Esterline

**Control &
Communication Systems**

Vista 500-600-700

**Shelter/Naval rugged consoles
for mission-critical
environments**

*The Vista500
consoles include:
Esterline's RNA product
for video distribution
and/or desktop sharing
and Esterline's RDDS-2
radar display options.*

*Based on its broad range of
rugged visualization component
for mission-critical applications,
Esterline has developed Vista500
consoles, an advanced rugged
working position to equip Ground
Control Station.*

*VISTA500 is Esterline's latest
family of consoles offering an
ergonomic rugged working
position for the most demanding
Command and Control, fire
control or situational awareness
applications for on board shelter
landbase or surface ships/
submarines systems*

*Esterline's VISTA500 console is
fully MIL-qualified in terms of
vibration, shock and EMI/EMC,
so it easily withstands the harsh
environmental conditions of a
typical shelter/naval environment.*

Three System architectures

Depending of the distributed computing systems architecture, Esterline
has designed a new console product family able to address different
types of working positions:

For systems with both the computing and graphics processing located
away from the operator:
- VISTA500 console: zero-clients simply provide DVI/USB HMI for remote
  computing.
- VISTA600 console: zero-clients simply provide network-attached
  HMI. In this version the console integrates the Esterline's RNA Video
  Decoder over IP allowing screens contents sharing technology with
  sub-frame latency.

For systems with remote data computing but graphics client processing
located in the operator workstation:
- VISTA700 console: Operator console provide dedicated graphics and
  video processing horsepower for user specific visualization operations
  such as windowing, rendering, and mixing of multiple data and sensor
  sources. The integrated computer platform is based on the fourth
  Generation Intel® Core™ i7 processors.

Esterline Display solution

Depending on your application, you can opt for one or two 23" rugged display(s) with HDTV (1920x1080) resolution and an additional 10.1" Rugged touch input display (1024x600 resolution) with Multi-touch touchscreen. The displays can be provided with the P-CAP Multi-touch touchscreen technology.

Console desktop

Esterline's VISTA500 consoles provide an ergonomic Human Machine Interface based on a customizable desktop including :
- 10.1" Rugged touch input display (1024x600 resolution) with Multi-touch touchscreen.
- Industrial keyboard and sealed mouse (Standard desktop)
- Or fully integrated Rugged backlit keyboard and ergonomic 2"-3 buttons trackball (customizable desktop)
- Stereo audio speakers
- Optional Joysticks, Audio/Headset devices, One or two programmable secured pushbutton modules (SMARTKEYS).

Long term Support

To ensure maximum support and availability of its VISTA500 components, Esterline has established a worldwide network of Integrated Logistics Support.

Features / benefits

- Networked video and radar visualization solutions for lower cost of ownership and redundancy
- Affordable yet powerful and modular solution for Land-based Shelter and Naval Multi-Function consoles
- Slim, compact and modular design, allowing multi-display configurations (single-head, top/down,) and future display integration
- Enhanced ergonomics for better user comfort
- Low risk solution with already qualified product line
- Esterline organization with extensive experience for long term support requirements
- One stop shop console offering with networked visualization and recording solutions

Technical specifications

	Vista 500
External Interfaces	3x DVI inputs up to 1920x1200 and USB port (up to 15 meters),
	Vista 600
Streaming video standards	IETF RFC4175 (uncompressed) IETF RFC3984 (H.264)
Network connections	2x 10GBASE-SR or 1000BASE-T 1x10/100BASE-T for maintenance
	Vista 700
Computer performance	Intel® Core™ i7-4770S 3.1 GHz with 8GB system memory (up to 16GB) SATA3 2.5" 256Go SSD (system disk) Windows 7 - 64 bits and Linux CentOS - 64bits
Graphics	PCI Express 16x HD4600 graphics chipset with three graphics outputs
Network connections	2x 1000BASE-T 2x RS422/232 ports
	Vista 500-600-700
Input devices	Standard desktop: Industrial Keyboard and Mouse, Customizable desktop: Rugged backlit keyboard and Trackball, Joystick in option Stereo Speakers Optional Multitouch touchscreen on the main displays, one or two Smartkey modules Optional audio headset connector and external audio input
Displays	1x or 2x main displays + 1x Touch Input Display inside the desktop (10.1" 1024x600 with P-CAP)
Dimensions	Top/Down: (WxHxD mm): 650x920x780 (excluding shock absorbers) Single Head: (WxHxD mm): 650x560x780 (excluding shock absorbers)
Power	100-240 VAC autorange, 50/60Hz Power Consumption: 300W typical
Weight	Top Down version: 65Kg Single Head version: 50 Kg
System availability	MTBF: Vista700: GF H24 typ. 6500h @ 25°C (depending of the final configuration) MTBF: Vista500: GF H24 typ. 11000h @ 25°C (depending of the final configuration)
Altitude/Low pressure operating	MIL-STD-810G Meth 500.4 Operating Up to 15000 ft (570 mBar)
Shocks Operating	MIL-STD-810G Soft mount: 50 g – 6 ms half sine Hard-mount: 20g – 11 ms half sine
Vibrations operating	MIL-STD-167-1 Type 1 MIL-STD-810G 514.6 Cat21, 1-100Hz/0.001g²/Hz (0.3gRMS), 2h/axis
Vibrations during transportation Non operating	Mil-STD-810 G, Method 514.6, procedure I & II, category 4: truck highways: 1.0g RMS 10-500Hz vertical, 0.2g RMS 10-500Hz transversal, 0.7g RMS 10-500Hz longitudinal, 1h/axe for 1609km wheeled vehicle: 2.2g RMS 5-500Hz vertical, 1.5g RMS 5-500Hz transversal, 1.9g RMS 5-500Hz longitudinal, 2h/axe for 804km
EMI/EMC	CE directive CEM 2004/108/CE Electromagnetic Compatibility (dec 2004) Catégory: ITE (Information Technology Equipment) MIL-STD-461F Navy ships (surface ships)

Temperature	MIL-STD-810G
	Operating:
	-10°C to 55°C with ACH and 0°C to +55° without ACH
	Limited to 0°C, 50°C on the VISTA600-750
	Storage: -40 to +70°C
Humidity	MIL-STD-810G
	95% @ 40°C non condensing
	according MIL-STD-810G Meth 507.5 fig 507.5-7
Drip Proof	MIL-STD-810G: Meth 506.4 Proc.III
	Tilting up to 45°
Fungus/Salt fog	MIL-STD-810G
	Meth 508.5: No materials that would promote fungus growth are used.
	Meth 509.4: Test on separate parts
Acoustic Noise	MIL-STD-740-1
	<50dbA @ 1 m

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