MH [new]

The new MH monitor family is compliant with the NEW ASEM STANDARDS and it is available with 8,4”, 10,4”, 12,1” - SVGA e XGA - 15” in 4:3 aspect ratio, 17” and 19” in 5:4 aspect ratio, 15,6”, 18,5” and 21,5” in 16:9 Wide 16 million colors TFT LED Backlight LCDs.

The front panels are in aluminium and True Flat aluminium with 5 wires resistive touchscreens. Wide versions are available with glass True Flat with retro-projected capacitive Multitouch touchscreen front panels. The 12,1”, 15”, 17” and 19” versions are also available with stainless steel True Flat front panels.

MH monitors are equipped with a standard VGA and DVI-D input video, 220÷110 VAC or 18÷36 VDC input voltage with or without galvanic isolation, one front-access USB 2.0 and two rear-access USB 2.0.

NEW ASEM STANDARDS

8,4” | 10,4” | 12,1” | 15” | 15,6”W | 17” | 18,5”W | 21,5”W

VGA | DVI | Panel | Res 5 | GFG | P-CAP | 24VDC | 220VAC

Alu | Alu TF | Alu-TFM | INOX

Stainless steel TrueFlat Front Panel

FEATURES | PLUS

- NEW ASEM STANDARDS COMPLIANT:
  - STANDARD CUT-OUT FOR PANEL PCs AND MONITORS
  - FRONT PANEL IN FOUR DIFFERENT VERSIONS
  - 24 DC POWER SUPPLY WITH GALVANIC ISOLATION
- UL 508 LISTED COMPONENT CERTIFICATION (PENDING)
- IP66 OR IP66K (STAINLESS STEEL AND P-CAP MULTITOUCH) PROTECTION RATING

System characteristics

Display	Size	8.4”	10.4”	12.1”	12.1”XGA	15.0”	15.6”	17”	18.5”	19”	21,5”
	Type	Color LCD TFT	Color LCD TFT	Color LCD TFT	Color LCD TFT	Color LCD TFT	Color LCD TFT	Color LCD TFT	Color LCD TFT	Color LCD TFT	Color LCD TFT
	Resolution	800x600 (SVGA)	800x600 (SVGA)	800x600 (SVGA)	1024x768 (XGA)	1024x768 (XGA)	1366x768 (WXGA)	1280x1024 (SXGA)	1366x768 (WXGA)	1280x1024 (SXGA)	1920x1080 (FHD)
	Colors	16.2M	16.2M	16.2M	16.2M	16.2M	16.7M	16.7M	16.7M	16.7M	16.7M
	Pixel pitch	0,213 x 0,213mm	0,264x0,264mm	0,3075x0,3075mm	0,240 x 0,240mm	0,297x0,297mm	0,252x0,252mm	0,264 x 0,264mm	0,300x0,300mm	0,294 x 0,294mm	0,300x0,300mm
	Backlight	LED	LED	LED	LED	LED	LED	LED	LED	LED	LED
	Luminance	450cd/m²	400cd/m²	500cd/m²	600cd/m²	450cd/m²	300cd/m²	350cd/m²	300cd/m²	350cd/m²	300cd/m²
	Contrast	600:1	700:1	800:1	700:1	700:1	500:1	1000:1	1000:1	1000:1	5000:1
	Viewing angle L:R/U:L(typ)	80°:80°/80°:60°	80°:80°/60°:80°	80°:80°/80°:60°	80°:80°/70°:70°	80°:80°/70°:70°	85°:85°/80°:80°	85°:85°/80°:80°	170° H, 160° V	85°:85°/80°:80°	178°/178°
	Lifetime	50.000h	50.000h	100.000h	50.000h	50.000h	50.000h	50.000h	50.000h	50.000h	50.000h
Video Inputs	Type	1 x VGA (DB15F), 1 x DVI-D single link (optional)									
Touchscreen Optional	Technology	5 wires – analog - resistive				Projective capacitive - 4 fingers - antiglare					
	Light transimission	80% ±2%				90% ± 3%					
	Lifetime	35mln activations				100mln activations					
	Linearity deviation	< 1 %				< 1 %					
	Interface	USB, Serial (optional)				USB					
	Glass Film Glass	Optional only for 12.1", 15" and 17" aluminum front panel				-					
Serial interfaces Optional	Type	1 x RS232 (DB9M) for touchscreen									
	UART	16550 compatible (FIFO 16 byte)									
	Transfer rate	115kbps max									
	Optoisolation	No									
USB interfaces	Type	2 x USB 2.0 (rear, TYPE-A, host port, protected), 1 x USB 2.0 (front, TYPE-A, host port, protected), 1 x USB 2.0 (rear, TYPE-B, client port (rear, TYPE-B, client port – HUB/touchscreen input)									
	Transfer rate	Up to 480Mbit/s (high speed)									
Buttons, leds and keys	LEDs	Power									
	OSD	Yes, by 3 buttons on rear									

Electrical characteristics

Power supply	Input voltage	18÷32 VDC not isolated or110÷230VAC autoranging
	Power consumption	6.5W@8.4", 28W@21.5"

Mechanical characteristics

Case	Type		Panel mount		
	Material		Steel, zinc galvanization		
Front panel	Type	MH	MH-TF	MH-TFM	MH-TFX
	Protection	IP66	IP66	IP66K	IP66K
	Construction	Full Alluminium alloy	Alluminium True Flat with polyester foil	Glass	Stainless steel True Flat with polyester foil
	Color	-	PANTONE Cool Gray 4C	Black	RAL 7035
	Touchscreen	optional	Yes, with OCA (Optical Clear Adhesive)	Yes, with OCA (Optical Clear Adhesive)	Yes, with OCA (Optical Clear Adhesive)

Measurements mm		MH (W x H x D)	MH-TF (W x H x D)	MH-TFM (W x H x D)	MH-TFX (W x H x D)	Cutout (W x H)	Weight (Kg)
	8,4"	250 x 210 x 64	250 x 210 x 64	-	-	230 x 190	3,1
	10,4"	300 x 245 x 64	300 x 245 x 64	-	-	280 x 225	3,9
	12,1"	335 x 270 x 64	335 x 270 x 64	-	335 x 270 x 64	315 x 250	4,6
	15"	390 x 315 x 64	390 x 315 x 64	-	398 x 315 x 64	370 x 295	5,3
	15,6"	430 x 275 x 64	430 x 275 x 64	430 x 275 x 64	-	410 x 255	6,0
	17"	455 x 355 x 66	455 x 355 x 66	-	455 x 355 x 66	435 x 335	6,7
	18,5"	500 x 320 x 64	500 x 320 x 64	500 x 320 x 64	-	480 x 300	7,3
	19"	490 x 388 x 66	490 x 388 x 66	-	490 x 388 x 66	470 x 368	7,3
	21,5"	579 x 367 x 68	579 x 367 x 68	579 x 367 x 68	-	559 x 347	8,4

Environmental characteristics

Temperature	Operation	0° ÷ +45°C
	Storage	-20° ÷ +60°C
Humidity	Operation/Storage	80% (non-condensing)

Warranty & Approvals

UL	Marks	cULus Listed
	Safety	Conforms to UL-508 (1 UL - Standard for Industrial Control Equipment)
	Certificate N°	20130926-E356364
CE	Emission	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker
	Immunity	Conforms to EN 55024 Information technology equipment – Immunity characteristics
	Safety	Conforms to EN 60950-1 – Information technology equipment – Safety
Warranty	Management	By ASEM headquarters
	Standard	12 months
	Extended	18 / 24 / 36 months (optional)