

# Thinlite 4K family

UltraHD 3840x2160 multi-purpose rugged displays



Where performance is required for mission critical applications in the most extreme environments, the Thinlite 4K family provides pixel perfect clarity in an MIL qualified package!

## Crystal clear vision for decisive situational awareness

Qualified to operate in the harshest environments found on military land, air, and sea platforms, the Thinlite 4K family is designed to meet the most extreme requirements. Expanding on our legendary Thinlite rugged display series with its exceptional SWaP-C benefits, the TL is now available in UltraHD 3840x2160 resolutions.

As application and sensor data increases in complexity, greater pixel density is required to fully visualize the expanded content. The Thinlite 4K displays deliver over 8 million pixels and 1.07 billion colors for brilliant image clarity. Featuring Scioteq's exclusive optical stack technology, the TL-800's IPS LCD is bonded with anti-glare and anti-reflective coatings provides superior undistorted images from ultra-wide viewing angles in any lighting conditions.

Available in 24", 27", 32", and 43", the TL-800 series displays preserve the Scioteq pedigree of unmatched quality, reliability, performance, and flexibility. Offered in two styles, with multiple customization options, our rugged 4K displays are designed to exceed even your most demanding requirements.



General specifications				
	TL-824	TL-827	TL-832	TL-843
Size	24"	27"	32"	43"
Native resolution	3840 x 2160 (UHD 4K)	3840 x 2160 (UHD 4K)	3840 x 2160 (UHD 4K)	3840 x 2160 (UHD 4K)
Active display area	525.66 x 295.70 mm (20.69" x 11.64")	596.7 x 335.66 mm (23.49" x 13.21")	697.31 x 392.23 mm (27.45" x 15.44")	941.18 x 529.42 mm (37.05" x 20.84")
Pixel pitch	0.1369 x 0.1369 mm	0.1554 x 0.1554 mm	0.182 x 0.182 mm	0.2541 x 0.2541 mm
Contrast ratio (typical)	1200:1	1300:1	1300:1	1000:1
Dimensions (W x H x D)	612 x 386 x 70 mm (24.09" x 15.19" x 2.75")	673 x 422 x 66 mm (26.49" x 16.61" x 2.6")	775 x 477 x 66 mm (30.51" x 18.76" x 2.6")	995 x 585 x 96.5 mm (39.17" x 23.0" x 3.8")
Weight	TBD	TBD	32.2 kg (71Lbs)	47kg (103.6 Lbs)
Power consumption (typical)	45 W	47 W	50 W	75 W
Panel type	TFT active-matrix, IPS, LED backlight			
Pixel arrangement	RGB vertical stripes			
Color depth	1.07 Billion colors (10-bit)			
Dimming ratio (typical)	500:1			
Brightness (typical)	250 cd/m <sup>2</sup> (72.5 fL)			
Viewing angle (H/V, typical)	178°/178° (CR ≥ 10)			
Response time (typical)	14ms (gray to gray, 25°C)			
Protective front glass	Chemically strengthened anti-glare and anti-reflective coating, no ITO coating, front glass bonded to LCD panel			
Video interface connections	2x Display Port (DP 1.2a standard) 1x DVI-I (DVI 1.0 standard)			
Supported input timings	max. 3840 x 2160 @60 Hz (DP) max. 3840 x 2160 @30 Hz (DVI) max. 1920 x 1200 (analog on DVI)			
Video composition	MultiWindow mode allows for up to 12 user defineable layouts Each layout can display up to 3 video inputs simultaneously in a user defined composition			
Power connection	Sub-D9 or MIL connector			
Power input	28 VDC or 115-220VAC, MIL-STD-704E and MIL-STD1275D guidelines			
Mounting	Console mounting VESA mounting 400 x 200 mm (4 x M6 screws)			
Options	<ol style="list-style-type: none"> <li>LFC - LCD flicker compensation</li> <li>Touch screen - PCAP, IR, or none</li> <li>Rugged - low temperature range (heater), higher vibration, and rapid decompression</li> <li>901D Qualification</li> <li>Circular MIL connectors (fully sealed)</li> </ol>			
		<b>Standard</b>	<b>Rugged option</b>	
Vibration operational	SHIP	MIL-STD-167-1 Type 1	MIL-STD-167-1 Type 1	
	AIRBORNE	2g, MIL-E-5400T Fig.2, curve IIa (sheet 2 of 3)	5g, MIL-E-5400T Fig.2, curve IIIa (sheet 2 of 3)	
	RANDOM	N/A	MIL-STD-810F, Meth 514.5 Proc I, comp. wheeled vehicle (C2 & C3)	
Operating temperature	Low temp: 0°C, High temp: 50°C MIL-STD-810G Meth 501.5 and Meth 502.5, Proc II		Low temp: -25°C, High temp: +55°C MIL-STD-810G Meth 501.5 and Meth 502.5, Proc II	
Storage temperature	Low temp: -40°C, High temp: +70°C MIL-STD-810G Meth 501.5 and Meth 502.5, Proc I		Low temp: -40°C, High temp: +70°C MIL-STD-810G Meth 501.5 and Meth 502.5, Proc I	
Relative humidity	max. 95% @ 40°C MIL-STD-810G Meth 507.5, Proc II		max. 95% @ 40°C MIL-STD-810G Meth 507.5, Proc II	
Enclosure (drip)	MIL-STD-810G Meth 506.5 Proc III		MIL-STD-810G Meth 506.5 Proc III	
Altitude low pressure	MIL-STD-810G Meth 500.5, Proc I & II 30,000 ft (300 mbar)		MIL-STD-810G Meth 500.5, Proc I & II 30,000 ft (300 mbar)	
Rapid decompression	N/A		MIL-STD-810G Meth 500.5, Proc III 8,000 ft to 40,000 ft in 15s	
EMI/EMC	MIL-STD-461G NAVY Applications		MIL-STD-461G NAVY Applications Navy fixed and Airforce Applications	
Ingress protection	IPx5 on display front and IPx5 on unit level with optional circular MIL connectors			
Regulatory compliance	FCC-A CE Directive EU RoHS Directive Safety standard EN62368			

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The information and data given are typical for the equipment described. However any individual item is subject to change without any notice.

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