

Liquid Crystal Displays



FEATURES

- 4 - bit or 8 - bit MPU interface available
- 160 JIS characters and 32 special characters and symbols can be displayed by internal character generator (ROM)
- Instruction set to position cursor, clear screen etc.
- Compact & lightweight design
- Single +5V power supply (except for high temperature type)
- Low power consumption
- Customised options are available, please consult Amtex

SPECIFICATIONS

Display Format	Type No.	Display Fonts	Character Size (W x H mm)	Module Dimensions (W x H x D mm)	Viewing Area (W x H mm)	Duty	Power Cons (mW)
8 Characters x 2 lines	DMC50448N	5 x 8 dots	2.95 x 4.75	40.0 x 35.4 x 8.2	30.4 x 13.9	1/16	10
16 Characters x 1 line	DMC16105	5 X 8 dots	3.20 x 5.95	80.0 x 36.0 x 15.0	64.5 x 13.0	1/16	9
	DMC16117A	5 x 8 dots	3.20 x 5.95	80.0 x 36.0 x 10.0	64.5 x 13.0	1/16	7.5
	DMC16188	5 x 8 dots	6.00 x 14.54	151.0 x 40.0 x 14.2	120.0 x 23.0	1/8	8.5
16 Characters x 2 lines	DMC50097H	5 x 8 dots	2.95 x 5.55	84.0 x 44.0 x 11.0	61.0 x 16.0	1/16	7
	DMC16202	5 x 8 dots	2.95 x 5.55	84.0 x 45.0 x 15.1	61.0 x 16.0	1/16	10
	DMC16204	5 x 8 dots	2.95 x 5.55	80.0 x 40.0 x 10.9	59.5 x 16.0	1/16	9
	DMC16205	5 x 8 dots	2.95 x 5.55	88.0 x 34.0 x 10.9	59.5 x 16.0	1/16	9
	DMC16230	5 x 7 dots + cursor	4.84 x 9.66	122.0 x 44.0 x 11.0	99.0 x 24.0	1/16	7.5
	DMC16249*	5 x 8 dots	2.95 x 4.35	80.0 x 36.0 x 11.0	64.5 x 13.8	1/16	9
16 Characters x 4 lines	DMC16433	5 x 8 dots	2.95 x 4.75	87.0 x 60.0 x 11.0	61.8 x 25.2	1/16	11
20 Characters x 1 line	DMC20171	5 x 7 dots + cursor	6.70 x 11.5	182.0 x 33.5 x 12.6	154.0 x 15.3	1/8	10
20 Characters x 2 lines	DMC50218	5 x 8 dots	3.20 x 5.55	116.0 x 37.0 x 11.0	83.0 x 18.6	1/16	7.5
	DMC20261	5 x 8 dots	3.20 x 5.55	116.0 x 37.0 x 11.0	83.0 x 18.6	1/16	7.5
20 Characters x 4 lines	DMC20434	5 x 8 dots	2.95 x 4.75	98.0 x 60.0 x 11.0	76.0 x 25.2	1/16	11
	DMC20481	5 x 8 dots	2.95 x 4.75	98.5 x 61.0 x 15.6	76.0 x 25.2	1/16	11.5
24 Characters x 2 lines	DMC50149	5 x 8 dots	3.20 x 5.55	121.5 x 33.5 x 16.1	93.5 x 15.8	1/16	6.5
40 Characters x 2 lines	DMC40202	5 x 8 dots	3.20 x 5.55	182.0 x 34.5 x 15.1	161.6 x 16.5	1/16	10
	DMC40218*	5 x 8 dots	3.20 x 5.55	182.0 x 33.5 x 15.5	151.6 x 14.2	1/16	16.5
40 Characters x 4 lines	DMC40457	5 x 8 dots	2.78 x 4.89	190.0 x 54.0 x 10.0	147.0 x 29.5	1/16	28.5

DMC Series

Liquid Crystal Displays
Character DMC Series

Part Number Generation

DMC	—	50000		N	Y	H	U	—	S	E	B	1
1		2		3	4	5	6		7	8	9	10

Table 1

- | | |
|---|--|
| 1. Type of display. Dot matrix character. | 6. Viewing direction...Nil: 6.00, U: 12.00 |
| 2. Development number (3 to 5 digits). | 7. Display mode...Nil: Reflective, transmissive with backlight, S: Transflective |
| 3. LCD type Nil: TN N:STN (Supertwist). | 8. Backlight...Nil: without backlight E: EL, L: LED |
| 4. LCD background colour...
Nil: Neutral, Y: Yellow, B: Blue, K: Dark Blue | 9. Backlight colour...
Nil: without backlight, W: White, B: Blue, Y: Yellow |
| 5. Operating temperature...Nil: Normal, H: Extended. | 10. Supplementary specification. |

	Operating Temperature	Storage Temperature
Normal Temp.	0°C ~ +50°C	-20°C ~ +70°C
Extended Temp.	-20°C ~ +70°C	-30°C ~ +80°C

AVAILABLE OPTIONS (Note...characters shown in red denote popular Amtex stock)

Type No.	TN Type			STN Type			Inverter for EL
	R	H	EL	R	EL	LED	
DMC50448N				NIL			
DMC16105						NY-LY	
DMC16117A	NIL						
DMC16188						NY-LY	
DMC50097H	NIL						
DMC16202						NY-LY-AGE	
DMC16204	NIL					NY-LY	
DMC16205						NY-LY	
DMC16230		H*	E			NYU-LY NY-LY-AVE	
DMC16249*	B*						
DMC16433				N	N-EB, N-SEW-B		INV-NS-104
DMC20171						NY-LY	
DMC50218	NIL			N-B			
DMC20261						NY-LY-AXE	
DMC20434	NIL			N, N-B			
DMC20481						NY-LY-ABE	
DMC50149						NYU-LY-B	
DMC40202						NY-LY-AFE	
DMC40218*	*			NY*	N-SEW-B*		INV-NS-104
DMC40457						NY-LY	

Table 2

Additional notes:

- B: Improved contrast ratio with 5V single power supply
- J: Improved response time
- D: Improved contrast ratio with dual power supply
- *: Small change has been made to display from original, eg: Using a different chip manufacturer

EXAMPLES:

DMC 16230NY-LY is an STN, Yellow background, Yellow LED backlight

DMC16117A (Nil) is a TN reflective. Nothing needs to be added to DMC16117A to select this option.

DMC16230N is an STN reflective.

DMC16230N-EB is an STN, with EL backlight