



FRM RGBA modules are premium color changing signage modules engineered for constant current so there is no lumen drop across the full length of any string. The FRM RGBA module features three chips in each LED – red, green, blue and amber for added brightness. Use DMX controls to tune RGBA modules to any color. Insulation Displacement Connection is adopted to reduce the voltage drop of long-distance supply. FRM Series modules are rated IP66 and come with a 2-year warranty.

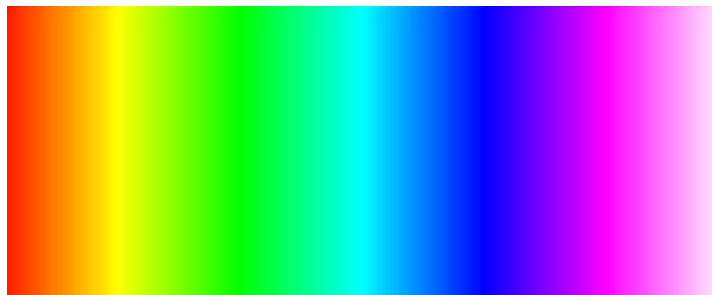
**APPLICATIONS**

- Channel letter
- Box signs
- Cove and Accent lighting

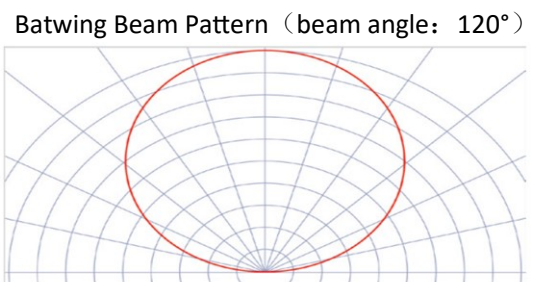
**PRODUCT RATINGS**

|                    |                      |                       |  |
|--------------------|----------------------|-----------------------|--|
| Luminous Efficacy  | 39.4 lm/W (All)      | Input Current         | 72mA (All)                             |
|                    | 20.6 lm/W (Red)      |                       | 25 mA (Red)                            |
|                    | 40.6 lm/W (Green)    |                       | 25 mA (Green)                          |
|                    | 9.4 lm/W (Blue)      |                       | 25 mA (Blue)                           |
|                    | 45.5 lm/W (Amber)    |                       | 25 mA (Amber)                          |
| Wattage per Module | 1.73 W/module (All)  | Power Supply Loading  | 52 modules per 100W                    |
|                    | 0.6 W/module (Red)   | Ingress Protection    | IP66                                   |
|                    | 0.6 W/module (Green) | Operating Temperature | -40° — +60° C                          |
|                    | 0.6 W/module (Blue)  | L70 Lifetime @ 60° C  | 50,000 Hours                           |
|                    | 0.6 W/module (Amber) | Warranty              | 2 Year Limited Warranty                |
| Input Voltage      | 24 VDC               | Number of Pixel       | 50 pixels / Strip (1 Pixel per module) |
| Control            | DMX512               | Addressing Options    | Auto-Addressing                        |

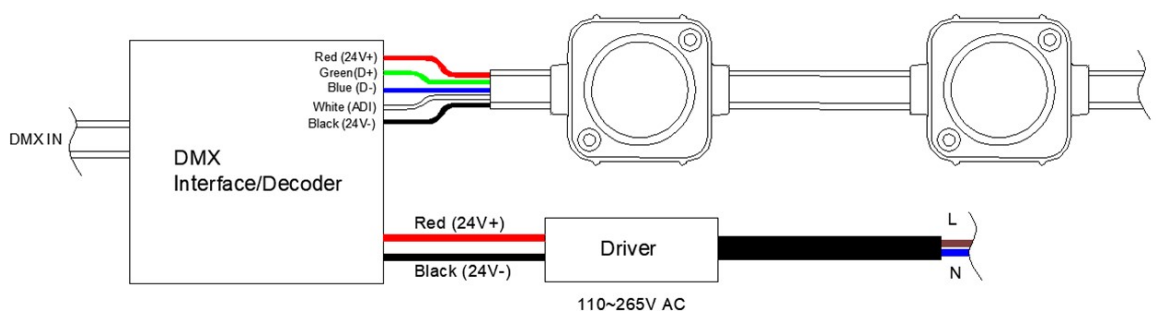
**COLOR TEMPERATURE SCALE**



**LUMINOUS INTENSITY DISTRIBUTION**



**WIRING DIAGRAM**



**SHIPPING INFORMATION**

| Module Type | Packaging Quantity |            | Carton Dimensions |          |          | Gross Weight | Net Weight |
|-------------|--------------------|------------|-------------------|----------|----------|--------------|------------|
|             | Per Strip          | Per Carton |                   |          |          |              |            |
| FRM-RGBA-B  | 50Modules          | 200Modules | W                 | D        | H        | 5.67KG       | 5.2KG      |
|             | 20FT               | 80FT       | 19.7 inch         | 9.1 inch | 6.7 inch |              |            |
|             | 6.1m               | 24.4m      | 500mm             | 230mm    | 170mm    |              |            |

**LAYOUT GUIDE\***

| Channel Depth (in.) | Single Row  |                | Multiple Rows |                | Channel Depth (mm) | Single Row  |                | Multiple Rows |                |
|---------------------|-------------|----------------|---------------|----------------|--------------------|-------------|----------------|---------------|----------------|
|                     | Max. Stroke | Module Spacing | Row Spacing   | Module Spacing |                    | Max. Stroke | Module Spacing | Row Spacing   | Module Spacing |
| 4                   | 11          | 4              | 10            | 4              | 100                | 275         | 100            | 100           | 100            |
| 5                   | 14          | 4              | 10            | 4              | 125                | 350         | 100            | 100           | 100            |
| 6                   | 14          | 5              | 10            | 5              | 150                | 350         | 125            | 100           | 125            |
| 7                   | 14          | 5              | 10            | 5              | 175                | 350         | 125            | 100           | 125            |
| ≥7                  | 14          | 5              | 10            | 5              | ≥200               | 350         | 125            | 100           | 125            |

\*Density guide designed to maintain a minimum of 600 lux for a single row or 800 lux for multiple rows at sign face .

**POWER SUPPLY LOADING**

| FRM-RGBA                   |      |  |  |  |  |
|----------------------------|------|--|--|--|--|
| Power Supply               |      | 18AWG/0.82 mm <sup>2</sup> supply wire<br>Max. # of Modules<br>Per Continuous String | 16AWG/1.31 mm <sup>2</sup> supply wire<br>Max. # of Modules<br>Per Continuous String | 14AWG/2.08 mm <sup>2</sup> supply wire<br>Max. # of Modules<br>Per Continuous String | 12AWG/3.31 mm <sup>2</sup> supply wire<br>Max. # of Modules<br>Per Continuous String |
| Maximum Supply Wire Limits | 18W  | 12Pcs ( 1.5m )   | /  | /  | /  |
|                            | 35W  | 24Pcs ( 2.9m )   | /  | /  | /  |
|                            | 60W  | 40Pcs ( 4.8m )   | /  | /  | /  |
|                            | 75W  | 50Pcs ( 6.1m )   | /  | /  | /  |
|                            | 100W | 50Pcs ( 6.1m )   | 63Pcs ( 7.6m )   | /  | /  |
|                            | 150W | 50Pcs ( 6.1m )   | 63Pcs ( 7.6m )   | 88Pcs ( 10.6m )  | /  |
|                            | 200W | 50Pcs ( 6.1m )   | 63Pcs ( 7.6m )   | 88Pcs ( 10.6m )  | 100Pcs ( 12.1m )   |
|                            | 240W | 50Pcs ( 6.1m )   | 63Pcs ( 7.6m )   | 88Pcs ( 10.6m )  | 100Pcs ( 12.1m )   |
|                            | 300W | 50Pcs ( 6.1m )   | 63Pcs ( 7.6m )   | 88Pcs ( 10.6m )  | 100Pcs ( 12.1m )   |

Note 1. The number of modules in each of the parallel strings should not exceed the specified maximum.

2. \*3 – 300 Watt Channels

**DIMENSIONS**
