

InfoVue™ Bi-Stable LCD Technology



New Bi-Stable LCDs Use **99% Less Power** Than Traditional LCDs

Lumex InfoVue™ Bi-Stable LCD technology is a low-power LCD solution well-suited for a wide range of applications where display information is not changed more than a few times a day.

A traditional LCD module requires 25-50mW of constant power to display even a static, unchanging image. Lumex's Bi-Stable LCDs can display information for over a year AFTER the power has been turned off with just a one-time 2-5 second burst of 10mW of power. This enables users to more easily update vital display information while also generating significant cost and manpower savings.

Features:

- Uses 99% less power than traditional LCDs
- Available in custom sizes ranging from 1/4" to 9 1/2"
- Samples available in a 2.8" size with 128 x 64 resolution
- Displays are available in black-on-yellow or blue-on-white color formats
- Lightweight - does not require a polarizer
- In many cases, display backlighting can be eliminated

LUMEX®
Creating LED and LCD Solutions Together™

4/20/11





Applications and Markets

Applications:

- Price & Sale Displays
- Thermostat-Related
- Climate, Alarm & Access Control Panels
- Refrigerator displays
- Hospitality Signs

Markets:

- Retail
- Industrial Controls
- Security
- Hospitality

Advantages of InfoVue™ Bi-Stable LCD Technology

Lumex's InfoVue™ Bi-Stable LCD Technology offers many advantages that make them desirable for a wide number of markets and applications:

- Low power consumption
- Cost effective
- Constantly changing image / message
- Brighter display contrast without increased power
- Can eliminate backlighting
- Lightweight
- Environmentally friendly

Lumex InfoVue™ Bi-Stable LCD's devices also use a simple passive-matrix addressing design making them **more cost effective** than an active matrix design.

Lumex's InfoVue™ Bi-Stable LCD technology could be used to make inexpensive, lightweight displays that **consume power ONLY when the display is being refreshed or redrawn.**

Brighter with LESS Power

The image on a bi-stable display **can be maintained without power**, thus reducing the amount of power required by the display.

Unlike traditional LCDs, InfoVue™ Bi-Stable LCDs do not require polarizers. The elimination of the polarizer offers an increase in light reflection for the displays, with less power consumption. By comparison:

	% of Light Reflection
Standard TN LCD	15%
InfoVue™ Bi-Stable LCD	40%

The increased percent of light reflection is also responsible for the increased contrast between pixels in the ON and OFF states—about 25:1 from directly in front of the display.

A traditional LCD module requires 25-50mW of constant power to display even a static, unchanging image. **InfoVue Bi-Stable LCDs can display information over a year after the power has been turned off with just a one-time 2-5 second burst of 10mW of power.**

For more information on Lumex's InfoVue™ Bi-Stable LCD Technology, or questions regarding any of Lumex's other InfoVue™ LCD product families, log onto **www.lumex.com**, or call **(800) 278-5666**.