# MILITARY CHASSIS LCD

Military Chassis IP65 Front LCD Monitor, 23.8"-1920x1080, LED-400 nits, WV(178°/178°),WT(-20~70C), Build-In PCAP touch, I/O regular connector: VGA, USB(touch), Compliant to EMI/EMC MIL-STD-461F / MIL-STD-810G, Power: 9~36V DC Isolated



## **MODEL: EMCHW2380-PCAP**

#### **FEATURES:**

- Modularize mechanical design provides flexible product configuration and easy maintenance
- Optional build-in touch screen for interactive application
- Available with auto-brightness sensor offers application in day and night
- VGA connector with optional AV.SV.AV-Looping
- Complete custom design/solution for OEM customers
- Optional: MIL connector/M12 connector/Plastic IP66 water resistance connector
- Auto Power On: Monitor is always "ON" when connect to power.
- Auto Video Signal On: Monitor (Backlight) will turn off when no video signal, but it will Auto turn back on.

#### **SPECIFICATIONS:**

Cell Type / Glass Surface   TFT LCD / Black Anti-Glare, low reflection coating	anel	Cell Type / Glass Surface	ICD / Plack Anti Clare low reflection coating
Active Area / Pixel Pitch 527.04(H) x 296.46(V) mm / 0.2745(H) x 0.2745(V) mm  Native Resolution / Colors 1920(H) x 1080(V) / 16.7 M  Brightness / Contrast 400 cd/m² (typ) / 3000 : 1  Response Time < 16 ms  Viewing Angle (typical) H.178°(-89°~ + 89°) , V. 178°(-89°~ + 89°)  Light Source LED backlight, Long life, 35,000 hrs (typ)  Input Sources  PC System Signal Analog RGB (0.7/1.0 V <sub>p.p.</sub> , 75 ohms)  Sync Separate Sync, Composite Sync, Sync On Green Frequency F <sub>h</sub> : 30 - 82Khz , F <sub>v</sub> : 50 -75Hz  Audio System 2W speaker x 2  Input Terminals 1 xVGA, 1 x PC Audio (Stereo Headphone Jack), 1 x DC Power Plug  Convenient Features Auto Calibration , Back Light Adjustment, Plug&Play (VESADDC/CI, DDC 2B)  OSD Multi-Languages , Wall Mount Ready (VESA Dimension - please refer to Drawing)  Power			LCD / Black Affil-Glafe, low reflection coalling
Native Resolution / Colors 1920(H) x1080 (V) / 16.7M  Brightness / Contrast 400 cd/m² (typ) / 3000 : 1  Response Time < 16 ms  Viewing Angle (typical) H.178°(-89°~+89°) , V. 178°(-89°~+89°)  Light Source LED backlight, Long life, 35,000 hrs (typ)  Input Sources  PC System  Signal Analog RGB (0.7/1.0 V <sub>p-p</sub> , 75 ohms)  Sync Separate Sync, Composite Sync, Sync On Green Frequency F <sub>h</sub> : 30 - 82Khz , F <sub>v</sub> : 50 -75Hz  Audio System 2W speaker x 2  Input Terminals  1 xVGA, 1 x PC Audio (Stereo Headphone Jack), 1 x DC Power Plug  Convenient Features  Auto Calibration , Back Light Adjustment, Plug&Play (VESADDC/CI, DDC 2B)  OSD Multi-Languages , Wall Mount Ready (VESA Dimension - please refer to Drawing)  Power		Aspect Ratio / Size	le /23.8" viewable diagonal area
Brightness / Contrast 400 cd/m² (typ) / 3000 : 1  Response Time		Active Area / Pixel Pitch	.04(H) x 296.46(V) mm / 0.2745(H) x 0.2745(V) mm
Response Time Viewing Angle (typical) Light Source  PC System Signal Sync Separate Sync, Composite Sync, Sync On Green Frequency Audio System System Viewing Angle (typical) Frequency Audio System Signal Sync Separate Sync, Composite Sync, Sync On Green Frequency Fh: 30 - 82Khz, Fv: 50 - 75Hz  Audio System Viewing Angle (typical) Signal Analog RGB (0.7/1.0 Vp.p, 75 ohms) Sync Separate Sync, Composite Sync, Sync On Green Frequency Fh: 30 - 82Khz, Fv: 50 - 75Hz  Audio System Viewing Angle (typical) Signal Sync Separate Sync, Composite Sync, Sync On Green Frequency Fh: 30 - 82Khz, Fv: 50 - 75Hz  Audio System Viewing Angle (typical) Sync Separate Sync, Composite Sync, Sync On Green Frequency Fn: 30 - 82Khz, Fv: 50 - 75Hz  Audio System Viewing Angle (typical) Sync Separate Sync, Composite Sync, Sync On Green Frequency Fn: 30 - 82Khz, Fv: 50 - 75Hz  Audio System Viewing Angle (typical) Sync Separate Sync, Composite Sync, Sync On Green Frequency Fn: 30 - 82Khz, Fv: 50 - 75Hz  Audio System Viewing Angle (typical) Sync Separate Sync, Composite Sync, Sync On Green Frequency Fn: 30 - 82Khz, Fv: 50 - 75Hz  Audio System Viewing Analog RGB (0.7/1.0 Vp.p, 75 ohms)		Native Resolution / Colors	O(H) x1080(V)/16.7M
Viewing Angle (typical) H.178°(-89°~ + 89°), V. 178°(-89° ~ + 89°)  Light Source LED backlight, Long life, 35,000 hrs (typ)  PC System Signal Analog RGB (0.7/1.0 V <sub>p.p</sub> , 75 ohms)  Sync Separate Sync, Composite Sync, Sync On Green Frequency F <sub>h</sub> : 30 - 82Khz, F <sub>v</sub> : 50 -75Hz  Audio System 2W speaker x 2  Input Terminals 1 xVGA, 1 x PC Audio (Stereo Headphone Jack), 1 x DC Power Plug  Convenient Features Auto Calibration, Back Light Adjustment, Plug&Play (VESADDC/CI, DDC 2B)  OSD Multi-Languages, Wall Mount Ready (VESA Dimension - please refer to Drawing)  Power		Brightness / Contrast	cd/m <sup>2</sup> (typ) / 3000 : 1
Light Source  Light Source  LED backlight, Long life, 35,000 hrs (typ)  PC System  Signal  Analog RGB (0.7/1.0 V <sub>p.p</sub> , 75 ohms)  Sync  Separate Sync, Composite Sync, Sync On Green  Frequency  Fh: 30 - 82Khz, Fv: 50 -75Hz  Audio System  2W speaker x 2  Input Terminals  1 xVGA, 1 x PC Audio (Stereo Headphone Jack), 1 x DC Power Plug  Convenient Features  Auto Calibration, Back Light Adjustment, Plug&Play (VESADDC/CI, DDC 2B)  OSD Multi-Languages, Wall Mount Ready (VESA Dimension - please refer to Drawing)  Power  Power		Response Time	5 ms
PC System   Signal   Analog RGB (0.7/1.0 V <sub>p.p</sub> , 75 ohms)   Sync   Separate Sync, Composite Sync, Sync On Green   Frequency   Fh : 30 - 82Khz , Fv: 50 -75Hz		Viewing Angle (typical)	78°(-89°~ + 89°) , V. 178°(-89° ~ + 89°)
Sync Separate Sync, Composite Sync, Sync On Green Frequency Fh: 30 - 82Khz, Fy: 50 -75Hz  Audio System 2W speaker x 2  Input Terminals 1 xVGA, 1 x PC Audio (Stereo Headphone Jack), 1 x DC Power Plug  Convenient Features Auto Calibration, Back Light Adjustment, Plug&Play (VESADDC/CI, DDC 2B)  OSD Multi-Languages, Wall Mount Ready (VESA Dimension - please refer to Drawing)  Power 9~36V DC Isolated		Light Source	backlight, Long life, 35,000 hrs (typ)
Frequency F <sub>h</sub> : 30 - 82Khz, F <sub>v</sub> : 50 -75Hz  Audio System 2W speaker x 2  Input Terminals 1 xVGA, 1 x PC Audio (Stereo Headphone Jack), 1 x DC Power Plug  Convenient Features Auto Calibration, Back Light Adjustment, Plug&Play (VESADDC/CI, DDC 2B)  OSD Multi-Languages, Wall Mount Ready (VESA Dimension - please refer to Drawing)  Power 9~36V DC Isolated	put Sources	PC System	nal Analog RGB (0.7/1.0 V <sub>p.p</sub> , 75 ohms)
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Input Terminals   1 xVGA, 1 x PC Audio (Stereo Headphone Jack), 1 x DC Power Plug			quency F <sub>h</sub> : 30 - 82Khz , F <sub>v</sub> : 50 -75Hz
Convenient Features Auto Calibration , Back Light Adjustment, Plug&Play (VESADDC/CI, DDC 2B) OSD Multi-Languages , Wall Mount Ready (VESA Dimension - please refer to Drawing) Power 9~36V DC Isolated		Audio System	speaker x 2
OSD Multi-Languages , Wall Mount Ready (VESA Dimension - please refer to Drawing)  Power 9~36V DC Isolated	put Terminals	1 xVGA, 1 x PC Audio (St	leadphone Jack), 1 x DC Power Plug
Power 9~36V DC Isolated	onvenient Features	Auto Calibration , Back L	djustment, Plug&Play (VESADDC/CI, DDC 2B)
		OSD Multi-Languages , W	unt Ready (VESA Dimension - please refer to Drawing)
<b>1.</b>	ower	9~36V DC Isolated	
	ower Consumption	Operation / Power Saving	4 watt, < 1 watt (Support DPMS)
Operating Condition   Temperature / Humidity   -20°C ~ 70°C (- 4 °F ~ 158°F), 10% ~ 90% (no condensation)	perating Condition	Temperature / Humidity	°C ~ 70°C (- 4 °F ~ 158°F), 10% ~ 90% (no condensation)
Storage Condition Temperature / Humidity -30°C ~ 80°C (-22°F ~ 176°F), 10% ~ 90% (no condensation)	orage Condition	Temperature / Humidity	°C ~ 80°C (-22°F ~ 176°F), 10% ~ 90% (no condensation)
Certification FCC,CE	ertification		C,CE
Dimensions         Physical         Please refer to Drawing	mensions	Physical	ase refer to Drawing
Carton WxHxD=TBD		Carton	HxD=TBD
Weight N.W./G.W. TBD	•	N.W./G.W.	
Container Loaded 20ft / 40ft / 40ft HQ TBD (Sets , By pallet)	ontainer Loaded	20ft / 40ft / 40ft HQ	(Sets , By pallet)

 $<sup>\</sup>hbox{*Specifications subject to change without notice, not responsible for typographical errors.}$ 

#### **OPTIONAL MIL:**

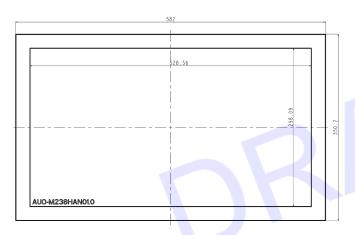
- Environmental: MIL-STD-810, DO-160
- EMI/EMC: MIL-STD-461/462
- Panel construction & lighting: MIL-P-7788
- Power: MIL-STD-704, MIL-STD-1275
- Shock-MILS 901D
- Vibration-MIL STD 167

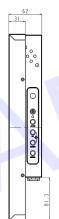


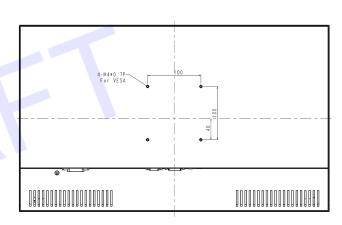
### **MECHANICAL DRAWING:**

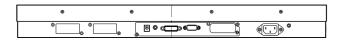
This is subject to change without Notice. Final Drawings Will be Provided for Approval after Order.











Drawing No.: EMCHW2380-PCAP-03192022-V1

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