FULL HIGH DEFINITION RUGGED MONITORS

IP67 (NEMA 6 Submersible) 10.1 1920x1200, 800 nits, 170° (H) x 170° (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: DHFW1010

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 Ratio1)
- Anti-Reflective and Anti-Glare Treatments
- Enhanced Sunlight Readability
- IP67/NEMA 6 Enclosure (Sealed Connectors*)
- 10.1" TFT AMLCD
- MIL-STD-461, 704, 810, 1275

* Cables not included

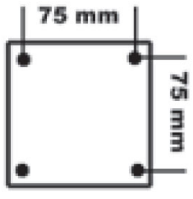
OPTIONAL FEATURES

- 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

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Modified: 05-16-2022

SPECIFICATIONS

LCD SIZE	Resolution	Luminance	Viewing Angle	Contrast Ratio	Maximum Power Consumption
10.1" TFT AMLCD	1920x1200	800 nits	170° (H) x 170° (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 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)				
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.

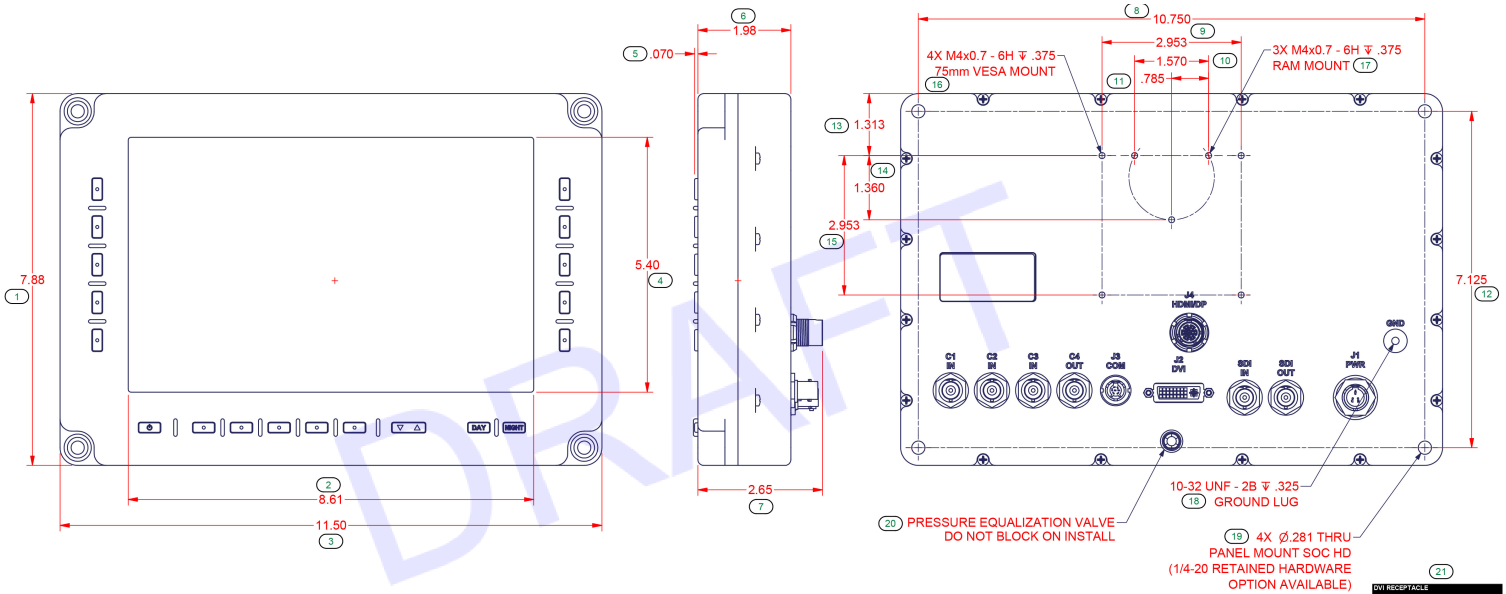
*- Cables not included
†-Power range specified covers momentary environmental fluctuations generally found in a mobile environment while display is operating. For power initialization and continual operation, nominal voltages are required

1 - Dimming Ratio is LCD-specific.

2 - Configuration-Specific; Contact DSE for details.

MECHANICAL DRAWINGS

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



PART FINISH: HARD COAT ANODIZE, BLACK (30)

PART WEIGHT: 5.18 lbmass +/- .25 LBS (31)

(29)

3 PIN RECEPTACLE J1 POWER	
PIN	SIGNAL
A	28 VOLT DC
B	28 VOLT RTN
C	N/C
Vendor P/N#	71-533721-33P (3-pin power)
Mate #	PT06E833SSR (141247)
Strain #	Included
Cable Assy#	900222

(28)

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

(26)

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

(27)

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

(24)

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

(25)

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

(23)

DISPLAY PORT PINOUT J4 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+
Fischer #	UR01W11_F019P-BK1-E1AA
Mate #	UP01L11_M019C-BK1-Z1ZA
Strain #	UB11 A1BK
Cable Assy#	900302

(22)

HDMI PINOUT J4 HDMI/DP	
PIN	SIGNAL
1	RX2- IN
2	RX2+ IN
3	GND
4	GND
5	GND
6	GND
7	GND
8	RX0- IN
9	GND
10	DDC SDA
11	DDC SCL
12	RX1+ IN
13	RX1- IN
14	CEC IN
15	HOT PLUG DETECT
16	DDC +5V
17	RXC- IN
18	RXC+ IN
19	RX0+ IN
Fischer #	UR01W11_F019P-BK1-E1AA
Mate #	UP01L11_M019C-BK1-Z1ZA
Strain #	UB11 A1BK
Cable Assy#	900302

(21)

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#	

Drawing No.: DHFW1010-05162022-V1

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