

□ 13 mm 16 × 16 Dots LNP729101

Technical drawing of the LED display assembly, showing front and side views with dimensions and labels.

**Front View Dimensions:**

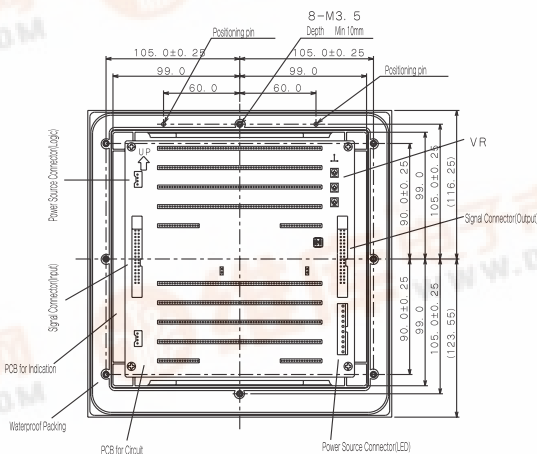
- Overall width: 239.8 Max
- Overall height: 239.8 Max
- Module pitch (width): 15.0 x 15.0 = 225.0
- Module pitch (height): 15.0 x 15.0 = 225.0
- Mounting hole diameter:  $\phi 1.0$
- Mounting hole offset: X1.0, Y1.0
- LED pitch: X16, Y16
- LED label: LED
- Waterproof rash label: Waterproof rash

**Side View Dimensions:**

- Overall depth: 30.6
- Mounting hole offset: 7.5
- Mounting hole diameter:  $\phi 3.0$
- Mounting hole offset: 4.0
- Mounting hole offset: 1.0
- Mounting hole offset: 3.3
- Mounting hole offset: 7

**Labels:**

- 8 - Pin for attaching body of equipment
- Hood
- Frames
- Dot arrangement



| Item                          | Symbol           | Ratings                       | Unit |
|-------------------------------|------------------|-------------------------------|------|
| Supply Voltage for Logic      | V <sub>CC</sub>  | - 0.3 ~ + 5.25                | V    |
| Supply Voltage for LED        | V <sub>LED</sub> | R: + 5.0 PG: + 5.0 PB: + 5.0  | V    |
| Input Voltage                 | V <sub>in</sub>  | - 0.3 ~ V <sub>CC</sub> + 0.3 | V    |
| Operating Ambient Temperature | T <sub>opr</sub> | - 20 ~ + 45                   | °C   |
| Storage Temperature           | T <sub>stg</sub> | - 30 ~ + 80                   | °C   |

| Item                                |                | Symbol                                           | Ratings                                 | Unit              |
|-------------------------------------|----------------|--------------------------------------------------|-----------------------------------------|-------------------|
| Display Colors                      |                |                                                  | Full Color (Red, Green, Blue)           |                   |
| Display Surface Size                |                |                                                  | Max 239.8 × 239.8                       | mm                |
| Dot Total Number                    |                |                                                  | 256 (□ 13 16 × 16)                      |                   |
| Dot Structure                       |                |                                                  | R:2 PG:1 PB:1                           |                   |
| Dots Pitch                          |                |                                                  | 15.0                                    | mm                |
| Brightness(when lighting all lamps) |                | B                                                | R:1600 PG:3150 PB:500(W):5000           | cd/m <sup>2</sup> |
| Dots Brightness Variation           |                |                                                  | + 5 - 20                                | %                 |
| Area Gradation                      |                |                                                  | R:PG:PB<br>256 gradation for each color |                   |
| Modulated Light                     |                |                                                  | 8                                       | %                 |
| Peak Emission Wavelength (Typ)      |                | $\lambda_p$                                      | R:620 PG:515 PB:468                     | nm                |
| Viewing Angle (50 % Luminous)       |                | 2θ 1/2                                           | Level 120,Up10,Down40                   | °                 |
| Operating Method                    |                |                                                  | 1/2( Duty )<br>Dynamic lighting         |                   |
| Operating Frequency                 |                | f <sub>CLK</sub>                                 | 2 or 4                                  | MHz               |
|                                     |                | f <sub>ECLK</sub>                                | 8                                       |                   |
| for Logic<br><br>for LED            | Supply Voltage | V <sub>CC</sub>                                  | 5.0 ± 0.25                              | V                 |
|                                     | Supply Current | I <sub>CC</sub>                                  | Max 1.0                                 | A                 |
|                                     | Supply Voltage | V <sub>R</sub> ·V <sub>PG</sub> ·V <sub>PB</sub> | 4.8                                     | V                 |
|                                     | Supply Current | I <sub>R</sub>                                   | Max 4.0                                 | A                 |
|                                     |                | I <sub>PG</sub>                                  | Max 6.4                                 |                   |
|                                     |                | I <sub>PB</sub>                                  | Max 4.8                                 |                   |
| Max                                 |                |                                                  | 1100                                    | g                 |

