1080P HIGH DEFINITION RUGGED MONITORS

Rugged Full IP67/NEMA6 Enclosure with Sunlight Readable Wide 14.1" 800nits WXGA(1280x800), HDMI Input, DVI Input, HD-SDI Input, Composite Video Inputs, HD-SDI Output, Composite Video Output, LED Backlight, 15 User Programmable Buttons, WXGA Resolution, 12-36VDC Power Input, Operating Temperature -46C to 71C (-51F to 160F); External cables are not included.

Model: DHDW1410

Rugged DHD monitor ensures complete optical performance and full reliability while providing a small footprint for small spaces. 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)
- Composite Video Inputs (3), PIP Capable
- Composite Video Output (1)
- Auto Sensing NTSC, PAL Formats
- Up to 1080p30 High Definition Video
- MIL-C Power*
- LED Backlight (1000:1 Dimming Ratio)
- Anti-Reflective and Anti-Glare Treatments
- Enhanced Sunlight Readability
- IP67/NEMA 6 Enclosure (Sealed Connectors*)
- User Programmable Bezel Keys (15), RS232
- 14.1" TFT AM LCD
- 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

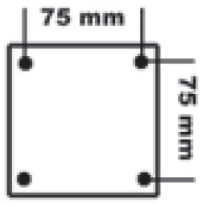
MOUNT OPTIONS *(Quoted individually)*

Panel

RAM

Side

(12.1" - 17".5 ONLY)



VESA

SPECIFICATIONS

LCD SIZE	Resolution	Luminance	Viewing Angle	Contrast Ratio	Maximum Power Consumption
14.1" TFT AMLCD	WXGA (1280x800)	800 nits	160° (H) x 140° (V)	700:1	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	HDMI (1), SDI (1) 3G/HD/SD, DVI-I (1), Composite Video (3); Auto Sensing NTSC and PALBGHID Formats; SDI (1) 3G/HD/SD, Composite Video (1)				
Housing	Milled Aluminum, Black Hard Anodized				
Mount Options	Panel, RAM, VESA (75mm), Side (12.1" - 17.5" only); Quoted individually.				
Wide Range DC Power Input	10-36 VDC (12, 24, 28 VDC nominal)				
Power Conditioning	Protected against Internal Short Circuit, Load Dump, Over Voltage and Reverse Polarity				
ENVIRONMENTAL SPECIFCATIONS					
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)				
Vibration	5.8 G (5-500 Hz)				
Altitude	45,000 ft.				

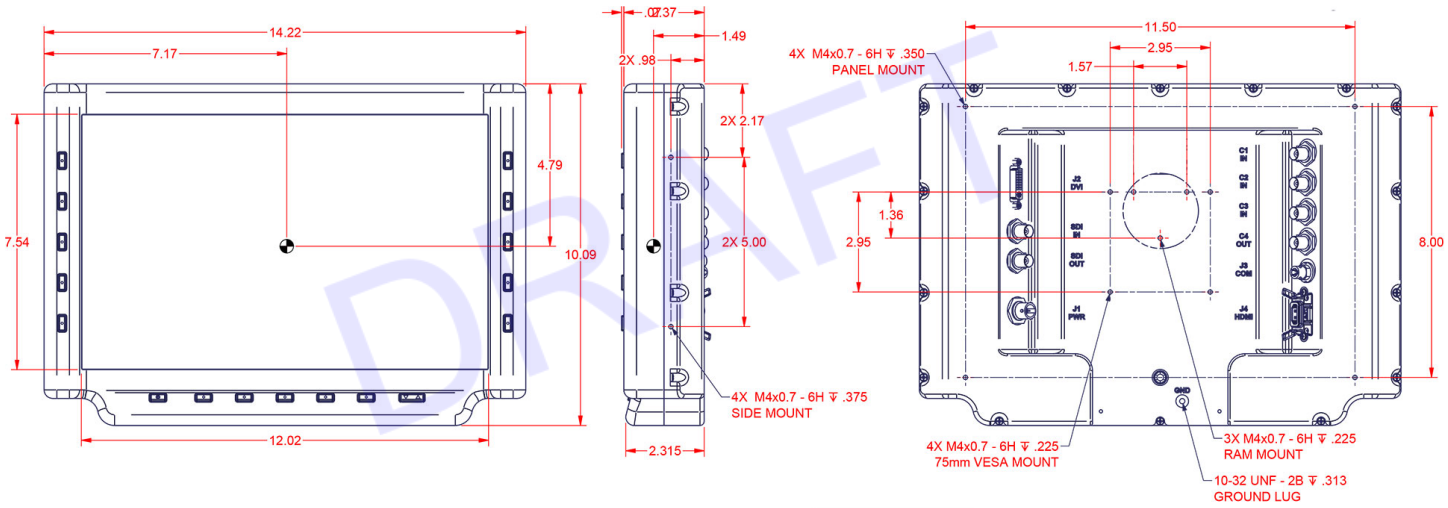
MILITARY SPECIFICATIONS			
MIL-STD-461	EMI	**MIL-STD-810**	Method 512; Immersion
MIL-STD-704	Aircraft Power Requirements	**MIL-STD-810**	Method 513; Acceleration
MIL-STD-810	Method 500, Altitude	**MIL-STD-810**	Method 514; Procedure I, II, V, VI; General Vibration
MIL-STD-810	Method 501; I & II; High 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

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

MECHANICAL DRAWINGS

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



Drawing No.: DHDW1410-04052022-V1

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-
C1	ANALOG RED
C2	ANALOG GREEN
C3	ANALOG BLUE
C4	ANALOG HSYNC
C5	ANALOG GND
AMPHENOL #	LTWDID-29PFFP-SL8001
Mate #	LTWDID-29AMMM-SL7AXX
Strain #	
Cable Assy#	

HDMI RECEPTACLE J4 HDMI	
PIN	SIGNAL
1	DATA 2+
2	DATA 2 SHIELD
3	DATA 2-
4	DATA 1+
5	DATA 1 SHIELD
6	DATA 1-
7	DATA 0+
8	DATA 0 SHIELD
9	DATA 0-
10	CLOCK+
11	CLOCK SHIELD
12	CLOCK-
13	CEC
14	RESERVED
15	SCL
16	SDA
17	DDC CEC GROUND
18	+5V POWER
19	HOT PLUG DETECT
AMPHENOL #	LTWHJ-19PFFR-GS7001 (141308)
Mate #	LTWHP-19AMMI-QL7A
Strain #	
Cable Assy#	

VIDEO OUT VIA BNC C4 OUT	
PIN	SIGNAL
CENTER	COAX CORE
SHELL	SHIELED BRAID

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

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
AMPHENOL #	803-015-07ZN6-7PN
Mate #	803-001-06ZN6-7SN
Strain #	
Cable Assy#	900267

SDI OUT VIA BNC SDI OUT	
PIN	SIGNAL
CENTER	COAX CORE
SHELL	SHIELED BRAID

SDI IN VIA BNC SDI IN	
PIN	SIGNAL
CENTER	COAX CORE
SHELL	SHIELED BRAID

3 PIN RECEPTACLE J1 POWER	
PIN	SIGNAL
A	28 VOLT DC
B	28 VOLT RTN
C	N/C
Amphenol #	71-S33721-33P (3-pin power)
Mate #	PT06E833SSR (141247)
Strain #	Included
Cable Assy#	900222