



4K RUGGEDIZED LARGE AREA DISPLAYS

Mission-critical visualization for airborne, naval
and ground mobile platforms

4K VISUALIZATION ENGINEERED FOR THE HARSHTEST ENVIRONMENTS

Modern ISR missions, vehicle modernization programs and command-and-control architectures demand more from operator displays than legacy HD monitors can deliver. The Spectra ARD family of 4K ruggedized large area displays provides native 3840×2160 resolution across three form factors – 24”, 27” and 32” – enabling operators to see more sensor data, fuse more sources simultaneously and make faster decisions in extreme environments.

Purpose-built for airborne, naval and ground mobile platforms, every ARD display shares a common architecture of military-grade construction, wide-temperature operation and flexible I/O – simplifying integration, logistics and long-term sustainment across multi-platform programs.



ARD24 – 24”
22.3”×13.1”

The most compact 4K ruggedized display in the family. Designed for space-constrained crew stations, multi-display arrays and retrofit installations where every inch of panel space matters.

At 22.3” wide and under 20 lbs, the ARD24 delivers the full 3840×2160 resolution and environmental qualification of its larger siblings in a footprint sized for tactical platforms.



ARD27 – 27”
25.5”×15.1”

An airborne-proven primary operator display for ISR workstations, fire control stations and multi-purpose consoles. 163 PPI density delivers razor-sharp text and imagery at typical operator viewing distances.

Four video inputs with quad-split processing allow simultaneous presentation of EO/IR, SAR, mapping and targeting data without compression or downscaling.



ARD32 – 32”
29”×17.65”

Maximum viewing area for command centers, Combat Information Centers (CICs) and mobile command posts.

The ARD32 provides four times the workspace of a standard HD monitor on a single screen, enabling quad-split presentation of tactical maps, live sensor feeds, Blue Force Tracking and communications logs in native or near-native resolution.



KEY CAPABILITIES

TRUE COLOR REPRESENTATION

10-bit color depth reproducing 1.06 billion colors for true-to-life sensor imagery and operational data.

EXTREME TEMPERATURE RANGE

Passive thermal management enables rapid warm-up from -55°C cold soak and sustained operation at +71°C with full solar loading.

MISSION SYSTEM INTEGRATION

Serial and Ethernet remote control, optional touchscreen and programmable bezel buttons connect to mission-critical actions through an integrator-defined CONOPS.

ADVANCED OPTICAL STACK

Specialized coatings and optical bonding eliminate glare, maximize contrast and provide impact resistance against strikes or flying debris.

RUGGEDIZED CONSTRUCTION

Aerospace-grade aluminum chassis, IP66 sealed. Conformal-coated electronics and fully potted internal connections for high-vibration longevity.

SPECIFICATION SUMMARY

	ARD24	ARD27	ARD32
Display	23.8" / 16:9	27.0" / 16:9	32.0" / 16:9
Resolution	3840×2160	3840×2160	3840×2160
Video inputs	4 (quad processing)	4 (quad processing)	4 (quad processing)
Video I/O	DVI-D, HDMI, DP, 3G-SDI	DVI-D, HDMI, DP, 3G-SDI	DVI-D, HDMI, DP, 3G-SDI
Dimensions (W×H×D)	22.3"×13.1"×2.9"	25.5"×15.1"×3.9"	29"×18"×3.3"
Weight*	~19.5 lbs	~22 lbs	~33 lbs
Power (max)	60W	75W	130W
Operating temp	-40°C to +71°C	-40°C to +71°C	-40°C to +71°C
Shock	20G op / 40G crash	20G op / 40G crash	20G op / 40G crash
Altitude	45,000ft	45,000ft	45,000ft
Protection	IP66	IP66	IP66
Standards	MIL-STD-810H, -461G, DO-160G	MIL-STD-810H, -461G, DO-160G	MIL-STD-810H, -461G, DO-160G

MISSION VISUALIZATION WITHOUT COMPROMISE



The Spectra ARD 4K display family delivers native ultra-high-definition resolution in ruggedized displays purpose-built for the most demanding military and aerospace environments. From airborne ISR workstations and naval Combat Information Centers to ground vehicle fire control stations and mobile command posts, the ARD24, ARD27 and ARD32 close the gap between what modern sensors capture and what operators can see.

With a shared architecture across three form factors, the ARD series reduces integration risk, simplifies logistics and supports long-term sustainment across multi-platform programs. Every display is qualified to MIL-STD-810H, MIL-STD-461G and DO-160G — and fully customizable to meet specific program requirements.

End-to-end information products & systems,
when it matters most, **Spectra is the solution.**

CONTACT US

Let us know how Spectra's full suite of rugged information products & systems can help meet your needs. We look forward to answering your questions and discussing your program requirements with you.



North American Operations

- Las Cruces, New Mexico
- Alpharetta, Georgia
- Katy, Texas
- Fort Worth, Texas
- San Diego, California

International Operations

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