



OPTREX DOT MATRIX Type LCD Modules



FEATURES:

- Interface with 8-bit or 4-bit MPU is available.
- 192 kinds of characters, numerals, symbols and special characters can be displayed by built-in character generator (ROM).
- Other preferred characters can be displayed by character generator (RAM).
- Various functions of instruction are available by programming: clear display, cursor at home, on/off cursor, blink character, shift display, shift cursor, read/write display data, etc.
- Compact and lightweight design.
- Low power consumption.

Standard Pin Connections

Pin No.	Symbol	Pin No.	Symbol
1	VSS	8	DB1
2	VCC	9	DB2
3	VEE	10	DB3
4	RS	11	DB4
5	R/W	12	DB5
6	E	13	DB6
7	DB0	14	DB7

40x4 Pin Connections

Pin No.	Symbol	Pin No.	Symbol	Pin No.	Symbol
1	DB7	7	DB1	13	VSS
2	DB6	8	DB0	14	VCC
3	DB5	9	E1	15	E2
4	DB4	10	R/W	16	NC
5	DB3	11	RS	17	K
6	DB2	12	VEE	18	A

Optrex Numbering System

DMC - 50000 N Y H U - S E B 1



- Type of Display: Character Dot Matrix
- Development Successive Number (3 digits to 5 digits)
- LCD TYPE: Nil = TN N = STN
- Background Color: Nil = Neutral Y = Yellow B = Blue K = Dark Blue
- Operating Temp.: Nil = Normal H = Extended
- Viewing Direction: Nil = 6 O U = 12:00 L = 9:00 R = 3:00
- Display Mode: Nil = Reflective Transmissive with Backlight S = Transflective T = Transmissive without Backlight
- Backlight: Nil = Without Backlight E = EL L = LED
- Backlight Color: Nil = Without Backlight W = White B = Blue Y = Yellow
- Supplemented Specification: Successive Number (No. 1 to 99)

Inverter Needed	Display Format	Matching Bezel ‡	Character Format	Outline Dimension W x H x D (mm)	Viewing Area W x H (mm)	Character Size W x H (mm)	Dot Size W x H (mm)	Operating Temp. (°C)	Storage Temp. (°C)	Supply Voltage (V)	Digi-Key Part No.	Price Each 1	Price Each 100	Optrex Part No.
<i>Standard LCD Dot Matrix Modules (Data Book Sold Separately)</i>														
—	16x1	PRD250LPW-ND	5x8 dots	80 x 36 x 10	64.5 x 13	3.2 x 5.95	.6 x .7	0 to +50	-20 to +70	5	73-1012-ND	12.88	9.36	DMC-16117A
—	16x1	N/A	5x7 CURS	122 x 33 x 11	99 x 13	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1013-ND	20.20	14.68	DMC-16128
—	16x1	N/A	5x7 CURS	122 x 33 x 11	99 x 13	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1015-ND	22.36	16.24	DMC-16129
—	16x2	PRD250LPW-ND	5x8 dots	80 x 40 x 10.9	59.5 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1033-ND	18.86	13.70	DMC-6202
—	16x2	PRD250LPW-ND	5x8 dots	84 x 44 x 11	61 x 16	2.95 x 5.55	.55 x .55	0 to +50	-20 to +70	5	73-1025-ND	19.18	13.93	DMC-16207
—	16x2	PRD250LPW-ND	5x8 dots	84 x 44 x 11	61 x 16	2.95 x 5.55	.55 x .55	-20 to +70	-30 to +80	+5, -7	73-1036-ND	19.40	14.09	DMC-16207H
—	16x2	PRD250LPW-ND	5x8 dots	84 x 44 x 11	61 x 16	2.95 x 5.55	.55 x .55	0 to +50	-20 to +70	5	73-1054-ND	17.50	12.71	DMC-16207U
—	16x2	N/A	5x7 CURS	122 x 44 x 11	99 x 24	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1026-ND	22.90	16.64	DMC-16230
—	16x2	N/A	5x7 CURS	122 x 44 x 11	99 x 24	4.84 x 9.66	.92 x 1.1	-20 to +70	-30 to +80	+5, -7	73-1041-ND	28.22	20.51	DMC-16230H
—	16x2	N/A	5x7 CURS	122 x 44 x 11	99 x 24	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1030-ND	22.90	16.64	DMC-16230U
—	16x2	PRD250LPW-ND	5x8 dots	80 x 36 x 11	64.5 x 13.8	2.95 x 4.35	.55 x .5	0 to +50	-20 to +70	5	73-1037-ND	16.62	12.08	DMC-16249B
—	16x2	PRD250LPW-ND	5x8 dots	80 x 36 x 11	64.5 x 13.8	2.95 x 4.35	.55 x .5	0 to +50	-20 to +70	5	73-1039-ND	16.62	12.08	DMC-16249UB
—	16x4	N/A	5x8 dots	87 x 60 x 11	61.8 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1080-ND	35.02	25.44	DMC-16433
—	16x4	N/A	5x8 dots	87 x 60 x 11	61.8 x 25.2	2.95 x 4.75	.55 x .55	-20 to +70	-30 to +80	+5, -7	73-1108-ND	35.02	25.44	DMC-16433H
—	20x2	PRD360LPW-ND	5x8 dots	116 x 37 x 11	83 x 18.6	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1056-ND	29.56	21.48	DMC-20261
—	20x2	PRD360LPW-ND	5x8 dots	116 x 34 x 11	83 x 18.6	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1055-ND	22.90	16.64	DMC-20215A
—	20x2	PRD360LPW-ND	5x8 dots	116 x 37 x 11	83 x 18.6	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1058-ND	24.24	17.61	DMC-50218
—	24x2	PRD360LPW-ND	5x8 dots	118 x 36 x 11	93.5 x 15.8	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1064-ND	26.94	19.57	DMC-24227
—	40x2	N/A	5x8 dots	182 x 33.5 x 11	152 x 16.5	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1069-ND	43.10	31.37	DMC-40218
—	40x4	N/A	5x8 dots	190 x 54 x 11	147 x 29.5	2.78 x 4.89	.5 x .55	0 to +50	-20 to +70	5	73-1099-ND	83.52	60.69	DMC-40457
<i>Supertwist LCD Modules (Data Book Sold Separately)</i>														
—	8x2	N/A	5x8 dots	40 x 35.4 x 8.2	30.4 x 13.9	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1106-ND	13.50	9.81	DMC-50448N
—	16x2	PRD250LPW-ND	5x7 dots	64.2 x 27.6 x 2.2	56.2 x 12.7	2.6 x 5.2	.48 x .7	0 to +50	-20 to +70	+3, -7	73-1177-ND*	15.08	10.96	DMC-50747NF
—	16x2	PRD250LPW-ND	5x8 dots	84 x 44 x 11	61 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1044-ND	22.90	16.64	DMC-16207
—	16x2	N/A	5x7 CURS	122 x 44 x 11	99 x 24	4.84 x 9.66	.92 x 1.10	0 to +50	-20 to +70	5	73-1028-ND	25.60	18.60	DMC-16230N
—	16x2	PRD250LPW-ND	5x8 dots	80 x 36 x 11	64.5 x 13.8	2.95 x 4.35	.55 x .50	0 to +50	-20 to +70	5	73-1038-ND	19.76	14.36	DMC-16249N
—	16x4	N/A	5x8 dots	87 x 60 x 11	61.8 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1083-ND	37.72	27.40	DMC-16433N
—	20x4	N/A	5x8 dots	98 x 60 x 11	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1091-ND	48.72	35.41	DMC-20434N
—	40x4	N/A	5x8 dots	190 x 54 x 10	147 x 29.5	2.78 x 4.89	.5 x .55	0 to +50	-20 to +70	5	73-1102-ND	86.20	62.63	DMC-40457N
<i>High Contrast Supertwist LCD Modules (Data Book Sold Separately)</i>														
—	16x2	PRD250LPW-ND	5x8 dots	84 x 44 x 11	61 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1045-ND	22.90	16.64	DMC-16207N-B
—	16x4	N/A	5x8 dots	87 x 60 x 11	61.8 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1084-ND	28.93	23.19	DMC-16433N-B
—	20x2	PRD360LPW-ND	5x8 dots	116 x 37 x 11	83 x 18.6	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1061-ND	24.76	17.99	DMC-50218N-B
—	20x4	N/A	5x8 dots	98.5 x 60 x 11	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1092-ND	44.70	32.47	DMC-20434N-B
—	24x2	PRD360LPW-ND	5x8 dots	118 x 36 x 11	93.5 x 15.8	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1066-ND	28.28	20.55	DMC-24227N-B
<i>Supertwist LCD Modules With Yellow LED Backlighting (Data Book Sold Separately)</i>														
—	16x1	N/A	5x7 CURS	122 x 33 x 15.7	99 x 13	4.84 x 9.66	.92 x 1.10	0 to +50	-20 to +70	5	73-1011-ND	30.98	22.52	DMC-16128NY-LY
—	16x1	PRD250LPW-ND	5x8 dots	80 x 36 x 15	64.5 x 13	3.2 x 5.85	.6 x .7	0 to +50	-20 to +70	5	73-1018-ND	26.94	19.57	DMC-16105NY-LY
—	16x1	N/A	5x8 dots	151 x 40 x 14.2	120 x 23	6.0 x 14.54	1.152 x 1.76	0 to +50	-20 to +70	5	73-1014-ND	63.30	45.99	DMC-16188NY-LY
—	16x2	PRD250LPW-ND	5x8 dots	84 x 45 x 15.1	61 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1048-ND	26.94	19.57	DMC-16202NY-LY
—	16x2	PRD250LPW-ND	5x8 dots	80 x 40 x 16.1	59.5 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1034-ND	22.90	16.64	DMC-16204NY-LY
—	16x2	PRD250LPW-ND	5x8 dots	88 x 34 x 16.1	59.5 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1035-ND	26.94	19.57	DMC-16205NY-LY
—	16x2	N/A	5x7 CURS	122 x 44 x 14.6	99 x 24	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1051-ND	35.02	25.44	DMC-16230NY-LY
—	16x2	N/A	5x7 CURS	122 x 44 x 14.6	99 x 24	4.84 x 9.66	.92 x 1.1	0 to +50	-20 to +70	5	73-1053-ND	35.02	25.44	DMC-16230NY-LY
—	20x2	PRD360LPW-ND	5x8 dots	116 x 37 x 15.7	83 x 18.6	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1062-ND	35.02	25.44	DMC-20261NY-LY
—	20x4	N/A	5x8 dots	98.5 x 61 x 15.6	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1094-ND	45.80	33.28	DMC-20481NY-LY
—	20x4	N/A	5x8 dots	98.5 x 61 x 15.6	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1097-ND	45.80	33.28	DMC-20481NY-LY
—	40x2	N/A	5x8 dots	182 x 34.5 x 15.1	152.5 x 16.5	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1076-ND	71.40	51.87	DMC-40267NY-LY
—	40x2	N/A	5x8 dots	182 x 34.5 x 15.1	152.5 x 16.5	3.2 x 5.55	.6 x .65	-20 to +70	-30 to +80	+5, -7	73-1078-ND	71.40	51.87	DMC-40267NY-LY
<i>High Contrast Supertwist LCD Modules with Yellow LED Backlighting (Data Book Sold Separately)</i>														
—	16x2	PRD250LPW-ND	5x8 dots	84 x 45 x 15.1	61 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1047-ND	26.94	19.57	DMC-16202N-LY-B
—	16x2	PRD250LPW-ND	5x8 dots	84 x 45 x 15.1	61 x 16	2.95 x 5.55	.55 x .65	0 to +50	-20 to +70	5	73-1043-ND	26.94	19.57	DMC-16202NY-LY-1
—	16x2	PRD250LPW-ND	5x8 dots	84 x 45 x 15.1	61 x 16	2.95 x 5.55	.55 x .65	-20 to +70	-30 to +80	+5, -7	73-1032-ND	26.94	19.57	DMC-16202NY-LY-D
—	16x2	N/A	5x7 CURS	122 x 44 x 14.6	99 x 24	4.84 x 9.66	.92 x 1.10	0 to +50	-20 to +70	5	73-1052-ND	36.36	26.42	DMC-16230NY-LY-B
—	16x2	N/A	5x7 CURS	122 x 44 x 14.6	99 x 24	4.84 x 9.66	.92 x 1.10	-20 to +70	-30 to +80	+5, -7	73-1050-ND	37.72	27.41	DMC-16230NY-LY-D
—	20x2	PRD360LPW-ND	5x8 dots	116 x 37 x 15.7	83 x 18.6	3.2 x 5.55	.60 x .65	0 to +50	-20 to +70	5	73-1057-ND	35.02	25.44	DMC-20261ANY-LY-B
—	20x2	PRD360LPW-ND	5x8 dots	116 x 37 x 15.7	83 x 18.6	3.2 x 5.55	.60 x .65	-20 to +70	-30 to +80	+5, -7	73-1063-ND	35.02	25.44	DMC-20261NY-LY-D
—	20x4	N/A	5x8 dots	98.5 x 61 x 15.6	76 x 25.2	2.95 x 4.75	.55 x .55	0 to +50	-20 to +70	5	73-1095-ND	45.80	33.28	DMC-20481NY-LY-B
—	24x2	PRD360LPW-ND	5x8 dots	121.5 x 33.5 x 16.1	93.5 x 15.8	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5	73-1024-ND	48.70	35.38	DMC-50149NY-LY-B
—	40x2	N/A	5x8 dots	182 x 34.5 x 15.1	147.5 x 11.5	3.2 x 5.55	.6 x .65	0 to +50	-20 to +70	5				