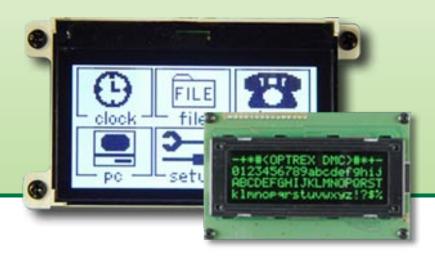
Step up to Higher Performance

Monochrome Graphic & Character LCDs



These new STN LCDs offer designers a range of passive matrix display solutions. Optrex STEP products deliver remarkable readability in any ambient lighting condition, with exceptional performance over a wide operating temperature range.

A Higher Standard for STN

Step up to higher performance in passive matrix monochrome graphic and character LCDs.

Key Features:

- Wide operating temperature (-20 to +70°C) standard
- High contrast ratio up to 80:1
- High brightness up to 100 nits
- · High ambient-light legibility
- Built-in controllers
- Selectable interface



Backward Compatible

The new LCDs are available in industrystandard configurations and compatible with existing Optrex LCDs to provide an easy upward migration path for designers.

RoHS Compliant*

All modules are built in complete compliance with the European Union's RoHS (Reduction of Hazardous Substances) directive that restricts the use of certain substances such as lead, mercury and cadmium in electronic equipment.

Range of Colors

Designers can choose from a wide variety of colors to suit their applications.



FPD Total Solution Provider Page I



Graphic LCDs

Featuring built-in controllers, standard operating temperatures of -20° to 70°C, and a luminance of up to 100 nits, these are the "next step" in STN graphic displays. These displays are mechanically compatible and require only a minor change to the software to make them electrically compatible with existing displays.



Part#	Size	Color Background	Dot Format	Module Dimension (mm)	Interface		
F-51852	2.8"	phone phone	128 × 64	89.7 × 49.8 × 6 (low profile)	Selectable 8-bit Parallel or Serial		
F-51852	2.8"	phone Property Property Inc.	128 × 64	89.7 × 49.8 × 11.8	Selectable 8-bit Parallel or Serial		
F-51854	4.7"	(phos	160 × 128	129.0 × 102.0 × 13.5	8-bit Parallel		
F-51851	5.2"	Phone Park Inc.	240 × 64	135.2 × 51.7 × 9.8	8-bit Parallel		

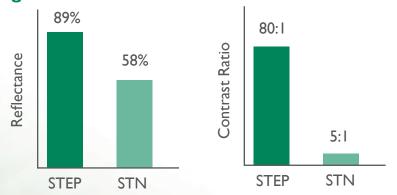
Character LCDs

Offering a 5V power supply, standard operating temperatures of -20° to 70°C, and a luminance of up to 70 nits, these LCDs are the new generation in STN character displays. They are mechanically and electrically compatible with existing displays for an easy upward migration path.



Part#	Color	Dot Format	Module Dimension (mm)	Interface
C-51848	W G B	16 character x 2 line	122.0 × 44.0 × 14.6	8-bit Parallel
C-51505	W G B B B	20 character x 2 line	116.0 × 37.0 × 15.7	8-bit Parallel
C-51847	W G B	20 character x 4 line	98.5 × 61.0 × 15.6	8-bit Parallel
C-51850	W G B	40 character x 2 line	182.0 × 34.5 × 15.1	8-bit Parallel
C-51849	WG	40 character x 4 line	190.0 × 54.0 × 14.6	8-bit Parallel

A Higher Standard for STN



Optrex America, Inc. 46723 Five Mile Road Plymouth, Michigan 48170

Telephone: (734) 416-8500 Fax: (734) 416-8520

Released June 2006 | Copyright © 1998-2006 Optrex America, Inc.

These specifications are subject to change without notice. Please check with OPTREX prior to designing equipment using this information.

* ROHS compliance is based upon Optrex America's understanding of RoHS and Optrex America's knowledge of the materials used by the manufacturer in its products.

Take the Next Step...

Detailed Product Information

Request a Product Quote

Contact a Representative in your area

Engineering Resources

Free Optrex Newsletter

All trademarks are the property of their respective owners.

Page 2 FPD Total Solution Provider