

FULL HIGH DEFINITION RUGGED MONITORS



IP67 (NEMA 6 Submersible) 13.3" 1920x1080, 400nits 178° (H) x 178° (V) 800:1, VESA Mount, Power Consumption: 35Watts, Video Inputs: HD-SDI, HDMI, DVI/DisplayPort/VGA, RS170 (NTSC/PAL), Video Outputs: HD-SDI, RS-170 (NTSC/PAL), Programmable Bezel Keys, Optional Touch Screen, 10-36VDC, MIL-STD 810, MIL-STD 461, MIL-STD 1275, MIL-STD 704, IP67, DO-160, -46C to 71C, External cables are not included.

Model: DHFW1330

Built with a Full HD 1920x1080 LCD, the DHFW Display Series deliver a MIL-Spec design with low-power consumption, high brightness backlight, and an ultra-thin form factor for critical operations requiring 1080p detail. The rugged DHFW monitor ensures complete optical performance and full reliability while providing a small footprint for constrained spaces. User Programmable Bezel Keys allow full control of external systems or a custom interface of internal display features (video processing, picture layout, user interface preferences, and navigation shortcuts). Multiple mounting options allow for seamless integration within any rugged system.

STANDARD FEATURES

- SDI Input (1), 3G/HD/SD SMPTE 424M/292M/259M
- SDI Output (1), 3G/HD/SD SMPTE 424M/292M/259M
- HDMI Input (1)
- DVI-I Input (1), Digital/Analog
- Composite Video Inputs (3)
- Composite Video Output (1)
- Auto Sensing NTSC, PAL Formats
- Up to 1080p30 High Definition Video
- User Programmable Bezel Keys (15), RS232
- MIL-C Power*
- LED Backlight (1000:1 Dimming Ratio)
- Anti-Reflective and Anti-Glare Treatments
- Enhanced Sunlight Readability
- IP67/NEMA 6 Enclosure (Sealed Connectors*)
- 13.3" TFT AMLCD
- MIL-STD-461, 704, 810, 1275



* Cables not included

OPTIONAL FEATURES

- Resistive Touch Screen (USB or RS232 Interface)
- Night Vision Compatible – Monochrome Red/Green
- NVIS MIL-STD-3009 Class B White Compliant

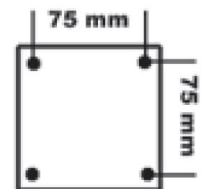
MOUNT OPTIONS *(Quoted individually)*



PANEL



RAM



VESA

SPECIFICATIONS

LCD SIZE	Resolution	Luminance	Viewing Angle	Contrast Ratio	Maximum Power Consumption
13.3" TFT AMLCD	1920x1080	400 nits	178° (H) x 178° (V)	800:1	35 Watts
TECHNICAL SPECIFICATIONS					
Display	8-bit color, 16,777,216 colors. TFT AMLCD (Thin-Film Transistor Active-Matrix Liquid-Crystal Display)				
Dimming Ratio	1000:1				
Video Inputs/Outputs	SDI (1) 3G/HD/SD, HDMI (1), DVI-I (1) Digital/Analog, Composite Video (3); Auto Sensing NTSC and PAL-BGHID Formats; SDI (1) 3G/HD/SD, Composite Video (1)				
Housing	Milled Aluminum, Black Hard Anodized				
Mount Options	Panel, RAM, VESA (75mm); Quoted individually.				
Wide Range DC Power Input	10-36 VDC (12, 24, 28 VDC nominal); 24" is 16-36 VDC (24, 28 VDC nominal)				
Power Conditioning	Protected against Internal Short Circuit, Load Dump, Over Voltage and Reverse Polarity				
ENVIRONMENTAL SPECIFICATIONS					
IP Rating	IP67 (NEMA 6 Submersible)				
Operating Temperature	-46°C to 71°C (-51°F to 160°F); -20°C (-4°F) with Touch Option				
Storage Temperature	-54°C to 71°C (-65°F to 160°F)				
Humidity and Altitude	0-100%; 45,000 ft.				

MILITARY SPECIFICATIONS			
MIL-STD-461	EMI	MIL-STD-810	Method 512; Immersion
MIL-STD-704	Aircraft Power Requirements	MIL-STD-810	Method 513; Acceleration
MIL-STD-810	Method 500; Altitude	MIL-STD-810	Method 514; Procedure I, II, V, VI; General Vibration
MIL-STD-810	Method 501; I & II; High Temperature	MIL-STD-810	Method 516; Procedure I, Functional Shock
MIL-STD-810	Method 502; I & II; Low Temperature	MIL-STD-810	Method 520; Temp, Humidity, Vibe and Altitude
MIL-STD-810	Method 503; Temperature Shock	MIL-STD-1275	Vehicle Power Requirements
MIL-STD-810	Method 505; Solar Radiation	MIL-STD-1472	Thermal Contact Hazard
MIL-STD-810	Method 506; Rain	MIL-STD-3009	NVIS Compatible (Optional)
MIL-STD-810	Method 507; Humidity	MIL-PRF-22885	Sunlight Readability for Push Buttons
MIL-STD-810	Method 508; Fungus	MIL-A-8625	Standard Finish, Type III, Class 1 & 2
MIL-STD-810	Method 509; Salt/Fog	MIL-PRF-22750	Painted Finish, Optional, Minimum Quantity Required
MIL-STD-810	Method 510; Blowing Sand and Dust	MIL-DTL-26482	Connector, Qualified
MIL-STD-810	Method 511; Explosive Atmosphere	MIL-DTL-38999	Connector, Qualified

**Specifications subject to change without notice, not responsible for typographical errors.*

*- Cables not included

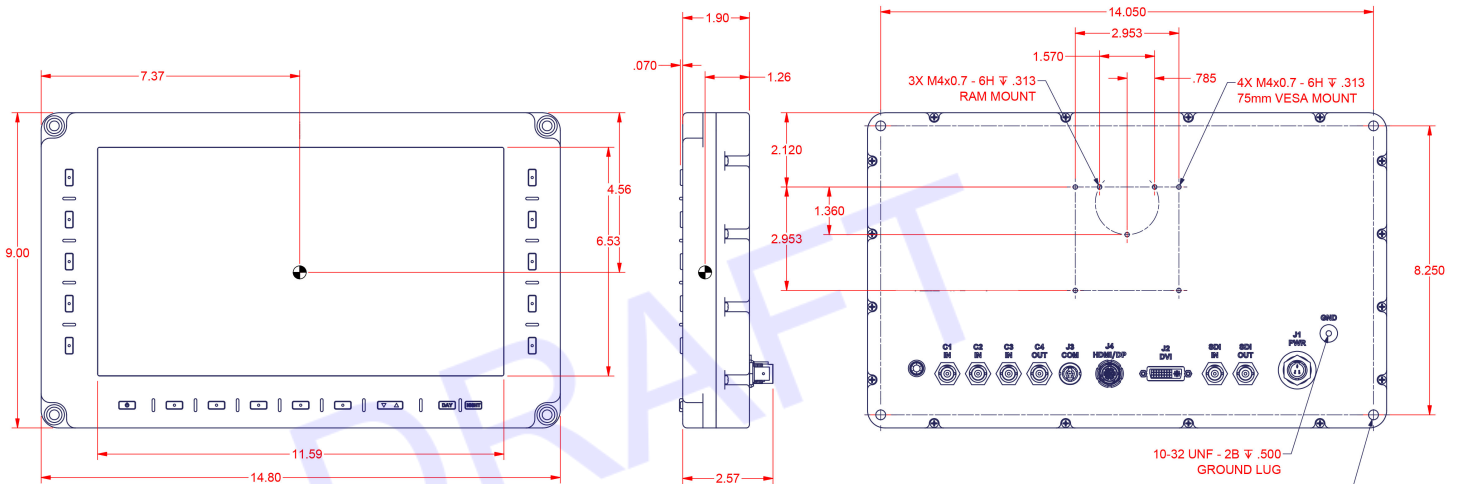
†-Power range specified covers momentary environmental fluctuations generally found in a mobile environment while display is operating. For power initialization and continual operation, nominal voltages are required

1 - Dimming Ratio is LCD-specific.

2 - Configuration-Specific; Contact iTech for details.

MECHANICAL DRAWINGS

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



7 PIN RECEPTACLE J3 COM	
PIN	SIGNAL
1	USB- or RS-232_TxD (TOUCH SCREEN)
2	RS232_TxD (BUTTONS)
3	RS232_RxD (BUTTONS)
4	GND
5	GND
6	USB+ or RS-232_RxD (TOUCH SCREEN)
7	N/C
Vendor P/N#	883-015-0728679N
Manufacturer #	883-001-06296-75N
Strain #	
Cable Assy#	900297

SDI OUT VIA BNC SDI OUT	
PIN	SIGNAL
1	CENTER COAX CORE
2	SHELL SHIELDED BRAID

SDI IN VIA BNC SDI IN	
PIN	SIGNAL
1	CENTER COAX CORE
2	SHELL SHIELDED BRAID

VIDEO OUT VIA BNC C4 OUT	
PIN	SIGNAL
1	CENTER COAX CORE
2	SHELL SHIELDED BRAID

VIDEO IN (V3) VIA BNC C1 IN, C2 IN, C3 IN	
PIN	SIGNAL
1	CENTER COAX CORE
2	SHELL SHIELDED BRAID

DVI RECEPTACLE J2 DVI	
PIN	SIGNAL
1	TMDS DATA 2-
2	TMDS DATA 2+
3	TMDS DATA 2 SHIELD
4	N/C
5	N/C
6	DDC CLOCK
7	DDC DATA
8	ANALOG VSYNC
9	TMDS DATA 1-
10	TMDS DATA 1+
11	TMDS DATA 1 SHIELD
12	N/C
13	N/C
14	+5V
15	GND
16	HOT PLUG DETECT
17	TMDS DATA 0-
18	TMDS DATA 0+
19	TMDS DATA 0 SHIELD
20	N/C
21	N/C
22	TMDS CLOCK SHIELD
23	TMDS CLOCK+
24	TMDS CLOCK-

HDMI PINOUT J4 HDMI/DP	
PIN	SIGNAL
1	ROC- IN
2	ROC- IN
3	GND
4	GND
5	GND
6	GND
7	GND
8	ROC- IN
9	GND
10	DDC SDA
11	DDC SCL
12	ROC- IN
13	ROC- IN
14	CEC IN
15	HOT PLUG DETECT
16	DDC +5V
17	ROC- IN
18	ROC- IN
19	ROC- IN

DISPLAY PORT PINOUT J5 HDMI/DP	
PIN	SIGNAL
1	ML LANE 0-
2	ML LANE 0+
3	GND
4	GND
5	GND
6	GND
7	GND
8	ML LANE 2-
9	GND
10	AUX CH-
11	AUX CH+
12	ML LANE 1+
13	ML LANE 1-
14	GND
15	HOT PLUG
16	DP PWR
17	ML LANE 3-
18	ML LANE 3+
19	ML LANE 2+

4X Ø.281 THRU PANEL MOUNT SOC HD (1/4-20 RETAINED HARDWARE OPTION AVAILABLE)

Drawing No.: DHFW1330-05162022-V1

