

What Is A Daylight Readable Monitor?

A Daylight Readable monitor is a video display which is designed for areas with bright ambient light. This includes daylight, reflected light (over ground or water), indirect sunlight or very bright indoor lighting. (For use in direct bright sunlight, use a [Sunlight Readable](#) monitor).

As you have probably seen, viewing images on any video screen (monitor, TV, cell phone, laptop) outdoors can be extremely difficult. This is due to 3 factors:

1. Lack of screen brightness
2. External reflections
3. Internal reflections

Optically Bonded Daylight Readable monitors address all of these.

1. Daylight Readable Monitors typically feature LCD panels with 400 to 550 nits brightness.
2. By using Anti-Reflective glass, surface reflections are greatly minimized.
3. Internal reflections are eliminated with the use of Optical Bonding. When sunlight passes through a monitor's glass, it hits the LCD panel, and reflects back onto the inner surface of the glass. These internal reflections greatly decrease the monitor's contrast ratio, resulting in images which appear dull, washed-out and muted. Optical Bonding resolves these problems. The Optical Bonding process injects an optical-grade resin which completely fills the air gap between the outer glass and the LCD panel. The resin hardens, making it one solid, contiguous layer from the glass to the LCD panel. This eliminates over 99% of internal reflections.

Daylight Readable monitors are ideal for use in bright daylight conditions, outdoors or in areas with high ambient light or reflected light (off water, the ground, snow, etc.)

However, if the application requires video images to be clearly seen with bright sunlight shining directly onto the monitor's screen, a [Sunlight Readable monitor](#) would probably be a better choice.

For extreme applications requiring the ultimate in sunlight readability, or when protective glass is required over the LCD panel, **TRU-Vu** also offers a combination of the two technologies: an Optically Bonded Sunlight Readable monitor. Contact us for more details.