

# Rugged All Weather Sunlight Readable LCD

8.4" Rugged IP67 sealed High Brightness LCD w/RGB, 12/24 VGA Video Input, Brightness 5-800nits (Res.800 x 600), Altitude 45,000 ft Operating Temp -40C  $\sim$  70C Integrated NVIS Green/Red + Auto On + Heater for operations down to -40C

**MODEL: DOD8400R-NVG** 

i-Tech's harsh-duty All-Weather Monitor (DOD) is a flat panel display, engineered to survive the most demanding applications. Designed to be rugged, the DOD handles a wide-range of extreme environments making it the industry choice for mobile applications. Housed in a milled billet aluminum case, the slim-profile DOD is light weight and watertight, with fully sealed connectors. Front-mounted controls and the optional touch screen make the monitor user-friendly. The DOD incorporates the latest optical engineering to achieve optimum view ability in all lighting conditions, including direct sunlight. The DOD's power efficient, low heat design results in the increased reliability and longevity required for mission critical deployment.

### STANDARD FEATURES

- Auto Scaling VGA to UXGA
- 8.4" TFT AM LCD SVGA (800 x 600)
- Brightness Range 5-800 nits
- Transflective Enhancement
- Antireflective / Antiglare Surface Treatments
- Button OSD User Interface (MIL-PRF-22885; 1 million + actuations)
- Milled AL Case, sealed to IP67 / NEMA 6
- Black Anodized Finish
- IP68 Anticorrosive Metal Sealed Connectors
- Industry Standard PC Connection
- Wide Range Input (10-36 VDC)T (MIL-STD-1 275)
- Protected against Internal Short Circuit, Load Dump, Over Voltage and Reverse Polarity
- 20 Watts Maximum Power Consumption

#### **OPTIONAL FEATURES**

- LED Backlight (1000:1 Dimming Ratio)
- Internal Heaters
- USB Pass-through with IP68 Sealed Connector
- Analog Resistive Touch Screen
- Night Vision Goggle Filter (MIL-STD-3009)
- Flush Mount Bezel, IP67 Sealed
- Panel Mount, IP67 Sealed
- 1 9" Rack Mount
- External VAC 1 20/240 Power Supply

### **TECHNICAL SPESIFICATIONS**

8.4" TFT AM, SVGA, LCD, 16M Colors Display Sunlight Readable\* 800 nits, Transfective, AR/AG

Contrast Ratio 600:1 Dimming Ratio 100.1

1000:1 (optional LED) 1 30° (H) x 115° (V)

Viewing Angle (typical) Video Input **VGA** 

Connectors IP68 Fischer High Density to DB-15 JAE to Flying Leads DC Input JAE to DB-9 Touch (optional) JAE to USB Port

Housing Milled Aluminum, Black Anodized, UV Clear Coat Mounting Flush, Panel, 19" Rack or RAM Mount (Standard) Wide Range DC Power 10-36 VDC (12, 24, 28 VDC nominal) MIL-STD-1275

Internal Short Circuit Protection Load Dump Protection Over Voltage Protection Reverse Polarity Protection

**Power Conditioning** Power Consumption 20 Watts Max

## **ENVIRONMENTAL SPECIFICATIONS**

IP67 (NEMA 6 Submersible) IP Rating

-40°C to 70°C (-40°F to 158°F) (Designed to meet MIL-STD-810F) Operating Temperature ‡

Storage Temperature -40°C to 80°C (-40°F to 1 76°F)

0-100% Humidity Shock 50 G

Vibration 5.8 G (5-500 Hz)

Altitude 45,000 ft.

Designed to meet FCC B, CE EMI Sunlight Readability MIL-PRF-22885 (for push buttons) Nighttime Readability\* MIL-STD-3009 Class B (Optional)

**CABLES** 

Power (3-pin), RGB, Touch\*, USB\* \* Included only if option is ordered Included

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

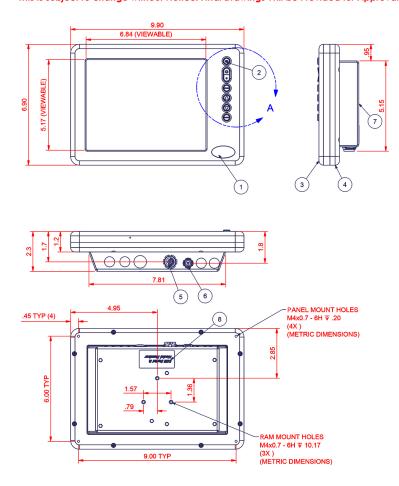


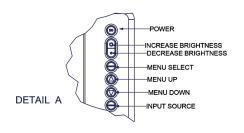
i-Tech Company LLC EMAIL: info@itechlcd.com • WEB: www.iTechLCD.com

Modified Date: 03-08-2022

#### **MECHANICAL DRAWINGS**

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





			I LD
		6	R-GND
		2	GREEN
		7	G-GND
		3	BLUE
		8	B-GND
		4	ID2
		11	ID0
MER - 730108 (JB5CS03AL00)		5	V-GND
		14	V-SYNC
ĦΝ	SIGNAL	12	ID1-DA
1	VDC	16	ID3-CLK
2	NC	13	HSYNC
3	G/VD	10	H-GND

POWER - 730108 (JB5CS03AL00)		
ĦΝ	SIGNAL	
1	VDC	
2	NC	
3	G/VD	

Drawing No.: DOD8400R-NVG-03082022-V1

VIDEO - 141178 (DBPE 104 Z092-130) 19 PIN

i-Tech's integrated NVIS options either produce near zero color shift or slight color shift for full sunlight readability. The integrated NVIS is MIL-STD-3009 compliant, and can be viewed with NVGs (Night Vision Goggles) through the entire brightness range. Dimming is not necessary to meet MIL-STD-3009, Class B NVIS requirements. Brightness levels will be reduced with the NVIS option.

The 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.

Low temperature operation may require heater option.



I-TECH

i-Tech Company LLC EMAIL: info@itechlcd.com • WEB: www.iTechLCD.com

Modified Date: 03-08-2022