

ENH104VD1-350 10.4" Enhanced AMLCD Display

Enhanced Brightness for Outdoor Viewability

The ENH104VD1-350 color TFT LCD provides improved optical performance based on the enhancement of a standard Sharp LQ104V1DG21 color active matrix LCD module. The incorporation of an index matching (IM) film provides for improved contrast in high ambient lighting conditions. The ENH104VD1-350 is available in two surface treatments – IM/Clear (glossy) or IM/110 (a 10% diffusion).

The enhanced LCD module is composed of a color TFT LCD panel, driver ICs, control circuit, power supply circuit and a backlight unit. Graphics and text can be displayed on a 640 x 480 pixel panel with 262,144 colors by supplying 18-bit data signals (6-bits/color), four timing signals, +3.3V / +5V DC supply voltage for the TFT panel and supply voltage for the backlight. The TFT LCD panel used for this module has low reflection and high color saturation. Viewing angle is 6 o'clock direction. The module offers a wide viewing angle at a nominal brightness (350 cd/m² typical). The backlight-driving DC/AC inverter is not built into this module.

WEDC's ENH104VD1-350 meets the environmental specifications of the standard Sharp LQ104V1DG21. WEDC provides a full one year warranty to the enhanced performance display.



Performance Features

- VGA 640(H) x 480(V) Resolution
- 350 nit typical Luminance
- TTL Interface
- High Contrast Ratio/High Aperture Ratio

Applications

- Industrial automation
- Medical instrumentation
- Test & measurement

Surface Treatments

- Diffuse front surface, IM/110
- Glossy front surface, IM/Clear

Display Characteristics

- Display Format: 640 Pixels (H) x 480 Pixels (V)
- Active Viewing Area: 211.2mm (H) x 158.4mm (V)
- Pixel Configuration: RGB Vertical Stripe
- Pixel Pitch: 0.330mm (H) x 0.330mm (V)
- Display Mode: Normally White

Viewing Angle

- Typical: 70/70/40/70 CR>10

Luminance

- Typical: 350 cd/m²

Response Time

- Typical: Rise 20ms / Fall 40ms

Operating Temperature

- Topa -10°C to +65°C (Ambient)

Storage Temperature

- Tstg -30°C to +70°C

When looking for a high-efficiency enhanced display system to integrate into your high-end product application, start with White Electronic Designs. Our people, processes and products are committed to the design, development and delivery of advanced display technology that expands possibilities in ways that consistently translate to success. And that's just the beginning Call **503.690.2460** or visit **www.whiteedc.com**.



WHITE ELECTRONIC DESIGNS

Display Systems Division

21333 NW Jacobson Road ■ Hillsboro, OR 97124
Tel: 503.690.2460 ■ Fax: 503.690.2490

