



Hope Industrial Systems, Inc.

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Data Sheet: Panel Mount Monitors and Touch Screens IP65/IP66, NEMA 12/4/4X 12"/15"/17"/19"/19.5"/22"/23.8"

Features

- ▶ IP65/IP66 Rated
- ▶ Bright, high contrast, and ultra-wide viewing angle displays
- ▶ Long-life backlights – up to 60,000 hours brightness half-life
- ▶ Field-proven MTBF of more than 250,000 hours
- ▶ Touch Screen, Glass, Acrylic, and Food Protection window options
- ▶ Stainless steel, carbon steel, and edge-to-edge bezel options
- ▶ Only 46 mm to 54 mm deep
- ▶ Panel mount without drilling stud holes
- ▶ Cable lengths from 1.5 m to 300 m
- ▶ Industrial Certifications: CE, UKCA, IEC 60721-3, UL 508A, UL 50E, UL/EN/IEC62368-1, UL Recognised Component

Product Description

Hope Industrial Systems' Panel Mount Industrial Monitors are designed to provide the industrial user with excellent picture quality and rugged design for reliable continuous operation.

A unique single-cutout, stud-free design and depths of only 46.2 mm to 53.8 mm make them a snap to install. Options like touch screens and KVM Extenders make these displays highly versatile.

These monitors are backed by industrial certifications (including 3rd-party environmental testing) and an industry-leading 5-year warranty.

Optional Accessories

- ▶ Industrial Keyboards (IP65/IP66 rated)
- ▶ Screen Protectors (all sizes)
- ▶ Extended cable options up to 300 m
- ▶ KVM Extenders

RoHS  



Rear view of 19" Panel Mount Monitor.



Panel Mount workstation configuration with monitor and industrial keyboard.



About Hope Industrial Systems

Hope Industrial provides industrial flat panel monitors and touch screens with superior quality and up-to-date features that are relevant to industrial applications.

We house this advanced technology in a variety of rugged enclosures that allow the user to put their displays wherever they are needed in the factory. We assure our customers of high reliability over time and back it up with an industry-leading warranty.

We provide all of these benefits at a price that is significantly less than comparable industrial offerings. And finally, we offer the best sales, support and service in the industry:

- ▶ 5-year limited warranty on all monitors, return shipping included
- ▶ 24-48-hour repair turnaround (most models)
- ▶ Same day dispatch lead time (most models)
- ▶ 30-day money-back guarantee



Optional KVM Extender allows monitor to be placed up to 300m away from computer.



Optional Screen Protector guards touch screens from scratches and wear.

Panel Mount Industrial Monitors and Touch Screens: Specifications

Model No. (Revision):	HIS-ML12 (Rev. E)	HIS-ML15 (Rev. H)	HIS-ML17 (Rev. H)	HIS-ML19 (Rev. H)	HIS-ML19.5 (Rev. B)	HIS-ML22 (Rev. C)	HIS-ML23.8 (Rev. A)
Display							
Type	Thin-film transistor (TFT) Active Matrix Liquid Crystal, LED Backlit						
Size	307mm (12.1") diagonal	381mm (15") diagonal	432mm (17") diagonal	483mm (19") diagonal	495mm (19.5") diagonal	559mm (22") diagonal	605mm (23.8") diagonal
Aspect Ratio	4:3		5:4		16:9	16:10	16:9
Image Size (WxH)	246 x 184.5 mm	304 x 228 mm	338 x 270 mm	375 x 300 mm	435 x 239 mm	474 x 296 mm	527 x 296 mm
Native Resolution*	SVGA (800 x 600 @ 60Hz)	XGA (1024 x 768 @ 60Hz)	SXGA (1280 x 1024 @ 60Hz)		HD1080p (1920 x 1080 @ 60 Hz)	WSXGA+ (1680 x 1050 @ 60Hz)	HD1080p (1920 x 1080 @ 60Hz)
Pixel Pitch	0.308 mm x 0.308 mm	0.297 mm x 0.297 mm	0.264 mm x 0.264 mm	0.293 mm x 0.293 mm	0.2265 mm x 0.221 mm	0.282 x 0.282 mm	0.2745 x 0.2745 mm
Number of Colours	16.7 million						
Brightness (white)	450 nits (cd/m ²)	400 nits (cd/m ²)	250 nits (cd/m ²)		350 nits (cd/m ²)		350 nits (cd/m ²)
Viewing Angle (Hori/Vert)	178° / 178°	170° / 170°	170° / 160°	178° / 178°		170° / 160°	178° / 178°
Contrast Ratio	1500:1		1000:1	1000:1 (typ); 20M:1 (dyn)	3000:1	1000:1 (typ); 10M:1 (dyn)	1000:1
Backlight Brightness half-life	60,000 hours			40,000 hours	50,000 hours		40,000 hours
Video							
Input Connectors	HD-15, DVI-I			HD-15, DVI-D	DVI-I, DisplayPort	HD-15, DVI-I	DVI-I, DisplayPort
Inputs using Adapter	HDMI, HDMI Mini, HDMI Micro, DisplayPort, DisplayPort Mini, BNC				HDMI, HDMI Mini, HDMI Micro, DisplayPort Mini, VGA, BNC	HDMI, HDMI Mini, HDMI Micro, DisplayPort, DisplayPort Mini, BNC	HDMI, HDMI Mini, HDMI Micro, DisplayPort Mini, VGA, BNC
Input Signal Formats	RGB Analogue, Sync Types: Separate (Sep.), Composite (Comp.), Sync-on-Green (SoG); DVI			RGB Analogue, Sync Type: Separate; DVI	RGB: Sep., Comp., SoG; DVI; DisplayPort	RGB: Sep., Comp., SoG; DVI	RGB: Sep., Comp., SoG; DVI; DisplayPort
Horizontal / Vertical Scan	30-60 kHz / 50-75 Hz	31-73 kHz / 50-75 Hz		24-82 kHz / 50-75 Hz			
Response Rate	12 ms	35 ms	5 ms	14 ms	25 ms	5 ms	14 ms
Electrical							
Monitor Input	100 to 240 VAC, 0.4/0.2A, 60/50 Hz or 9.6-36.6 VDC, 2.5 to 0.65 A	100 to 240 VAC, 1.5/0.75 A, 60/50 Hz or 9.6 to 36.6 VDC, 2.5 to 0.65 A			100 to 240 VAC, 0.6/0.3 A, 60/50 Hz and 10.8 to 26.4 VDC, 2.3 to 0.9 A	100 to 240 VAC, 1.5/0.75 A, 60/50 Hz or 9.6 to 36.6 VDC, 2.5 to 0.65 A	100 to 240 VAC, 0.6/0.3 A, 60/50 Hz and 10.8 to 26.4 VDC, 2.3 to 0.9 A
Power Consumption	~14.9 W	~16.8 W	~20 W	~16 W	~27 W	~26 W	~27 W
Environmental							
Temperature / Humidity	Temperature: 0° to 50°C / Humidity: 20% to 90% non-condensing						
Operating Shock / Vibration	15 g, 6 msec, half-sine / Operating (sine): 1.0 g, swept sine 9-500 Hz; Transport (random): 0.1g ² / Hz, 10-200 Hz; 0.03g ² / Hz, 200-2000 Hz						
Altitude	Operating: up to 3.05 km; Non-operating: up to 12.2 km						
Physical							
Enclosure Type	Panel mount; rear collar compresses gasket against panel (7.9 mm maximum panel thickness); held by M5 studs						
Bezel Material	Black powder-coated carbon steel or stainless steel faceplate				Edge-to-edge window	Black carbon steel or stainless steel faceplate	Edge-to-edge window
Panel Rating (with proper installation)	Black powder-coated carbon steel: IP65/IP66; NEMA/UL Type 12/4 Stainless steel: IP65/IP66; NEMA/UL Type 12/4/4X				IP65/IP66/IP69/IP69K; NEMA/UL Type 12/4/4X	Black Carbon Steel: IP65/IP66; NEMA/UL Type 12/4 Stainless: IP65/IP66; NEMA/UL Type 12/4/4X	IP65/IP66/IP69/IP69K; NEMA/UL Type 12/4/4X
Depth behind Front Edge of Panel	50.3 mm	49.6 mm	49.9 mm	53.8 mm	46.3 mm	50.0 mm	46.1 mm
Bezel Dimensions (WxHxD)	338mm x 296mm x 7mm	438mm x 354mm x 7mm		483mm x 399mm x 7mm	530mm x 332.5mm x 9mm	559mm x 375mm x 7mm	597mm x 377mm x 9mm
Cutout Dimensions (WxH)	308 mm x 263 mm	406.9 mm x 323.1 mm		453.4 mm x 366.8 mm	497.8 mm x 298.5 mm	528.7 mm x 342.3 mm	566.7 mm x 342.4 mm
Net / Shipping Weight	3.86 kg / 5.17 kg	6.35 kg / 8.16 kg		8.16 kg / 9.98 kg	5.83 kg / 8.16 kg	8.62 kg / 10.43 kg	7.71 kg / 13.61 kg
Window Options	All Models: • Single-Touch Resistive Touch Screen • Tempered Glass window (non-touch) • Acrylic window (non-touch) (n/a 19.5, 23.8)				HIS-ML19.5 and HIS-ML23.8 Models only: • Glass-armoured touch screen with sulphur gas protection also available (call for details) • Multi-Touch PCAP Touch Screen • Food Protection window (non-touch)		
Compliances and Certifications							
Electrical	CE, UKCA, UL/EN/IEC62368-1, UL/EN/IEC60950-1, UL Recognized Component for US and Canada, UL 508A, CAN ICES-3A/NMB-3A, FCC Class A, NOM						
Enclosure, Environmental	UL 50E, IEC 60721-3 (Reliability), WEEE						

* A full list of supported video standards may be found on our website.