AbraxSys
RUGGED LCD SOLUTIONS

Visibility, Durability, and Flexibility for Seamless Integration

Table of Contents

AT ABRAXSYS,

We specialize in designing and manufacturing rugged, industrial-grade display solutions that thrive in the harshest environments.
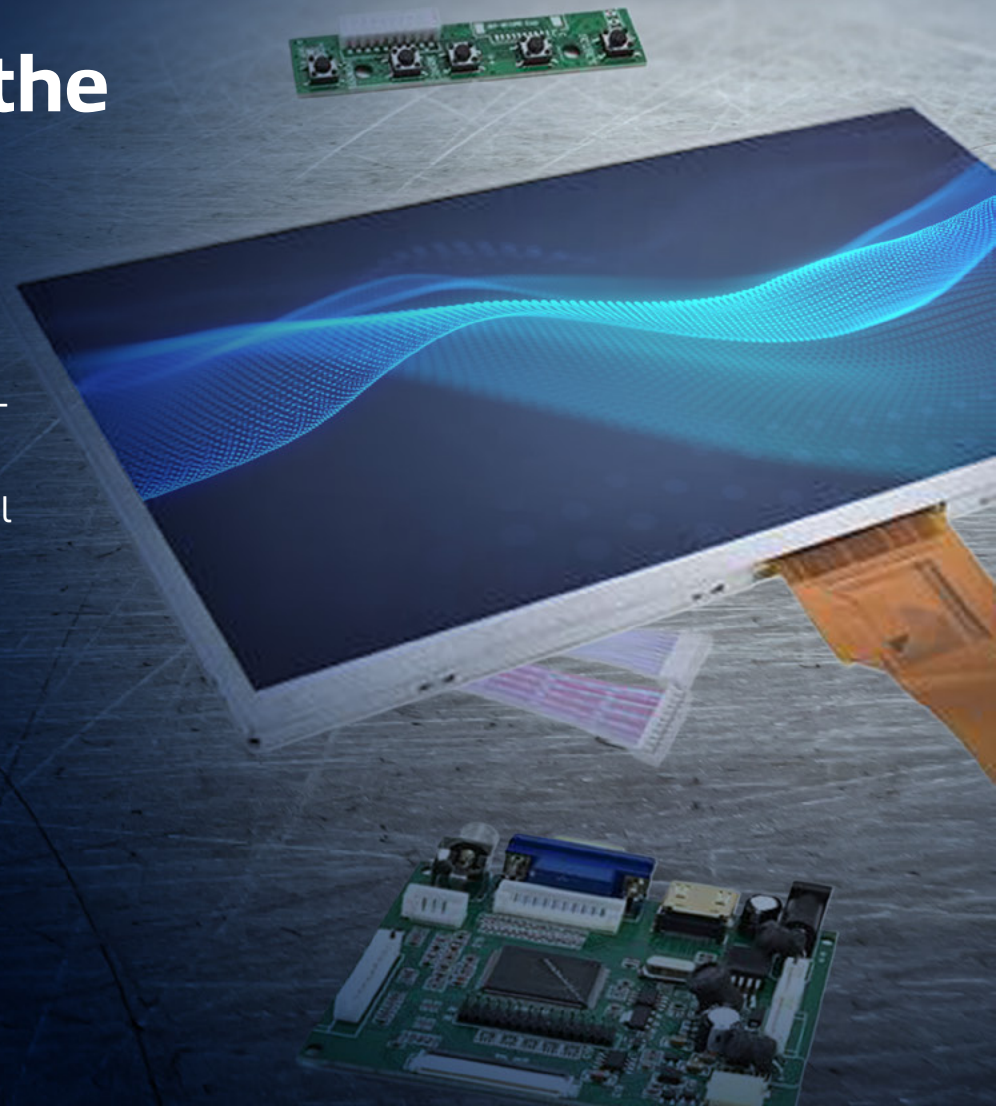
Our **sunlight-readable LCD kits** are engineered for maximum visibility in direct sunlight and specifically designed for integration into space-constrained or client-designed enclosures. These kits provide the essential core components for rapid deployment in mission-critical and outdoor systems, delivering high performance without the footprint of a fully enclosed monitor.

Whether you're building custom kiosks, industrial controls, or embedded systems, AbraxSys kits offer stock-maintained components for fast availability and long-term reliability.

What Sets LCD Kits Apart?

Sunlight-readable LCD kits are high-performance displays ideal for integration into OEM products, retrofits, and equipment without standard mounting formats. These kits offer core sunlight-readable display technology in an open-frame configuration, allowing integrators to tailor-fit the solution within tight or uniquely designed spaces. Unlike finished, fully enclosed displays, these kits offer unmatched flexibility in configuration and deployment for OEMs, integrators, and end users.
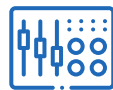
Key Features Include:

High-brightness LCD panel (1000 to 1800 nits)

On-screen display (OSD) button control board

Analog-to-Digital interface board in each kit

Optional touch screen (Hardened Resistive or Multi-Touch Projected Capacitive)

LED backlight driver board

Advantages of AbraxSys Sunlight Readable Kits

High-Brightness Visibility

- Brightness options up to 1800 nits for readability under direct sunlight

- Optical bonding and anti-reflective coatings minimize glare and enhance contrast

- Wide viewing angles and color fidelity ensure clarity from any position
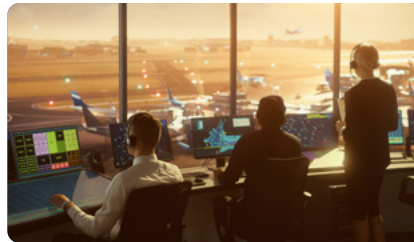
Designed for Seamless Integration

- Flexibility for integration into custom enclosures without standard mounting formats

- Perfect for custom housing, limited-space designs, and OEM configurations

- Input options include VGA, DVI, HDMI, DisplayPort, SDI, BNC, and/or Composite Video

- Slim profile and rear-accessible components simplify system-level integration

Reliable in Demanding Environments

- Operating temperature ranges from -35°C to +85°C

- Optional touchscreens with ruggedized overlays

- Built to withstand vibration, shock, and harsh conditions

- Highly versatile, ready-to-integrate solutions for harsh-duty industrial, marine, and military applications

Applications Across Industries

AbraxSys sunlight-readable monitors are trusted across a wide range of industries where visibility and reliability are critical:

Oil and Gas
Our rugged displays are designed to withstand the harsh environments of oil rigs and refineries, featuring high-brightness screens for outdoor visibility and wide temperature ranges for extreme climates.

Military
AbraxSys provides military-grade monitors built to meet stringent defense standards, offering rugged construction, secure mounting options, and superior performance in both field and command center environments.

Marine
Our marine displays are fully waterproof, sunlight-readable, and corrosion-resistant, making them ideal for navigation systems and other critical applications on seafaring vessels.

Automotive
We offer durable, vibration-resistant monitors for in-vehicle use, designed to perform reliably in both commercial and military automotive applications.

Aerospace
AbraxSys aerospace displays are engineered for high-altitude performance, with lightweight designs and advanced cooling systems that ensure reliability in the most demanding aviation environments.

Mining
Our mining monitors are built to endure the rough conditions of underground and open-pit mining, featuring reinforced casings and shock-resistant technology.

Energy
AbraxSys provides robust displays for the energy sector, supporting applications in power generation, grid management, and renewable energy systems with reliable performance in volatile environments.

Manufacturing
Our industrial monitors are essential in factory automation, offering precise control and monitoring capabilities with features like touch screen interfaces and wide temperature support.

Transportation
AbraxSys delivers dependable displays for public transit and logistics operations, with products that withstand the rigors of daily use in trains, buses, and fleet vehicles.

Truck Scales
Our high-brightness displays ensure visibility in outdoor weigh stations and truck scale applications, even in direct sunlight and extreme weather conditions.

First Responders & Border Security
Designed for emergency and tactical operations, our sunlight-readable monitors enhance situational awareness and communication for first responders, law enforcement, and border security personnel.

Drones & ROVs
AbraxSys monitors provide crystal-clear displays for remote drone and ROV (Remotely Operated Vehicle) operations, ensuring real-time visual accuracy in reconnaissance, inspection, and underwater applications.

Why Choose AbraxSys?

At AbraxSys, we combine cutting-edge technology with unparalleled expertise to deliver display solutions that stand out in performance, reliability, and customization. Here's why we're the preferred choice for rugged, embedded display systems:

Proven Performance

Our sunlight-readable LCD kits are used in mission-critical applications across defense, energy, marine, and industrial sectors—trusted to deliver visibility and reliability in the harshest conditions.

Tailored Solutions

Every kit is available in a range of sizes and configurations, with options for touchscreens, input formats, and integration components, ensuring seamless compatibility with your unique enclosure or system.

Made in the USA

All AbraxSys products are designed and manufactured in the United States, guaranteeing high quality, consistency, and reliable lead times.

Long-Term Support

We maintain a stock of critical components for fast delivery and offer long-term availability, backed by a comprehensive 1-year warranty with extended warranty options available.

DETAILED SPECIFICATIONS
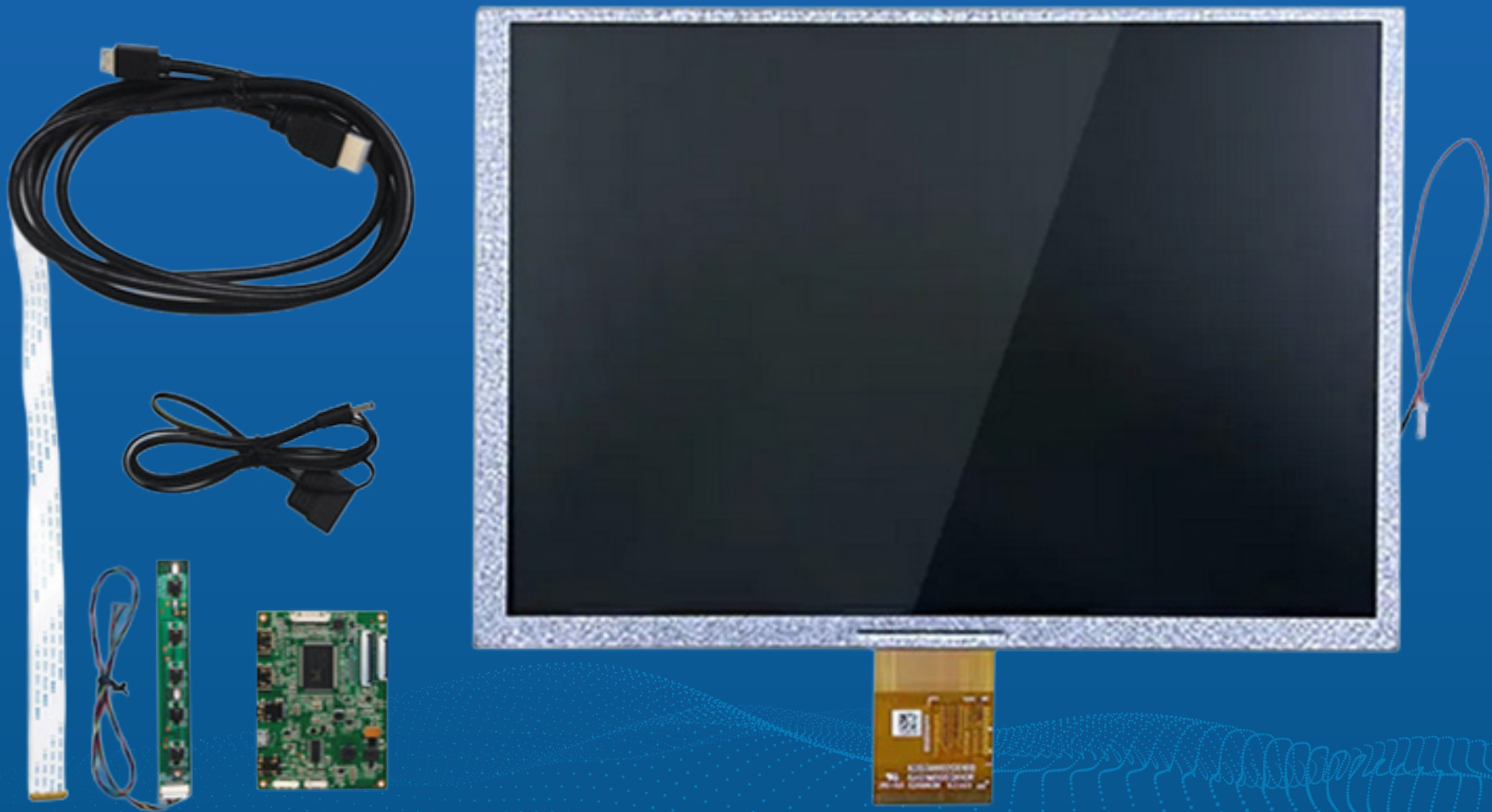
Sunlight Readable LCD Kits

AbraxSys' Sunlight Readable LCD Kits are engineered for seamless integration into custom or space-constrained enclosures. Each kit delivers high-brightness performance in extreme environments and includes the essential core components: a high-luminance LCD panel, analog-digital interface board, LED backlight driver, and OSD controls. With a wide range of sizes, brightness levels, and resolutions, these kits are ideal for OEM applications, embedded systems, kiosks, and industrial controls requiring exceptional outdoor visibility and integration flexibility.

8.4" Sunlight Readable LCD Kit

Model	SRD-084-KIT
Display Size	8.4"
Brightness	1200 nits (cd/m2)
Resolution	800 x 600 (SVGA) Native
Inputs	DVI, HD15 (VGA), HDMI, DisplayPort, NTSC-PAL, S-Video, SDI
Operating Temperature Range	-30°C to 80°C (-22°F to 176°F)

10.4" Sunlight Readable LCD Kit

Model	SRD-104-KIT
Display Size	10.4"
Brightness	1300 nits (cd/m2)
Resolution	1024 x 768 (XGA) Native
Inputs	DVI, HD15 (VGA), HDMI, DisplayPort, NTSC-PAL, S-Video, SDI
Operating Temperature Range	-30°C to 80°C (-22°F to 176°F)

12.1" Sunlight Readable LCD Kit

Model	SRD-121-KIT
Display Size	12.1"
Brightness	1200 nits (cd/m2)
Resolution	1024 x 768 (XGA) Native
Inputs	DVI, HD15 (VGA), HDMI, DisplayPort, NTSC-PAL, S-Video, SDI
Operating Temperature Range	-30°C to 85°C (-22°F to 185°F)

13.3" Sunlight Readable LCD Kit

Model	SRD-133-KIT
Display Size	13.3"
Brightness	1500 nits (cd/m2)
Resolution	1920 x 1080 (1080p) True High-Definition
Inputs	DVI, HD15 (VGA), HDMI, DisplayPort, NTSC-PAL, S-Video, SDI
Operating Temperature Range	-30°C to 70°C (-22°F to 158°F)

15" Sunlight Readable LCD Kit

Model	SRD-150-KIT
Display Size	15"
Brightness	1600 nits (cd/m2)
Resolution	1024 x 768 (XGA) Native
Inputs	DVI, HD15 (VGA), HDMI, DisplayPort, NTSC-PAL, S-Video, SDI
Operating Temperature Range	-30°C to 80°C (-22°F to 176°F)

15.6" Sunlight Readable LCD Kit

Model	SRD-156-KIT
Display Size	15.6"
Brightness	1500 nits (cd/m2)
Resolution	1920 x 1080 (1080p) True High-Definition
Inputs	DVI, HD15 (VGA), HDMI, DisplayPort, NTSC-PAL, S-Video, SDI
Operating Temperature Range	-30°C to 75°C (-22°F to 167°F)

17.0" Sunlight Readable LCD Kit

Model	SRD-170-KIT
Display Size	17"
Brightness	1200 nits (cd/m2)
Resolution	1280 x 1024 (SXGA) Native
Inputs	DVI, HD15 (VGA), HDMI, DisplayPort, NTSC-PAL, S-Video, SDI
Operating Temperature Range	-30°C to 70°C (-22°F to 158°F)

18.5" Sunlight Readable LCD Kit

Model	SRD-185-KIT
Display Size	18.5"
Brightness	1500 nits (cd/m2)
Resolution	1920 x 1080 (1080p)
Inputs	DVI, HD15 (VGA), HDMI, DisplayPort, NTSC-PAL, S-Video, SDI
Operating Temperature Range	-30°C to 70°C (-22°F to 158°F)

19" Sunlight Readable LCD Kit

Model	SRD-190-KIT
Display Size	19"
Brightness	1600 nits (cd/m2)
Resolution	1280 x 1024 (SXGA) Native
Inputs	DVI, HD15 (VGA), HDMI, DisplayPort, NTSC-PAL, S-Video, SDI
Operating Temperature Range	-30°C to 85°C (-22°F to 185°F)

21.5" Sunlight Readable FHD Kit Wide Format 1080P

Model	SRD-215-KIT
Display Size	21.5"
Brightness	1400 nits (cd/m2)
Resolution	1920 x 1080 (1080p)
Inputs	DVI, HD15 (VGA), HDMI, DisplayPort, NTSC-PAL, S-Video, SDI
Operating Temperature Range	-20°C to 70°C (-4°F to 158°F)

24" Sunlight Readable FHD Kit Wide Format 1080P

Model	SRD-240-KIT
Display Size	24"
Brightness	1400 nits (cd/m2)
Resolution	1920 x 1080 (1080p)
Inputs	DVI, HD15 (VGA), HDMI, DisplayPort, NTSC-PAL, S-Video, SDI
Operating Temperature Range	-20°C to 70°C (-4°F to 158°F)

27" Sunlight Readable LCD Kit

Model	SRD-270-KIT
Display Size	27"
Brightness	1000 nits (cd/m2)
Resolution	1920 x 1080 (1080p) 4K UHD 3840 x 2160
Inputs	DVI, HD15 (VGA), HDMI, DisplayPort, NTSC-PAL, S-Video, SDI
Operating Temperature Range	-20°C to 60°C (-4°F to 140°F)

Available Options

- With or without touch screen, various types available

- Various inputs and/or combinations: DVI, DisplayPort, VGA(HD15), Composite, S-video, BNC, SDI, HDMI

- Various Power Types: AC, 12V DC, 24V DC, 9-36V DC, 20-53V DC

- Multiple options to control dimming

- Further Operational Temperature Ranges

- Optical Bonding of Protective Window or Touch Screen to LCD Face

- Conformal Coating of all internal electronics

- Custom video format programming

- Custom 'Splash Screen' imagery

- Private Labeling services

Contact Us

Ready to enhance your systems with an AbraxSys LCD Kit?

Our team of specialists is here to help you select or customize the perfect kit for your application. Contact AbraxSys today to learn more about our integration options and sunlight-readable display solutions.