


**All-Weather All-Terrain Fully Sealed IP68 (NEMA 6P) Submersible  
 Extreme Operational Temperature Sunlight Readable LCD**

VarTech's 8.4" **All-Weather, All-Terrain**, Harsh-Duty LCD Display System is waterproof (fully submersible) and engineered to withstand the harshest environments and most demanding real world applications.

This high resolution SVGA 800 x 600 native (optional XGA 1024 x 768), is equipped with VarTech's proprietary **Enhanced Light Transmission Technology (ELTT)** which allows for **true Sunlight Readability** and as well provides exceptional clarity and viewing angles. This advanced user friendly LCD display system provides extensive operational temperatures of -20° to +70°C (standard) or -45°C to 70°C (optional) and unprecedented video input capabilities from traditional VGA to up to **FOUR individual direct composite BNC video feeds with easy one-touch toggle select function between all feeds!**



## FEATURES

- ◆ Completely Sealed IP68 (NEMA 6P) Submersible Black Powder Coated Aluminum Enclosure
- ◆ Harsh Duty LCD Panel w/ Optically Bonded Overlay
- ◆ True High Brightness Low-Power, high reliability **Solid State LED Backlighting**
- ◆ VarTech's advanced VTLED driver technology
- ◆ SVGA native Resolution
- ◆ Ultra-Wide Viewing Angles
- ◆ Very High Contrast
- ◆ Extreme Wide Operational Temperatures
- ◆ Variable Power Supply, 9 to 36 VDC (Optional AC Power)
- ◆ Shock: MIL-S-901D\*
- ◆ Vibration: MIL-STD-167\*
- ◆ Environmental Design: MIL-STD-810F\*
- ◆ EMI/EMC: FCC Class B\* (optional 461E)
- ◆ Marine IEC 60529
- ◆ Marine IEC 60945
- ◆ One-Touch Toggle Between Multiple Video Feeds

\* Designed to Meet

## CONTACT

### HEADQUARTERS

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## SPECIFICATIONS

### Construction

IP68 (NEMA 6P) Fully-Enclosed Submersible Black Powder Coated Aluminum Enclosure

### Display Size – Viewable Area

8.4 inches

### Panel Type

Harsh Duty LCD cell w/ Optically Bonded Protective Overlay (VBOND)

### Resolution

Standard: SVGA 800 x 600 Native  
 Optional: XGA 1024 x 768 native

### Brightness

True High Brightness:  
 Standard SVGA Type: 1000 nits (cd/m2) , 292 fL  
 Optional XGA Type: 800 nits (cd/m2)

Low-Power, high reliability **Solid State LED Backlighting**

### Backlight MTBF

100,000 hours

### Dimming

Advanced Deep Dimming - 0-100%

### Backlight Driver

VarTech's advanced VTLED driver technology, the latest in technology for driving solid state High Bright Light Emitting Diodes (HBLEDs)

### Viewing Envelope: Horizontal

Standard SVGA Type: 80° / 80°  
 Optional XGA Type: 85° / 85°

### Viewing Envelope: Vertical

Standard SVGA Type: 80°(up) / 60°(down)  
 Optional XGA Type: 85° / 85°

### Contrast Ratio

Standard SVGA Type: 600:1  
 Optional XGA Type: 400:1

### Video Input (Available Configurations Customer's Choice)

- IP68 Sealed VGA Connector for Computer interface
- IP68 Standard PC connection and direct video feed via single IP68 BNC connector (optional S-video)
- IP68 Standard PC connection and direct video feed via dual IP68 BNC connectors
- Direct video feed via up to **FOUR** individual IP68 Composite BNC connectors
- Direct video feed via IP68 S-video connector
- Also available with MIL-DTL-38999 connectors

### Electrical Input

Harsh Duty Variable Power Supply, 9 to 36 VDC, Wide Range, Low Noise, Wide Operational Temperature (Optional AC Power, Universal Input 85 to 264 VAC)

### Weight

5.3 lb

### Max Power Requirements

SVGA Panel - 25 watts, 32 watts w/heater  
 XGA Panel - 38 watts, 45 watts w/heater

### Video Controller

VarTech's Harsh Environment Controller Board

### Wide Operational Temperatures

Standard: -20° to +70°C (-4°F to 158°F)  
 Optional: -45° to +70°C (-45°F to 158°F)

### Storage Temperature

-40° to +75°C (-40°F to 167°F)

### Humidity

Operating: 0 to 100%

### Altitude

10,000 ft. (optional 45,000 ft.)

### Shock

Designed to Meet MIL-S-901D

### Vibration

Designed to Meet MIL-STD-167

### Environment

Designed to Meet MIL-STD-810F

### Marine

Designed to Meet IEC 60529

### EMI / EMC

Designed to Meet FCC Class B (optional 461E)  
 Designed to Meet IEC 60945

### Cables

Length - 3m (9'10") each  
 Available IP68 Connector (monitor end) Cables:  
 Power  
 Video - 15-pin D-Sub  
 Touch (optional) - Serial or USB  
 Direct Composite BNC Video Feed (optional)

### Dimensions (Tentative)

Width - 9.90" (251.46mm)  
 Height - 6.90" (175.26mm)  
 Depth - 2.25" (57.15mm)

### Touch Screen (optional)

VarTech's Armor Touch - 3mm Thermally Strengthened Laminated Glass Substrate Optically Bonded overlay with Anti-Reflective Field & UV Protection

### Mounting

RAM Mounting - standard  
 Flush Mounting - optional  
 Handles (top or left & right) - optional  
 Pedestal Mounting - optional  
 VESA Mounting - optional

### Electrical Protection

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

### Night-Vision Compliance (optional)

NVIS MIL-STD-3009 Class B Gen 3 (MIL-L-85762A)

### Warranty

2 years