55.9	2.4	3.6	3.1	0.8
M100XWH-E24	100"(16:9)	93.5	87.2	90.2	93.3	79.1	49.0	24.0	75.5	2.4	3.6	3.1	0.8
M106UWH	106"(16:9)	98.7	92.4	95.4	98.5	62.5	52.0	4.5	58.9	2.4	3.6	3.1	0.8
M106UWH-E24	106"(16:9)	98.7	92.4	95.4	98.5	82.0	52.0	24.0	78.4	2.4	3.6	3.1	0.8
M120XWH2	120"(16:9)	110.9	104.6	107.6	110.7	69.4	58.8	4.5	65.7	2.4	3.6	3.1	0.8
M120UWH2	120"(16:9)	110.9	104.6	107.6	110.7	69.4	58.8	4.5	65.7	2.4	3.6	3.1	0.8
M120XWH2-E24	120"(16:9)	110.9	104.6	107.6	110.7	88.9	58.8	24.0	85.3	2.4	3.6	3.1	0.8
M135XWH2	135"(16:9)	123.9	117.7	120.7	123.8	77.2	66.2	4.5	73.1	2.4	4.1	3.5	0.8
M135UWH2	135"(16:9)	123.9	117.7	120.7	123.8	77.2	66.2	4.5	73.1	2.4	4.1	3.5	0.8
M150XWH2	150"(16:9)	137.2	130.7	133.7	137.0	84.6	73.5	4.5	80.5	2.4	4.1	3.5	0.8
M150UWH2	150"(16:9)	137.2	130.7	133.7	137.0	84.6	73.5	4.5	80.5	2.4	4.1	3.5	0.8
M86UWX	86"(16:10)	79.3	72.9	75.9	79.1	55.7	45.6	4.5	52.5	2.4	3.2	2.7	0.8
M94UWX	94"(16:10)	85.3	79.7	82.7	85.1	60.0	49.8	4.5	56.7	2.4	3.2	2.7	0.8
M109UWX	109"(16:10)	98.7	92.4	95.4	98.5	68.3	57.8	4.0	64.2	2.4	3.6	3.1	0.8
M128UWX	128"(16:10)	114.8	108.5	111.5	114.7	78.4	67.8	4.5	74.8	2.4	3.6	3.1	0.8
M139UWX	139"(16:10)	123.9	117.9	120.9	123.8	84.2	73.7	4.5	80.6	2.4	3.6	3.1	0.8
M95UWC-E18	95"(2.35:1)	93.5	87.2	90.2	93.3	61.3	37.2	18.0	57.6	2.4	3.6	3.1	0.8
M114UWC-E18	114"(2.35:1)	110.9	104.6	107.6	110.7	68.7	44.6	18.0	65.1	2.4	3.6	3.1	0.8
M128UWC-E20	128"(2.35:1)	123.9	117.7	120.7	123.8	76.7	50.1	20.0	72.6	2.4	4.1	3.5	0.8
M142UWC-E19	142"(2.35:1)	137.2	130.7	133.7	137.0	81.2	55.6	19.0	77.0	2.4	4.1	3.5	0.8

Unit: inch



Unit:mm

Note: Data Error ±1". The listed measurements are for general reference only. Please contact Elite Screens to verify product design and dimensions before attempting to integrate its products with any structural or furniture modification. Although a manufacturer may offer product advice, it may be taken or disregarded at the integrator's discretion. Elite Screens will not be held responsible or be otherwise liable for faulty installations.



22mm