

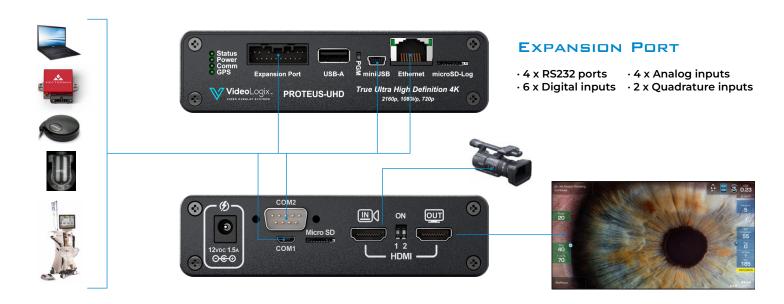
# PROTEUS - UHD

Video Overlay is a method by which computer-generated images are superimposed on video. Properly transformed images appear as if they are an integral part of the scene without impeding the video of the actual environment.

PROTEUS-UHD is designed for overlaying texts, images and data onto 2K & 4K video. Customization is effortless with ProteusWizard or simple command via RS232, USB, or ethernet.

Designed for mission-critical environments, PROTEUS-UHD delivers robust reliability - making it the ideal solution for professionals in medical, broadcast, surveillance, aerospace, ROV operations, and industrial applications.

### TYPICAL INTERCONNECT DIAGRAM



#### GENERAL FEATURES

- Ultra HD: 3840 x 2160p resolution
- HD: 1920 x 1080 i/p and 1280 x 720p
- Frame Rates: 24, 25, 29, 30, 50, 60Hz
- Color Depth: Supports 8/10/12 bits (YUV 4:2:2, YUV 4:2:0, YUV 4:4:4, RGB 4:4:4)
- Alpha Blending: 32-bit per pixel (ARGB) alpha blending
- Standalone Operation: No PC required
- ProteusWizard App: WYSIWYG overlay screen creator
- ProteusApp: Send drawing commands and simulate sensors
- Built-in Widgets: Includes ROV, airplane situation awareness, compass, sliders, and gauges, etc
- Overlay Capabilities: Supports PNG images, user text, time, date, GPS, and NMEA 0183 sensor data
- CSV Data Support: Overlay values from CSV strings received via RS232, USB, and Ethernet (UDP)
- Custom Fonts & Effects: Import any Windows fonts and apply anti-aliasing effects
- Drawing Commands: Through RS232, USB and Ethernet interface
- Quadrature Decoding: 2 x optically isolated quadrature decoder channels. Easily convert count to distance, speed, etc.
- **Analog Inputs:** 4 x analog input channels for converting voltage to speed, depth, pressure, etc
- **Digital Inputs:** 6 x optically isolated inputs for turning on/off any individual or grouped OSD objects
- **Timecode Support:** 1 x IRIG-B and video timecode
- Real-Time Clock: Battery-backed RTC with synchronization to SNTP, GPS, or IRIG-B
- Motion Sensors: Built-in 3D accelerometer and 3D gyroscope, linkable to any graphic widget
- E-Compass: Integrated electronic compass, linkable to any graphic widget
- Data Storage: microSD for recording and exporting

user data (e.g., KML data)

#### VIDEO

HDMI Input and Output: 4K UHD and HD resolutions

#### COMMUNICATION PORTS

- **RS232 Ports (4x):** Up to 921,600 baud rate
- USB: 1x Micro USB interface
- Ethernet: 10/100 Mbps (Static or DHCP IPv4)
- Keyboard Input: 1x USB keyboard port
- CAN Interface: 1x for controller area network integration

#### POWER & ENVIRONMENTAL

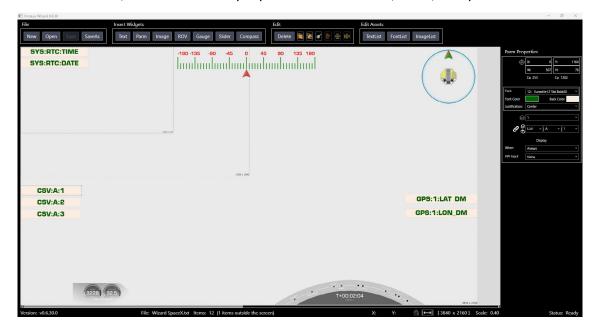
- Power Supply: Fully certified External AC/DC adapter (12V DC, 1.5A via 2.1mm x 5.5mm jack)
- External Adapter: 100-120V 50/60Hz, 230-240V, 50/60Hz
- **Dimensions & Weight:** 6.57 x 5.08 x 1.34 in, 1.25 lbs.
- Recommended Operating Temp: 10°C to 40°C, 10-90% RH (Non-Condensing)
- Storage Temperature: -10°C to 55°C, 10-95% RH

#### INCLUDED ACCESSORIES

- HDMI Cable
- Power Adapter
- USB microSD Card Reader
- Micro USB and Mini USB Cables
- USB Keyboard

## PROTEUSWIZARD APP

**ProteusWizard** is a WYSIWYG designer for on-screen displays (OSDs). Drag-and-drop widgets - Text, Parameter, Image, Gauge, Slider, Compass, and Up/Down Timer - onto the canvas, then fine - tune properties such as font, color, and position.



## PROTEUS COMM APP

**ProteusComm** is a utility for downloading configuration files, simulating sensor data, and practicing drawing commands via RS-232 or Ethernet.

