

# SUNLIGHT RUGGED ALL-WEATHER LCD

8.4" Rugged IP67 sealed High Brightness LCD w/ LVDS  
12/24 VDC Brightness 5-800 nits (Res.800 x 600)  
includes the Resistive USB Touch Screen  
and USB Pass Through option.

Model: DOD8400L-TR

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

- Digital LVDS Video Input
- 8.4" TFT AM LCD SVGA (800 x 600)
- Brightness Range 5-800 nits
- Transflective Enhancement
- Antireflective / Antiglare Surface Treatments
- Milled AL Case, sealed to IP67 / NEMA 6
- Black Anodized Finish
- Single High Flex Cable for all connections
- IP68 Anticorrosive Metal Sealed Connectors
- Protected against Internal Short Circuit, Load Dump, Over Voltage and Reverse Polarity
- 12 Watts Maximum Power Consumption

## OPTIONAL FEATURES

- 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
- Internal Heaters
- 1 9" Rack Mount
- Analog Resistive Touch Screen

## TECHNICAL SPECIFICATIONS

Display	8.4" TFT AM, SVGA, LCD, 262K Colors
Sunlight Readable*	800 nits, Transflective, AR/AG
Contrast Ratio	320:1
Dimming Ratio	100:1
Viewing Angle (typical)	160° (H) x 125° (V)
Video Input	LVDS
Connectors	IP68 Fischer High Density to custom DB-25
Housing	Milled Aluminum, Black Anodized, UV Clear Coat
Mounting	Flush, Panel, 19" Rack or RAM Mount (Standard)
Wide Range DC Power Input†	12/24 VDC MIL-STD-1275
Power Conditioning	Internal Short Circuit Protection Load Dump Protection Over Voltage Protection Reverse Polarity Protection
Power Consumption	12 Watts Max

## ENVIRONMENTAL SPECIFICATIONS

IP Rating	IP67 (NEMA 6 Submersible)* *cancelled with Standard A-Type Socket
Operating Temperature‡	-40°C to 70°C (-40°F to 158°F) (Designed to meet MIL-STD-810F)
Storage Temperature	-40°C to 80°C (-40°F to 176°F)
Humidity	0-100%
Shock	50 G
Vibration	5.8 G (5-500 Hz)
Altitude	45,000 ft.
EMI	Designed to meet FCC B, CE
Sunlight Readability	MIL-PRF-22885 (for push buttons)
Nighttime Readability*	MIL-STD-3009 Class B (Optional)

## CABLES

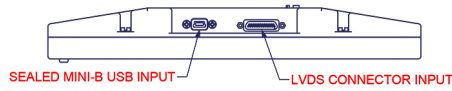
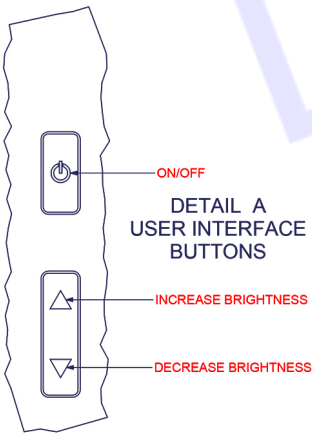
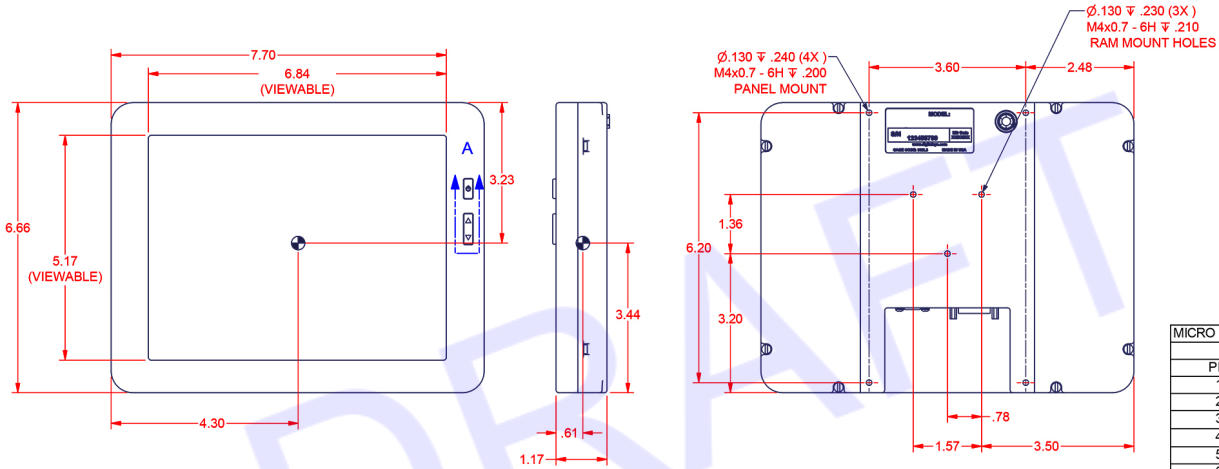
Included	Umbilical
Not Included	USB (with standard A-type socket)

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

Modified: 10-30-2023

# MECHANICAL DRAWINGS

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



MICRO D 25 PIN RECEPTACLE (LVDS)	
PIN	SIGNAL
1	RXD+ IN
2	RXD- IN
3	RX1+ IN
4	RX1- IN
5	RX2+ IN
6	RX2- IN
7	RXCK+ IN
8	RXCK- IN
9	GND
10	PWR VIN GND
11	PWR VIN GND
12	PWR +VIN
13	PWR +VIN
14	GND
15	USBD0- RS-232 TXD (TOUCH)
16	USBD0+ RS-232 TXD (TOUCH)
17	GND
18	USBD1- (PASS THRU)
19	USBD1+ (PASS THRU)
20	GND
21	PRE HEAT LED BEEPER CPU-HTR
22	PWR VIN GND
23	PWR VIN GND
24	PWR +VIN
25	PWR +VIN

PASS THRU USB RECEPTACLE (MINI-B USB)	
PIN	SIGNAL
1	USB +5V
2	USBD1-
3	USBD+
4	N/C
5	GND

AMPHENOL#	P-MUSB-B151-05 (420353)	MOLEX#	836149012
Mate #		Mate #	834219014 (MOLEX)
Strain #		Strain #	
Cable Assy#	900283	Cable Assy#	900284

Drawing No.: DOD8400L-TR-10302023-V1

