

EXTERIOR LINEAR™ QUAD

310 QUAD GRAZE / 310 QUAD COVE / 1210 QUAD GRAZE / 1210 QUAD COVE

SPEC SHEET



HIGHLIGHTS

- Linear LED fixture with QUAD color uniform color mixing
- Robust outdoor-rated fixture available in two lengths
- Easy installation with integrated power supply

OVERVIEW

The Exterior™ Linear QUAD is a series of high output LED pre-mixed color-changing fixtures in a robust outdoor-rated housing. Available in cove and graze light versions in different sizes for perfect fitting, the series is designed to illuminate walls and any other type of linear structure, and features superbly premixed colors and uniform light distribution at three different beam angles, ideal for highlighting textured surfaces.

Producing superior color mixing directly at the lens, the QUAD-color LEDs efficiently prevent multi-colored shadows, and improve the looks and aesthetics of the fixture in direct view installations. An integrated universal power supply makes installation a breeze and the DMX controllable fixture is easy to daisy chain using a combined power and data connector.

KEY MESSAGES

QUAD COLOR MIXING

The Exterior Linear QUAD features powerful QUAD color LEDs, which, combined with a large diameter lens, provide great color mixing within the lens while still maintaining a narrow beam, which is important for graze lighting applications.

A high-durability and ISO 12944-6 certified C5 M-classified marine surface coating allows for installation in extremely corrosive coastal environments, and its automatic thermal management system offers full protection of LEDs and components at excessive temperatures.

WEATHERIZED, STURDY DESIGN

The Exterior Linear QUAD is designed for permanent outdoor installation. IP 66-rated, it is efficiently protected against intrusion of dust and water, while its IK08-classification ensures great protection against external mechanical impacts.

SIMPLE INFRASTRUCTURE

The Exterior Linear QUAD features a built-in power supply which auto-ranges 100-277 V, allowing for long fixture runs of up to 25 x 4 ft fixtures (100 ft at 230 V). The IP-rated hybrid connector ensures hassle-free, fast installation with no extra control boxes required.

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FEATURES

- Robust, outdoor IP-66 rated linear fixture
- QUAD color LEDs for uniform color mixing direct out of the fixture
- Available in 1 and 4 ft versions to fit structural elements
- End-to-end connection or via connection cables
- Internal power supply for long fixture runs
- Easy installation due to hybrid power/data cable
- DMX control either as complete fixture or segment (1 ft) control
- 0–100% intensity control
- Remote Device Management (RDM) for remote reading of run hours and parameter setting
- Magnetic tool for fast local diagnostics
- Graze version with three beam angle options, including narrow for impressive graze effects
- Dedicated cove version for maximum spread of light
- Accessory glare shield and louvre available for improved glare control
- Low power consumption (max 20 W/ft)
- No extra control boxes required—connects directly to line voltage and DMX
- Automatic thermal management for full protection of LEDs and components
- Automatic power management for highest possible light output at any color



Lead-in Cable



Extension Cable



End Termination Cap



Glare Shield



Louvre

ORDERING INFORMATION

GRAZE VERSIONS

- Exterior Linear 310 Graze, Narrow, QUAD P/N 90356990
- Exterior Linear 310 Graze, Wide, QUAD..... P/N 90356991
- Exterior Linear 310 Graze, Asymmetric, QUAD..... P/N 90356992
- Exterior Linear 1210 Graze, Narrow, QUAD P/N 90356993
- Exterior Linear 1210 Graze, Wide, QUAD..... P/N 90356994
- Exterior Linear 1210 Graze, Asymmetric, QUAD..... P/N 90356995

COVE VERSIONS

- Exterior Linear 310 Cove, QUAD P/N 90356997
- Exterior Linear 1210 Cove, QUAD P/N 90356996

ACCESSORIES

- Glare Shield 300, Set of 4..... P/N 91611752
- Glare Shield 1200, Set of 4..... P/N 91611753
- Louvre, QUAD Graze 1 FT, Set of 4..... P/N 91611850
- Lead-in Cable, 2 M, EU P/N 91611754
- Lead-in Cable, 10 M, EU P/N 91611156
- Extension Cable, 0.2 M, EU..... P/N 91611758
- Extension Cable, 1 M, EU..... P/N 91611760
- Extension Cable, 5 M, EU..... P/N 91611762
- Extension Cable 10 M, EU..... P/N 91611764
- Lead-in Cable, 2 M, US P/N 91611755
- Lead-in Cable, 10 M, US P/N 91611157
- Extension Cable, 0.2 M, US..... P/N 91611759
- Extension Cable, 1 M, US..... P/N 91611761
- Extension Cable, 5 M, US..... P/N 91611763
- Extension Cable 10 M, US..... P/N 91611765
- End Termination Cap P/N 91611766

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TECHNICAL SPECIFICATIONS

DYNAMIC EFFECTS

Intensity 0 - 100%
Color control RGBW
Control 1 ft segments or as one fixture

CONTROL AND PROGRAMMING

Control systems DMX, RDM
Control resolution 8-bit DMX individual color control
DMX channels 4-16 depending on model and mode
User interface Magnetic switch to call up fixture status and diagnostics
DMX compliance USITT DMX512/1990
RDM compliance ANSI/ESTA E1.20

OPTICS

Light source OSTAR S2WM LEDs (4 LEDs/ft)
LED manufacturer Osram
Minimum LED lifetime 50,000 hours (to >70% luminous output)*
**Figure obtained under manufacturer's test conditions*

BEAM ANGLE (COVE MODEL)

Beam angle 105°

BEAM ANGLE (GRAZE MODEL)

Narrow 15°
Medium 60°
Asymmetric 17° x 67°

PHOTOMETRICS

	310 Graze	1210 Graze
Total luminous output	705 lumens	2820 lumens
Red output	174 lumens	696 lumens
Green output	435 lumens	1739 lumens
Blue output	102 lumens	407 lumens
White output	615 lumens	2460 lumens

PHOTOMETRICS

	310 Cove	1210 Cove
Total luminous output	793 lumens	3180 lumens
Red output	196 lumens	783 lumens
Green output	489 lumens	1954 lumens
Blue output	114 lumens	456 lumens
White output	690 lumens	2761 lumens

CONSTRUCTION

Housing Aluminum
Finish Clear anodized (standard) or white (optional)
Front Clear polycarbonate with diffuser
Protection rating IP66
IK rating IK08
Corrosion resistance C5-M (very high corrosivity/marine, ISO 12944)
RoHS compliant
Surge protection 4 KV

INSTALLATION

Orientation Any
Minimum distance to illuminated surfaces 0.1 m / 0.3 ft.

ELECTRICAL

Power/data in/thru 8-pin custom connectors
AC power 100-277 V nominal, 50/60 Hz
Power supply unit Auto-ranging electronic switch-mode
Maximum total length of fixtures 15.24 m / 50 ft. (at 120 V)
Maximum total length of fixtures 30.5 m / 100 ft. (at 240 V)
Maximum total length of fixtures 36.5 m / 120 ft. (at 277V)
Maximum total cable length 70 m / 230 ft. (at 120 V)
Maximum total cable length 100 m / 328 ft. (at 240/277 V)
Typical half-cycle RMS inrush current .. 310 model 0.3 A, 1210 model 0.7 A

TYPICAL POWER AND CURRENT

100-240 V, 50/60 Hz 20 W per foot +/- 1 W, PF 0.95 +/- 0.05
277 V, 50/60 Hz 20 W per foot +/- 1 W, PF 0.90 +/- 0.05
Figures are typical, not maximum. Measurements made at nominal voltage with all LEDs at full intensity.

THERMAL

Cooling Convection
Maximum ambient temperature 45° C (113° F)*
Minimum ambient temperature -30° C (-22° F)
Total heat dissipation (calculated, +/- 10%) 70 BTU/hr. per foot
**Above this temperature, the fixture regulates output to protect from overheating*

APPROVALS

EU Safety EN 60598-2-5, EN 60598-2-1, (EN 60598-1), EN 62471, EN 62493
EU EMC: EN 55015, EN 55032 (EN 55103-1), EN 55103-2, EN 61547, EN 61000-3-2, EN 61000-3-3
US Safety ANSI/UL 1598 US EMC: 47 CFR Part 15 Class B
Canadian Safety CSA C22.2 No. 250.0
Australia/NZ RCM

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DIMENSIONS

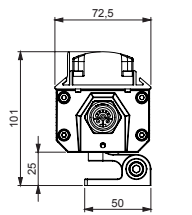
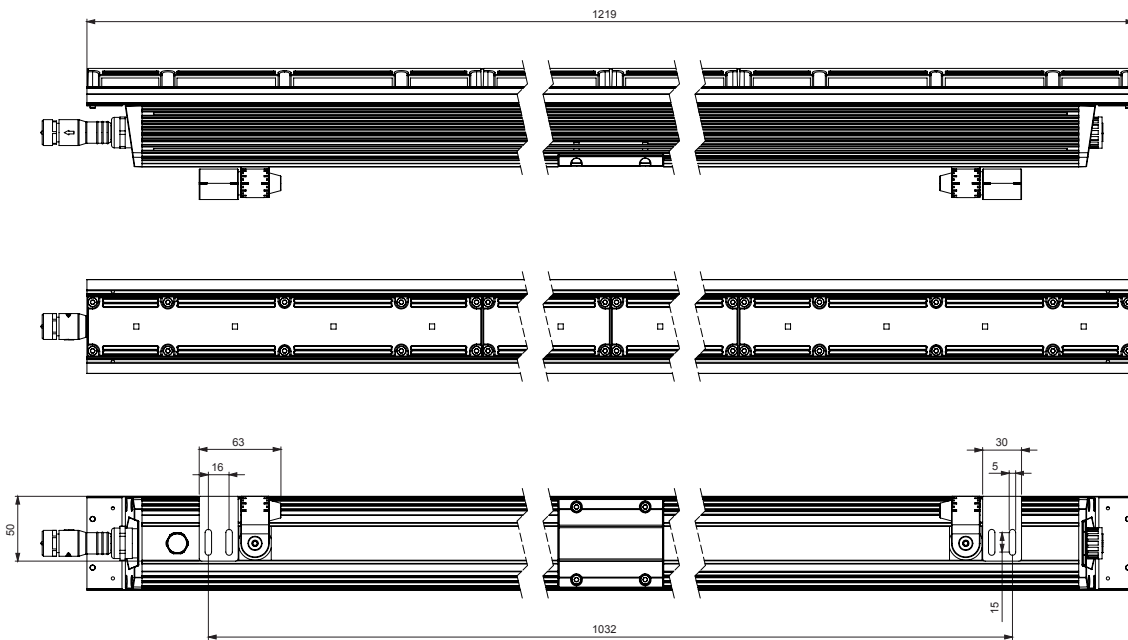
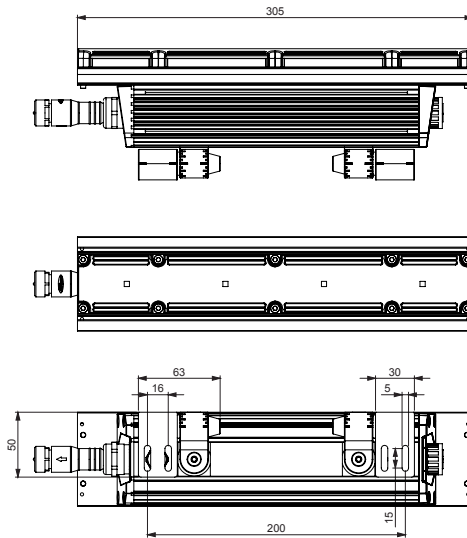
PHYSICAL

310 series (1 ft.) fixtures

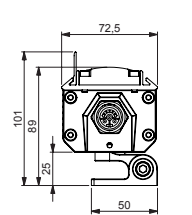
- Length.....305 mm / 12 in.
- Width.....72 mm / 2.8 in.
- Height, Graze.....101 mm / 4.0 in. incl. bracket
- Height, Cove.....89 mm / 3.5 in. incl. bracket
- Weight, Graze.....1.5 kg / 3.4 lbs.
- Weight, Cove.....1.6 kg / 3.6 lbs.

1210 series (4 ft.) fixtures

- Length.....1219 mm / 48 in.
- Width.....72 mm / 2.8 in.
- Height, Graze.....101 mm / 4.0 in. incl. bracket
- Height, Cove.....89 mm / 3.5 in. incl. bracket
- Weight, Graze.....6.0 kg / 13.3 lbs.
- Weight, Cove.....6.4 kg / 14.2 lbs.



QUAD Graze
Mounted with Glare shield (left side)



QUAD Cove
Mounted with Glare shield (left side)