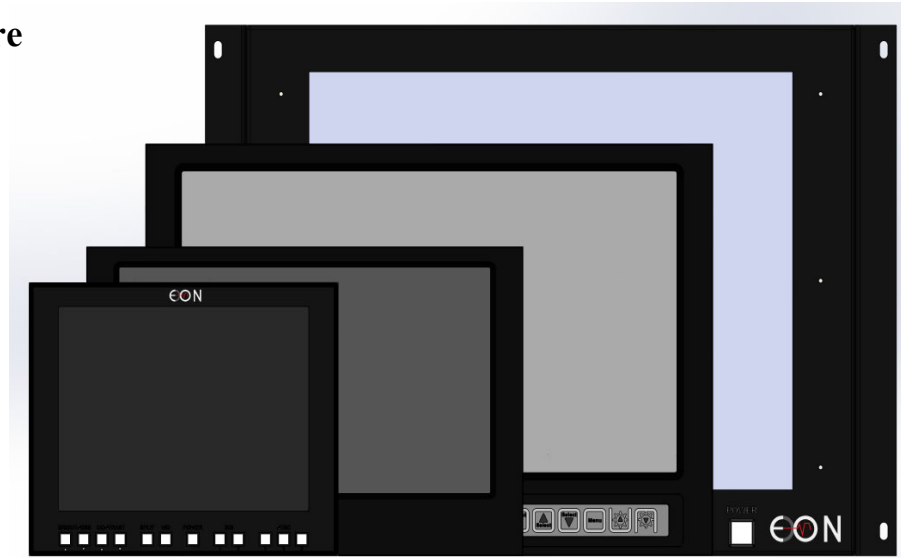




Eon Instrumentation Monitor Product Family

Features

- **Fully Customizable Video Inputs**
- **8.4", 10.1", 12.1", 15.6", 17.0" and more**
- **Sunlight Readable Displays**
- **Split Screen capable**
- **Touch Panel optional**
- **RS-232 Computer Control optional**
- **Up To 3Ghz Video Input**
- **Up to 1920x1080 HD Resolution**
- **Pushbutton Menu Selection**
- **Video Input Thru BNC or SDI**
- **MilStd-810F/G Environmental Qual**
- **MilStd-461EMI Qual**
- **28VDC MilStd 704 Power**



Description

Eon Instrumentation has developed a family of Rugged Standalone Digital Monitors as another component in its Digital Video Architecture. The HDM-series compliment the analog and digital video cameras, distribution amplifiers, and data recorders available from Eon Instrumentation. The displays use a Liquid Crystal Display (LCD) with vibrant colors and viewing angle of 80° left/right of center. A bonded shield is standard to support emitted EMI and impact resistance. Optional sunlight readable LCD, resistive touchscreen, and NVIS overlay are available. All signal inputs are either through MilStd D38999 circular connectors or 75 Ω BNC. Connectors are located on a doghouse built into the back of the monitor. This allows cables to be attached without adding the depth needed for display mounting. Lighted pushbutton controls are located on the bottom of the frame. Standard functions allow for adjustment of brightness and contrast. Other adjustment control options such as potentiometers, perimeter pushbuttons or locking toggles can be integrated.

Inputs:

	HDM-SVGA-084-1	HDM-101	HDM-156	HDM-156A	HDM-SXGA-170-2
SDI/HD-SDI/3G-SDI	√	√	√	√	
HDMI (Locking)			√	√	
VGA (D38999)			√	√	
NTSC	√				
2 -RS343 (D38999)					√

Features:

	HDM-SVGA-084-1	HDM-101	HDM-156	HDM-156A	HDM-SXGA-170-2
Size Display	8.4"	10.1"	15.6"	15.6"	17.0"
600-800 NIT Display		√	√		√
1000-1200 NIT Display	√			√	
Touch Panel	Optional		Optional	√	
RS-232 Computer Control	Optional	Optional	Optional	Optional	√
Split Screen	√				
1920x1080 Resolution		√	√	√	
1280x1024 Resolution					√
800x 600 Resolution	√				
Full EMI/Environmental Qualified	√	√	√	√	√
28VDC Input PWR	√	√	√	√	√

SDI/HD-SDI/3G-SDI:

	HDM-SVGA-084-1	HDM-101	HDM-156	HDM-156A	HDM-SXGA-170-2
NTSC (59.94Hz)	√	√	√	√	
PAL (50Hz)	√	√	√	√	
720p / 50Hz	√	√	√	√	
720p / 59.94Hz	√	√	√	√	
720p / 60Hz	√	√	√	√	
1080i/50Hz	√	√	√	√	
1080i/59.94Hz	√	√	√	√	
1080i/60Hz	√	√	√	√	
1080p/PsF25	√	√	√	√	
1080p/PsF29.97	√	√	√	√	
1080p/PsF30	√		√	√	
1080p/23.98Hz	√		√	√	
1080p/24Hz	√		√	√	
1080p/25Hz	√		√	√	
1080p/29.97Hz	√		√	√	
1080p/30Hz	√		√	√	
1080p/50Hz	√	√	√	√	
1080p/59.94Hz	√	√	√	√	
1080p/60Hz	√	√	√	√	
1280 x 1024					√
1024 x 768					√
800 x 600					√

Standard EMI/Environmental Qualification Specifications:

TABLE 1 –STANDARD DISPLAY EMI QUALIFICATION

EMI	Method	Level
Conducted Emissions	MIL-STD-461F	CE101, CE102, CS106, CS114, CS115, CS116
Radiated Emissions	MIL-STD-461F	RE101, RE102, RS103
HIRF and Lightning	Per RTCA/ DO-160D	Compliant
18 -36vdc power tests	MIL-STD-704/1275E	Compliant

TABLE 2- STANDARD DISPLAY ENVIRONMENTAL QUALIFICATION

Environment	Method	Level
Low Temperature (Cold Start)	MIL-STD-810F, 502.4, Proc II	Temp Range, [°C]: -20
Low Temperature (Operation on ground)	MIL-STD-810F, 502.4, Proc II	Temp Range, [°C]: -20
High Temperature (Operation)	MIL-STD-810F, 501.4, Proc II	Temp Range [°C] : +55
High Temperature (Storage)	MIL-STD-810F, 501.4, Proc I	Temp Range, [°C] : +70
Low Temperature (Storage)	MIL-STD-810F, 502.4, Proc I	Temp Range, °C : -40
Altitude (Storage)	MIL-STD-810F, 500.4, Proc I	Altitude [Kft]: 0 to 40
Humidity	MIL-STD-810G, 507.5	Temp [°C]:35-60 Humidity [%RH]: 5 – 95
Salt Spray	RTCA/DO-160D	Solution pH: 6.5-7.2 Temp [°C]: 35 Caterory X
Rain Waterproofness	MIL-STD-810F, 506.4, RTCA/DO-160D	Proc III Fallen Rate [mm/Hr]: 280 Caterory X
Sand and Dust	MIL-STD-810F, Method 510.4 Proc. I (Internal LRU)	Temp [°C]: 23-60 Air Velocity: 300-1750 ft/mn Duration: 12 hours
Vibration (operating)	MilStd 167-1A; MilStd 810F, 514.5, Pr I, Cat. 13	Type I – 25 hz; func 1hr/end 3hr
Shock, Functional	MIL-STD-810F, 516.5, Proc. I MIL-STD-901D	Pulse shape: Saw tooth Duration [msec]: 11 Amplitude [g]: 20 Total Impacts: 18 Grade A
Shock, Pitch/Roll/Yaw	DoD STD-1399	301A SeaState 8
Temperature Change	MIL-STD-810G, 503.5	+/- 20 deg C per minute