

Call for large OEM pricing – we carry major manufacturers.

The general advantages of LED displays compared to incandescent types are:

- Lower power consumption
- Longer lifetime (averaged more than 300,000 hours)
- Compact size suitable for instrumentation and graphic representations

Soldering: • Soldering bath: not more than 5 seconds @ 260°C • Soldering iron: not more than 3 seconds @ 300°C under 30W

LED Displays



LITEON

LEDTECH

Panasonic

National Semiconductor

Texas Instruments



† PC board mounted

7-Segment Displays

Part Number	Mfrs. New Product Number	Jameco's Old Product Number	Character Height	Illuminated Color	Buss Polarity*	Pins/Leads	Typical Vf @ If (mA)	Typical mcd @ mA	Wavelength nm	Decimal Point #	Pricing			
											1	10	100	1000
24731	LSD3021-11	MAN71	.300"	Red	CA	11	1.9 @ 20	0.3 @ 20	697	RHDP	\$.99	\$.85	\$.69	\$.55
24740	LSD3221-11	MAN72	.300"	Red	CA	11	2.1 @ 20	2.5 @ 20	697	LHDP	.89	.75	.65	.49
151976	LTS312AY	3005-03	.300"	Yellow	CA	11	2.8 @ 20	2.0 @ 10	585	LHDP	.89	.75	.65	.49
24782	LSD3211-11	MAN74	.300"	Red	CC	10	2.1 @ 20	2.5 @ 20	697	RHDP	.89	.75	.65	.49
27545	NSN373	NSN373 †	.300"	Red	2-digit CC	16	1.7 @ 10	1.6 @ 20	660	—	.10	.09	.08	.07
152944	LA3051-16	—	.300"	Red	CA	11	2.1 @ 20	0.8 @ 10	700	L/RHDP	.65	.57	.51	—
161509	LN524YA	—	.430"	Yellow	2-digit CA	10	2.2 @ 20	0.6 @ 5	700	RHDP	.35	.32	.29	.26
17187	LSD5051-11	CSS5103H1-21	.500"	Red	CC	10	2.1 @ 20	0.9 @ 20	697	RHDP	.89	.75	.65	.49
17208	LSD5061-11	FND507	.500"	Red	CA	10	2.1 @ 20	0.9 @ 20	697	RHDP	.89	.75	.65	.49
104213	LSD5124-10	LTS5301R	.560"	Orange Red	CA	10	2.0 @ 20	2.4 @ 20	635	RHDP	.65	.55	.49	.45
24715	LDD5121-20	CSD524H-22	.560"	Red	2-digit CA	18	2.1 @ 20	0.8 @ 20	697	RHDP	1.25	1.05	.89	.75
24723	LDD5111-11	MAN6740	.560"	Red	2-digit CC	18	2.1 @ 20	0.8 @ 20	697	RHDP	1.25	1.05	.89	.75
24694	LDD5124	CSD524E-33	.560"	Orange Red	2-digit CA	18	2.0 @ 20	2.4 @ 20	635	RHDP	1.59	1.49	1.35	1.19
24707	LDD5114-20	CSD525E-63	.560"	Orange Red	2-digit CC	18	2.0 @ 20	2.4 @ 20	635	RHDP	1.35	1.15	.85	.75
161488	LN516YK	—	.560"	Yellow	CC	10	2.2 @ 20	0.8 @ 10	590	RHDP	.36	.32	.29	.26
18737	LSD816-11	LTS3401LE	.800"	Orange Red	CA	13	1.6 @ 20	0.9 @ 20	655	RHDP	1.25	1.05	.79	.59
18753	LSD8151-10	LTS3405	.800"	Red	CC	13	2.1 @ 20	1.0 @ 20	697	LHDP	1.39	1.19	.99	.79
176559	C8021-1	—	.800"	Green	CC	13	2.0 @ 20	0.9 @ 20	568	RHDP	.89	.75	.59	.45
97172	LSD10061-10	CSS1014H	1.0"	Red	CA	10	2.1 @ 20	2.0 @ 20	697	RHDP	1.39	1.19	.89	.79
97199	LSD23265-10	CSS2314D	2.24"	Red	CA	10	1.7 @ 20	21 @ 20	660	RHDP	4.75	4.25	3.75	3.49
97201	LSD23255-10	CSS2315D	2.24"	Red	CC	10	1.7 @ 20	21 @ 20	660	RHDP	4.49	3.95	3.25	2.95
105591	LSD40054-20	CSS4013E	4.0"	Orange Red	CC	10	2.0 @ 20	1.8 @ 20	635	RHDP	9.49	8.29	7.49	6.49

Dot Matrix Displays

Part Number	Mfrs. New Product Number	Jameco Sockets	Character Height	Illuminated Color	Buss Polarity*	Pins/Leads	Typical Vf @ If (mA)	Typical mcd @ mA	Wavelength nm	Decimal Point #	Pricing			
											1	10	100	1000
173833	HP5082-7300	—	.290"	Red	4x7 Numeric	8	5.0 @ 170	.03 @ 20	640	RHDP	\$4.95	\$4.49	\$3.95	\$3.25
32951	TIL311	37161	.300"	Red	4x7 Hex character	11	5.0 @ 5	0.1 @ 5	660	—	16.95	15.95	14.95	13.95
118906	LTP747R	37161	.680"	Orange Red	5 x 7 AC/CR	12	1.7 @ 20	0.2 @ 20	655	—	1.95	1.75	1.49	1.25
183265	LMD5821ASR-20	101282	2.3"	Red	5 x 8 CC/AR	14	1.7 @ 20	12 @ 20	660	—	4.95	4.49	3.95	3.49

*CA-Common Anode / CC-Common Cathode / AC-Anode Column / CR-Cathode Row / AR-Anode Row # LHDP-Left Hand Decimal Point / RHDP-Right Hand Decimal Point

Incandescent Lamps

Incandescent Lamps

- Average life hours 10,000-50,000 hours

* P/N 141006/141073/141065:

C2R filament type



141006



141065

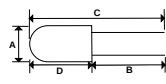


Fig. 1

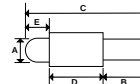


Fig. 2

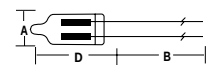


Fig. 3

Part No.	Product No.	Fig.	Size	Description	Dia. (mm)	Dimensions (in.)					Vf @ If	Pricing			
						A	B	C	D	E		1	10	100	1000
141057	6833	1	T 3/4	Incandescent lamp (1" lead wire)	.08/2.2	1	1.2	0.2	—	—	5V @ 60mA	\$.59	\$.45	\$.29	\$.24
141065*	2200	1	T1 3/4	Incandescent lamp (1" lead wire)	.19/4.9	1	1.5	0.5	—	—	5V @ 60mA	.49	.35	.25	.19
141073*	2182	1	T1 3/4	Incandescent lamp (1" lead wire)	.19/4.8	1	1.5	0.5	—	—	14V @ 80mA	.49	.35	.25	.19
141006*	7361	2	T1 3/4	Incandescent lamp bi-pin base	.18/4.7	0.3	0.8	0.3	0.3	—	5V @ 60mA	.59	.49	.35	.29
27351	NE2	3	—	Neon lamp (req. 150kΩ res. in series)	.197/5	1.2	—	0.38	—	—	65-120VDC @ 130-470mA/ 65-120VAC @ 150-500mA	.49	.39	.29	.25

Panel Mount LED Indicators

- Easy panel installation
- Vf @ If: 2V @ 20mA

- Panel/status/instrument indicators

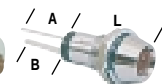
- Color: red

- Chrome housing

Part Number	Product Number	LED Size	Dimensions (in.)			Mounting Hole	Pricing			
			L	A	B		1	10	100	1000
141111	L922SRD	T1	.56	.34	.25	.23"	\$.79	\$.65	\$.49	\$.39
141129	L913RD	T1	.56	.39	.32	.24"	.89	.79	.65	.45
141137	L917RD	T1 3/4	.70	.55	.47	.31"	.89	.79	.65	.45



141111



141129/141137

JAMECO
ELECTRONICS

Over 6000
Quality Products!

Order Toll-Free
24-hours a day
7-days a week!

Order Toll Free 1-800-831-4242

Part Number Color Code Legend

NEW SALE REFURBISHED CLOSEOUT

JAMECO

Scott Edwards Electronics, Inc.**Serial LCD Modules**

- Includes instruction codes for character generation, cursor control, printing, etc. (examples for Stamps in PBASIC included)
- One-year warranty

*Ideal for use
w/ BASIC Stamps (pg 168), 80C52-
BASIC controllers and PCs!*

16 characters x 2 lines Integrated Display

- Terminal style 1200–9600 bps serial input with 16-byte input buffer
- Four inputs for switches/buttons that can be read via the serial connection
- EEPROM storage of settings, six custom characters, and a text screen that can be automatically displayed at startup (splash screen)
- Serial control of the standard LED backlight
- Low current draw; 5mA (backlight off) to 40mA (backlight on and bright)
- Power requirement: 4.8 – 5.5VDC @ 5mA (recommend P/N 164101, pg 67)
- Module size: 3.2"L x 2.0"W x 0.5"T

Part No.	Description	1	10	25
150990	LCD module	\$59.95	\$53.95	\$47.95

16 characters x 2 lines LCD Serial Backpack®

- High-contrast supertwist display
- Serial "backpack" accepts RS232, or inverted CMOS, TTL at 2400 or 9600 bps
- Power requirement: 4.8 – 5.5VDC @ 3mA (recommend P/N 164101, pg 67)
- Module size: 3.1"L x 1.4"W x 0.7"T

Part No.	Description	1	10	25
133129	LCD module	\$54.95	\$49.95	\$44.95

20 Characters x 4 Lines Graphics LCD

- 120 x 32 pixel graphics screen
- Terminal style 2400 or 9600 bps serial input
- EEPROM stores text font and 6 full-screen images
- Supports multiple fonts and font sizes
- Included utility program lets you create and download pictures and fonts
- Power requirement: 9V battery or 5V power supply (recommend P/N 164101, pg 67)
- Module size: 3.1"L x 1.9"W x 0.8"T

Includes: Battery snap connectors, sample programs and manual on disk

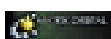
Part No.	Description	1	10
158166	20 x 4 serial LCD display ..	\$129.95	\$116.95

40 characters x 4 lines LCD Serial Backpack®

- High-contrast supertwist display with unique "big character" mode – prints 1" numbers and letters automatically
- Serial input at 1200, 2400, 4800 or 9600 bps
- Power requirement: 5VDC @ <10mA (recommend P/N 164101, pg 67)
- Module size: 7.5"L x 2.2"W x 0.9"T

Part No.	Description	1	10
136485	40 x 4 serial LCD display ..	\$169.95	\$152.95

**Same business day
shipping until
6:00 p.m. EST.
See page 182 for
Zone Chart**

**16 Characters x 2 Lines
Serial LCD Module**

- Backlight control, bar graphs, large digits, multiple displays, software contrast control, auto line wrapping, and auto scroll feature
- Serial input at 1200–19,200bps (jumper selectable)
- Connect 16 modules using the same 2 wire interface
- Backlight supply current: 40mA typical
- Power requirement: 5VDC @ 9mA (recommend P/N 164101, pg 67)
- Display size: 2.5"L x 0.7"W
- Module size: 3.2"L x 1.5"W x 0.8"T
- Weight: 0.6 lbs.



Includes: Manual and software

Part No.	Description	1	10	25
174166	16 x 2 w/ interface	\$59.95	\$54.95	\$49.95

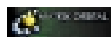
**20 Characters x 4 Lines
Serial VFD Display**

- 20 characters x 4 lines with large digits and bar graph mode
- Bar graphs, large digits multiple displays, software contrast control, auto line wrapping and scroll feature
- Serial input of 1200–19,200bps (jumper selectable)
- Power off supply current: 9mA
- Power requirement: 5VDC @ 275mA typical (recommend P/N 164101, pg 67)
- Display size: 2.8"L x .82"W
- Module size: 3.9"L x 2.4"W x 1.0"T



Includes: Manual and software

Part No.	Product No.	1	10	25
174158	VFD2041	\$159.95	\$143.95	\$129.95

**20 x 4 Serial
LCD Modules**

- 20 characters x 4 line display with large digit mode
- Backlight control, bar graphs, large digits, multiple displays, software contrast control, auto line wrapping and auto scroll feature
- Backlight supply current: 90mA typical
- Serial input at 1200–19,200bps (jumper selectable)
- Connect 16 modules using the same 2 wire interface
- Display size: 3.0"L x 1.0"W
- One-year warranty



150957



157323

Includes: Manual and software

150957: 20 x 4 Serial LCD Module

- Power requirement: 5VDC @ 10mA typical (recommend P/N 164101, pg 67)
- Module size: 3.9"L x 2.4"W x 0.7"T
- Weight: 0.9 lbs.

157323: 20x4 Serial LCD Module with keypad Interface

- Power requirements: 5VDC @ 16mA typical (recommend P/N 164101, pg 67)
- Module size: 3.7"L x 2.4"W x 1.1"T
- Weight: 0.6 lbs.

Part No.	Description	1	10	25
150957	LCD module	\$89.95	\$80.95	\$72.95
157323	Module w/ interface	109.95	99.95	89.95

**DATA IMAGE
Parallel LCD Displays****20 Characters x 2 Lines**

- LCD type: STN gray, reflective
- Character font: 5 x 8 dots
- Logic supply voltage: 7V maximum (recommend P/N 164101, pg 67)
- LCD driver supply voltage: 13.5V maximum
- Viewing angle: 70–90°
- Input data: 8-bit

185172: Module size: 3.5"L x 1.4"W x 0.25"T

185181: Module size: 7.1"L x 1.6"W x 0.25"T

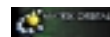
Part No.	Product No.	1	10	25
185172	CXM20211SR	\$12.95	\$11.49	\$9.95
185181	CM2021	17.95	13.55	11.15



185172



185181

**Graphics LCD****40 characters x 8 lines Maximum**

- 40 characters x 8 lines max. display with 5 x 7 font
- Backlight control, bar graphs, large digits, multiple displays, software contrast control, auto line wrapping, and auto scroll feature
- Pixel layout: 240 x 64 pixels
- Serial input: 1200–19,200bps (jumper configurable)
- Backlight supply current: 160mA typical
- Power requirement: 5VDC @ 31mA typical (recommend P/N 164101, pg 67)
- Display size: 5.2"L x 1.5"W • Weight: 0.9 lbs.
- Module size: 7.1"L x 2.6"W x 0.7"T



Includes: Manual and software

Part No.	Description	1	10	25
174182	Graphics display	\$199.95	\$179.95	\$162.95

**LCD Parallel Displays**

- 8-bit interface data bus
- Controller: KS0066U or equivalent
- Character font size: 0.125"W x 0.200"H
- Maximum input voltage: 5.3VDC
- Operating input voltage: 5VDC (recommend P/N 164101, pg 67)



171715



171723

171715: 16 Characters x 2 Lines • 14-pin/terminals

• Display size: 2.5"L x 0.7"W

• Module size: 3.4"L x 1.2"W x 0.5"T

171723: 20 Characters x 2 Lines • 16-pin/terminals

• Display size: 3.3"L x 0.7"W

• Module size: 4.6"L x 1.5"W x 0.4"T

Part No.	Product No.	1	10	25
171715	AC162A	\$17.95	\$15.95	\$14.29
171723	AC202A	22.95	19.95	17.95

Over 6,000 Products Stocked

- **Integrated Circuits**
- **Interconnect Devices**
- **Electronic Components**
- **Power Products**
- **Opto Electronics**
- **Wiring Accessories**
- **Electromechanical Devices**
- **Computer Products**

Point Size 16 x 4 Parallel LCD Module

- 16 x 4 character display (.78"H)
- Character font: 5 x 8 dots
- Input data: 40-bit or 8-bit interface available
- Display size: 2.4"L x 1.0"W x 0.06"T
- Module size: 3.4"L x 2.4"W x 0.25"T



Requires: 4.5V @ 2mA wall transformer (recommend P/N 164101, pg 67)

Part No.	Description	1	10	25
151933	16 x 4 parallel LCD	\$19.95	\$17.95	\$14.95

LCD Serial Display

- Terminal style serial input
- Character display type
- 20 characters x 4 lines
- White EL backlight
- Low power 3V design
- 5 x 8 dot matrix
- Super twisted nematic display
- Gray display color mode
- Module size: 3.5"L x 2.0"W x 0.3" Thick



Part No.	Description	1	10	25
181809	LCD module	\$79.95	\$69.95	\$62.95

VL 3½ & 4-Digit, 0.5" High Field Effect LCD Displays

- Compatible with socket P/N 78641 (2), pg 50
- Pin spacing: 0.1" centers
- 40-pin package (no connector required)
- Size: 2.0"L x 1.2"H x 0.1"D

17110: 4-Digit LCD

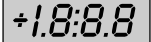
- Digital multimeters, thermometers, pressure gauges, timers, clocks (12 or 24 hour format) and frequency counters



17110

32230: 3½-Digit LCD

- Digital voltmeters, thermometers, pressure gauges, timers, clocks
- Can be used with Intersil's 7106CPL (P/N 43748, pg 8)



32230

Part No.	Description	1	10	25
17110	4-digit LCD w/ pins	\$12.95	\$11.49	\$9.95
32230	3½-digit LCD w/ pins	\$12.95	\$11.49	\$9.95

TRISYS Serial LCD Interface Module

For Parallel LCD Displays with Hitachi 4480 Chipset

- Supports 1 x 8 thru 4 x 20 LCD display formats
- Provides word wrap, control character processing for display blanking, cursor blanking, up-down-left-right cursor controls
- Size: 1.5"L x 1.0"W



Part No.	Description	1	10	25
157981	LCD serial module	\$24.95	\$22.49	\$19.95

0.5" Blue Green Fluorescent Display

- 4-digit vacuum fluorescent display
- 10 bar indicators and a colon indicator
- Size: 3.9"L x 1.6"H x 0.8"W (leads: .75" long)



Part No.	Description	1	10	25
42112	4-digit display w/ colon	\$1.99	\$1.75	\$1.59

0.6" High 3½-Digit & 4½-Digit LCD Digital Panel Meters



108388



175951



146835



123140

108388/146835:

- Single 9VDC operation – recommend P/N 151095, pg 82
- Maximum input: 199.9mVDC
- Maximum display: 1999 counts
- Accuracy: ±0.5%
- Automatic polarity indication
- Input impedance: >100MΩ
- Size: 2.7"L x 1.7"W

175951: • Includes bezel

146835: • Backlit display • Includes bezel

- Supply voltage: 9-12VDC (recommend 9V battery P/N 151095, pg 83)

Part No.	Description	1	10	25
108388	3.5 LCD DPM	\$14.95	\$13.49	\$11.95
175951	3.5 LCD DPM	\$12.95	\$11.95	\$10.95
146835	3.5 LCD (Backlit)	\$17.95	\$15.95	\$13.95
123140	4.5 LCD DPM	\$27.95	\$24.95	\$22.49

12-Button Numeric Keypad

- Rugged metal type
- 7-position PCB solder pads
- Tactile type keypad
- Contact rating: 24VDC @ 20mA
- Contact resistance: 200Ω max.
- Life test: 1,000,000 cycles per key
- Metal chrome body
- Size: 2.8"L x 2.2"W x 0.6"H



Part No.	Description	1	10	100
171491	Numeric keypad	\$15.65	\$14.05	\$12.64

12-Button Numeric and Alpha/Numeric Keypads

- Rugged white plastic
- 8-pin .100" header
- Tactile type keypad
- Contact rating: 12VDC @ 20mA
- Contact resistance: 200Ω max.
- Life test: 1,000,000 cycles per key
- Size: 2.8"L x 2.2"W x 0.6"H



Part No.	Description	1	10	100
190561	Numeric keypad	\$6.95	\$6.25	\$5.59
153488	Alpha numeric keypad	7.95	6.95	6.25

16-Button Numeric Keypad

- Rugged black plastic
- 4 x 4 matrix keypad
- 8-position solder pad
- Contact rating: 24VDC @ 20mA
- Contact resistance: 200Ω max.
- Life test: 1,000,000 life cycles per key
- Size: 3.0"L x 2.8"W x 0.6"H



Part No.	Description	1	10	100
169244	Numeric keypad	\$7.95	\$6.95	\$6.25

Information at Your Fingertips

Log onto our website for specials, technical tips and expanded product information

www.jameco.com



Log on today!

jameco.com

"We're here to provide the support you want."

16-Button Indoor/Outdoor Keypads

- 9-pin 0.100" headers
- Fully sealed snap-dome contact
- For indoor or outdoor use
- Contact rating: 24VDC @ 10mA resistive
- Life test: 3,000,000 cycles per key
- Compatible with MOS, TTL and DTL (10Ω max.)
- Recommended connector: P/N 103190 header & 100765 pin (≅10 pc min.)
- Size (housing): 4.7"W x 1.7"H x 0.4"T



160071



103190

* Prepackaged: please order in increments of 10 or 100

Part No.	Description	1	10	100
160071	2 x 8 matrix keypad	\$12.95	\$11.49	\$9.95
103190	Header housing (10-pin) .. *	.19	.12	
100765	Header pin (10 per pack) .. *	.10	.06	

Industrial Panel Meter

0 to 1mA DC

- Low cost, high quality
- Basic DC accuracy to 0.3%
- UL recognized
- Direct replacement for: Yokogawa, Modutec, Jewell, WPIC, Hoyt, Crompton, Brighton
- DC Ranges: 0 – 1mA Taut Band
- Size: 1.5"L x 1.7"W x 1.7"H
- Depth: 1.2"



Part No.	Product No.	1	10	25
171897	PMGGS	\$9.95	\$8.95	\$7.95



Micro Electronics LCD Dot Matrix Graphic Display

- 128 x 64 dot matrix display
- Display can be programmed to create a variety of sizes
- STN yellow green mode
- Operating voltage: 5V @ 1mA
- Operating current: .8mA on display mode and 1A on access mode (low power consumption)
- 180° viewing angle
- Built-in LCD driver IC: KS0708
- Easy interface with 8-bit MPU
- Module size: 3.0"W x 2.0"H x 0.1"T
- Display size: 2.8"W x 1.6"H



Part No.	Description	1	10
163176	Dot matrix graphics display	\$44.95	\$39.95

Up to 60% off!

Check out our clearance sale of hundreds of products
See pages 4 & 5 for complete details