# MR16 Downlight S

## Features

- 1 Quad-color RGBW LED at 10 W
- LED Lifespan: 50,000 hours
- Native Beam Angle: 30.9°
- Optics Included: Medium Filter (35°), Wide Filter (60°), and Honeycomb Filter
- Lumen Output: 266
- Color Temperature Presets: 1,800K to 10,000K
- Control: Logic Drive 2X (required), Logic POE X (required)
- Dimensions: 1.96 x 1.96 x 4.59 in (50 x 50 x 116.80 mm)
- Weight: 0.39 lb (0.18 kg)
- Lens Material: Frosted Polycarbonate
- Fixture Color: White

## Description

Iluminarc Logic MR16 Downlight luminaires are designed for the smallest of area lighting up to full room illumination. With their high quality 4-color RGBW color mixing system, Downlights provide soft, pleasing accent light and indirect illumination of bright, saturated colors and white calibrated CCT presets. Downlights utilize Power Over Ethernet (POE) technology, receiving power and control via an advanced driver. Powerful control options include Calendar Scheduling via onboard webserver, DMX, RDM, Art-Net, Art-RDM, sACN. Or you can use the included 8-button wall controller to trigger customizable looks. Go green with higher efficiency, lower cost without compromising quality or quantity.

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## Downloads

MR16 Downlight S Quick Reference Guide

MR16 Downlight S DMX Chart

- MR16 Downlight S Cutsheet
- MR16 Downlight S IES





## Specifications

Light Source and Optical Specifications

- · Light Source: 1 LED (quad-color RGBW) 10 W, (4.375 A)
- · Light Source Life Expectancy: 50,000 hours based on LED manufacturer's specifications
- Installed Optics: Medium Filter
- Included Optics: Wide Filter
- Beam Angle: Standard Optics: 30.9°, Medium Filter: 40.4°, Medium Filter With Honeycomb: 33.6°, Wide Filter: 41.8°, Wide Filter With Honeycomb: 34.2°
- Field Angle: Standard Optics: 59.7°, Medium Filter: 81.7°, Medium Filter With Honeycomb: 63.9°, Wide Filter: 105.5°, Wide Filter With Honeycomb: 64.3°
- Cutoff Angle: Standard Optics: 82.8°, Medium Filter: 148.9°, Medium Filter With Honeycomb: 84.7°, Wide Filter: 154.3°, Wide Filter With Honeycomb: 90°
- Lumens: Standard Optics: 266, Medium Filter: 194, Medium Filter With Honeycomb: 98.3, Wide Filter: 182, Wide Filter With Honeycomb: 83.1
- Iluminance: Standard Optics: 29 lux @ 5 m, Medium Filter: 11 lux @ 5 m, Medium Filter With Honeycomb: 9 lux @ 5 m, Wide Filter: 8 lux @ 5 m, Wide Filter With Honeycomb: 8 lux @ 5 m
- Efficacy At Full: Standard Optics: 32 lm / W, Medium Filter: 23 lm / W, Medium Filter With Honeycomb: 12 lm / W, Wide Filter: 22 lm / W, Wide Filter With Honeycomb: 10 lm / W
- Color Temperature Presets: 1800K 10000K

**Construction & Physical Specifications** 

- Dimensions: 1.96 x 1.96 x 4.59 in (50 x 50 x 116.80 mm)
- · Fixture Color: White
- Housing Material: Aluminum (ADC12)
- · Lens Cover: Frosted polycarbonate
- Mounting Options: Logic MR16 Trim Ring, Logic MR16 Mounting Kit
- Weight: 0.39 lb (0.18 kg)

#### **Control Specifications**

- Operating Modes: Selectable personalities, via Logic Drive 2X and POEX
- Personalities:
  - Red (1-channel): Red
  - Green (1-channel): Green
  - Blue (1-channel): Blue
  - White (1-channel): White
  - TW (2-channel): Dimmer, White CCT Preset
  - RGB (3-channel): Red, Green, Blue
  - RGBW (4-channel): Red, Green, Blue, White
  - RGBW+D (5-channel): Red, Green, Blue, White, Dimmer
  - FULL (10-channel): Dimmer, Red, Green, Blue, White, White CCT Presets, Strobe, Auto Programs, Dimmer Speed Presets
- Fixture Setup: Logic Drive 2X and POEX (RDM, webserver or display), Art-RDM (DMX Workshop)
- · Standalone Control: Yes, Logic Wall Con via Logic Drive 2X and POEX

#### **Electrical System Specifications**

- Electronic
- Input Voltage: 52 VDC, DMX/RDM (via Logic POEX)
- Power and Current:
  - 8.3 W Via POEX
- Power Linking: 8 units via Logic POEX
- Power Supply: Logic POEX (52 VDC)
- Recommended Power Cable: Belden 2413F, 2412F
- Required Cable Specifications: Cable type: CAT6/A, Shielded, Conductor Diameter: ≥23 AWG (≥0.5733 mm), Conductor Material: Solid Bare Copper Wire (stranded not supported), Cable plug: RJ45, CAT6/A, Shielded, Cable Terminator: T568B standard
- Total Max Cable Length: Drive to POE.X: ≤100 m / 328 ft, POE.X to first fixture: ≤15.24 m / 50 ft, First fixture to last fixture: ≤46m / 150 ft, Drive to last fixture: ≤145 m / 475 ft

#### **Thermal Specifications**

- BTU Hour: 8.3
- Cooling: Convection
- Maximum Surface Temperature: 158 °F (70 °C)
- Minimum Distance To Flammable Surface: 11.8 in (0.3 m)
- Operating Temperature Range: -4 °F to 113 °F (-20 °C to 45 °C)

#### **Regulatory & Voluntary Qualification**

- Canadian Safety: CSA-C22.2 No. 250.2
- Certification Listings: CE/MET/FCC/RoHS
- · City of Chicago Electric Code Safety: Chicago Plenum (CCEA), Section 18-27-300.22(c)(2)
- Environment Details: All indoor permanent installations. Please refer to the User Manual for more detailed information on installation.
- Environment Locations: Dry
- Installation Orientation: Any
- US Safety: UL 2108, UL 1598A
- · Warranty: 36-month manufacturer's limited warranty (for covered regions only)

#### Accessories

- · Included: Wide filter, Pendant hanging bracket
- Optional: Logic MR16 Honeycomb filter, Logic MR16 Trim Ring (white), Logic MR16 Mounting Kit (for wall mount, ceiling mount, and hanging pendant)
- Required: Logic Drive 2X, Logic POEX

#### Order Code

- Logic MR16 Downlight-small: LOGICMR16DNS
- Logic Drive 2X: LOGICDRIVE2X
- Logic POE X Power Data Adapter: LOGICPOEX
- Logic M16 Honeycomb Filter: LOGICMR16HF
- Logic MR16 Trim Ring: LOGICMR16TRIM
- Logic Wall Controller: LOGICWALLCON

## **Applications & Uses**



### Accessories



Logic Drive 2X

000

POE X Power Data

Adapter



Honeycomb Filter



Trim Ring



Logic Wall Controller