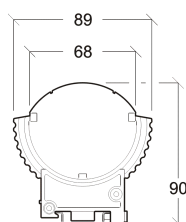
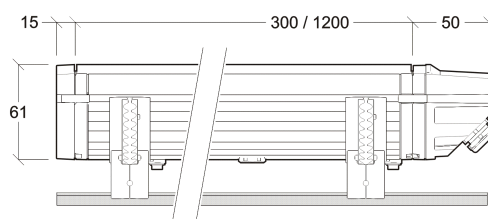


The Extube Series is a modular system of IP65-rated linear LED luminaires designed for the dynamic illumination of facades, bridges and structures. With RGBW color mixing and a choice of diffusers, Extube is ideal for floodlighting, wall-grazing or creating continuous, decorative lines of color, inside or outside.

- 12 or 48 LEDs in 4 colors: Red, Green, Blue and White
- RGBW color mixing
- Choice of optical diffuser films - narrow, medium, wide
- Simple click-together system: cable-less loop-through of power and data
- Easy installation: slides onto DIN rail
- Tiltable for precise optical aiming
- Weatherproof rating: IP65
- Slim, inconspicuous design
- Available in two lengths: 300 mm (12 in.) / 1200 mm (47.2 in.)
- No need for any external power supply, it's all built-in
- Choice of DMX control modes: RGB, RGBW, HSI, HSIC
- Auto-addressing during set-up




Physical Length: 300 mm (11.8 in.) / 1200 mm (47.2 in.), plus end cap 15 mm (0.6 in.) and connections cap 55 mm (2.2 in.) if installed
 Width: 89 mm (3.5 in.)
 Height: 90 mm (3.5 in.) including mounting bracket for DIN rail
 Weight: 300mm model 1.5 kg (3.3 lbs.), 1200mm model 5 kg (11.0 lbs.)

Dynamic Effects Color mixing: RGBW
 Red: 0 - 100%
 Green: 0 - 100%
 Blue: 0 - 100%
 White: 0 - 100%
 Color temperature control: 2 000 - 10 000 K continuous mixing

Optics Light source: Luxeon Rebel high power emitters
 White LED: Neutral white, 3500 - 4500 K, CRI 75
 Total LED power: 300mm models approx. 25 W, 1200mm models approx. 100 W
 Very Narrow (no diffuser), Narrow, Medium and Wide beam angles available

Control and Programming Color control modes: RGB, RGBW, HSI, HSIC
 Control system: DMX
 DMX channels: 3 or 4 on 300mm models, 3, 4, 12 or 16 on 1200mm models
 Grouped pixel control options: 1 x 3 (all as one group) on 300mm models, 1 x 12 (all as one group) or 4 x 3 on 1200mm models

DMX address setting: Martin MUM application, cascading auto-addressing
26-bit control (internal): RGB, RGBW, HSI, HSIC
Protocol: USITT DMX512-A
Receiver: RS-485
Firmware update: Serial upload via DMX link

Construction	Housing: Aluminum Finish: Clear anodized, black or white Front glass: UV-resistant clear polycarbonate End covers: PA6 nylon Mounting brackets: PA6 nylon Protection rating: IP65
Installation	Orientation: Any Aiming: +/- 90° in 25 steps of approx. 7° Mounting: 35 mm (1.4 in.) DIN top-hat rail Maximum interconnected length per power input: 26 m (85.3 ft.) at 230-240 V, 22 m (72.2 ft.) at 208 V, 13 m (42.7 ft.) at 110-120 V, or 11 m (36.1 ft.) at 100 V
Connections	Power connection: 1.8 m (5.9 ft.) cable tail Data connection: 1.8 m (5.9 ft.) cable tail Fixture-to-fixture: Quick IP65 plug-in system
Electrical	AC power: 100-120/200-240 V nominal, 50/60 Hz Max. peak inrush current: 300mm models 250 mA; 1200mm models 1 A Standby power: 300mm models 3 W; 1200mm models 12 W Power supply unit: Integrated, auto-sensing multi-voltage
Thermal	Cooling: Convection Maximum ambient temperature (Ta max.): 45° C (113° F) Minimum ambient temperature (Ta min.): -30° C (-22° F), power must be maintained below 0° C (32° F) Maximum surface temperature, steady state, Ta=40° C (104° F): 90° C (194° F) Total heat dissipation (calculated, +/- 10%): 300mm models 110 BTU/hr.; 1200mm models 440 BTU/hr.
Approvals	 EU safety: EN 60598-1, EN 60598-2-1 LED Safety: IEC 60825-1, 2001; IEC 62471, 2006 EU EMC: EN 55 015, EN 55 103, EN 61 000-3 US safety (pending): UL 1598 Canadian safety (pending): CAN/CSA C.22.2 No. 250
Included Items	Extube 300 mm 2 x adjustable brackets for mounting on DIN rail 2 x Extube locking clips 300mm diffuser, Medium: P/N 41600115 300mm diffuser, Wide: P/N 41600116 Extube 1200 mm 2 x adjustable brackets for mounting on DIN rail 2 x Extube locking clips Four 300mm diffusers, Medium Four 300mm diffusers, Wide Extube Power Connection Kit, EU and US types Input cap with 1.8 m (5.9 ft.) power and data cable tails End cap with integral DMX termination User manual: P/N 35000212 4 x Extube locking clips
Accessories	250 mm (9.8 in.) Extension Kit (output cap, cable and input cap), EU/US: P/N 91610094 2000 mm (78.7 in.) Extension Kit (output cap, cable and input cap), EU/US: P/N 91610095 300mm diffuser, Medium: P/N 41600115

300mm diffuser, Wide: P/N 41600116
 Four 300mm diffusers, Narrow: P/N 91610098
 Four 300mm diffusers, Medium: P/N 91610099
 Four 300mm diffusers, Wide: P/N 91610100
 DIN rail set (ten 2 m (6.6 ft.) lengths): P/N 91602009
1200mm models use 4 x 300mm diffusers

Ordering Information

Extube Power Connection Kit, EU type: P/N 91610086
 Extube Power Connection Kit, US type: P/N 91610087
 Extube 300mm, Aluminum, Narrow: P/N 90352200
 Extube 300mm, Black, Narrow: P/N 90352201
 Extube 300mm, White, Narrow: P/N 90352202
 Extube 1200mm, Aluminum, Narrow: P/N 90352210
 Extube 1200mm, Black, Narrow: P/N 90352211
 Extube 1200mm, White, Narrow: P/N 90352212

Photometric Data

1200mm, Very Narrow (Balanced white 5600 Kelvin)	Efficacy: 9.3 lumens per watt Half-peak angle: 19° Total output: 1200 lm
1200mm, Very Narrow (All LEDs on)	Efficacy: 8.1 lumens per watt Half-peak angle: 19° Total output: 1000 lm
1200mm, Very Narrow (Only 12 x blue LEDs on)	Efficacy: 1.7 lumens per watt Half-peak angle: 19° Total output: 120 lm
1200mm, Very Narrow (Only 12 x white LEDs on)	Efficacy: 10 lumens per watt Half-peak angle: 19° Total output: 680 lm
1200mm, Very Narrow (Only 12 x green LEDs on)	Efficacy: 9.9 lumens per watt Half-peak angle: 20° Total output: 670 lm
1200mm, Very Narrow (Only 12 x red LEDs on)	Efficacy: 5.9 lumens per watt Half-peak angle: 20° Total output: 280 lm
1200mm, Narrow (Only 12 x white LEDs on)	Efficacy: 9.6 lumens per watt Half-peak angle: 26° Total output: 650 lm
1200mm, Narrow (Balanced white 5600 Kelvin)	Efficacy: 9 lumens per watt Half-peak angle: 27° Total output: 1200 lm
1200mm, Narrow (All LEDs on)	Efficacy: 7.9 lumens per watt Half-peak angle: 27° Total output: 1000 lm
1200mm, Narrow (Only 12 x blue LEDs on)	Efficacy: 1.7 lumens per watt Half-peak angle: 27° Total output: 110 lm
1200mm, Narrow (Only 12 x red LEDs on)	Efficacy: 5.7 lumens per watt Half-peak angle: 27° Total output: 270 lm
1200mm, Narrow (Only 12 x green LEDs on)	Efficacy: 9.5 lumens per watt

	Half-peak angle: 28° Total output: 650 lm
1200mm, Medium (Only 12 x white LEDs on)	Efficacy: 9 lumens per watt Half-peak angle: 32° Total output: 610 lm
1200mm, Medium (All LEDs on)	Efficacy: 7.5 lumens per watt Half-peak angle: 33° Total output: 960 lm
1200mm, Medium (Only 12 x blue LEDs on)	Efficacy: 1.6 lumens per watt Half-peak angle: 33° Total output: 110 lm
1200mm, Medium (Only 12 x red LEDs on)	Efficacy: 5.4 lumens per watt Half-peak angle: 33° Total output: 260 lm
1200mm, Medium (Balanced white 5600 Kelvin)	Efficacy: 8.7 lumens per watt Half-peak angle: 33° Total output: 1100 lm
1200mm, Medium (Only 12 x green LEDs on)	Efficacy: 9.2 lumens per watt Half-peak angle: 34° Total output: 630 lm
1200mm, Wide (Only 12 x white LEDs on)	Efficacy: 8.7 lumens per watt Half-peak angle: 39° Total output: 590 lm
1200mm, Wide (Balanced white 5600 Kelvin)	Efficacy: 8.4 lumens per watt Half-peak angle: 40° Total output: 1100 lm
1200mm, Wide (All LEDs on)	Efficacy: 7.2 lumens per watt Half-peak angle: 40° Total output: 930 lm
1200mm, Wide (Only 12 x red LEDs on)	Efficacy: 5.1 lumens per watt Half-peak angle: 40° Total output: 250 lm
1200mm, Wide (Only 12 x blue LEDs on)	Efficacy: 1.5 lumens per watt Half-peak angle: 41° Total output: 100 lm
1200mm, Wide (Only 12 x green LEDs on)	Efficacy: 8.7 lumens per watt Half-peak angle: 42° Total output: 590 lm
300mm, Very Narrow (All LEDs on)	Efficacy: 8.1 lumens per watt Half-peak angle: 19° Total output: 260 lm
300mm, Very Narrow (Balanced white 5600K)	Efficacy: 9.3 lumens per watt Half-peak angle: 19° Total output: 300 lm
300mm, Very Narrow (Only 3 x blue LEDs on)	Efficacy: 1.7 lumens per watt Half-peak angle: 19° Total output: 30 lm
300mm, Very Narrow (Only 3 x white LEDs)	Efficacy: 10 lumens per watt

	on)	Half-peak angle: 19° Total output: 170 lm
300mm, Very Narrow (Only 3 x green LEDs on)	on)	Efficacy: 9.8 lumens per watt Half-peak angle: 20° Total output: 170 lm
300mm, Very Narrow (Only 3 x red LEDs on)	on)	Efficacy: 5.9 lumens per watt Half-peak angle: 20° Total output: 70 lm
300mm, Narrow (Only 3 x white LEDs on)	on)	Efficacy: 9.6 lumens per watt Half-peak angle: 26° Total output: 160 lm
300mm, Narrow (Only 3 x red LEDs on.)	on.)	Efficacy: 5.7 lumens per watt Half-peak angle: 27° Total output: 70 lm
300mm, Narrow (All LEDs on)	on)	Efficacy: 7.8 lumens per watt Half-peak angle: 27° Total output: 250 lm
300mm, Narrow (Balanced white 5600K)	on)	Efficacy: 9 lumens per watt Half-peak angle: 27° Total output: 290 lm
300mm, Narrow (Only 3 x blue LEDs on)	on)	Efficacy: 1.6 lumens per watt Half-peak angle: 27° Total output: 30 lm
300mm, Narrow (Only 3 x green LEDs on)	on)	Efficacy: 9.5 lumens per watt Half-peak angle: 28° Total output: 160 lm
300mm, Medium (Only 3 x white LEDs on)	on)	Efficacy: 9.1 lumens per watt Half-peak angle: 32° Total output: 150 lm
300mm, Medium (Only 3 x red LEDs on)	on)	Efficacy: 5.3 lumens per watt Half-peak angle: 33° Total output: 60 lm
300mm, Medium (All LEDs on)	on)	Efficacy: 7.6 lumens per watt Half-peak angle: 33° Total output: 240 lm
300mm, Medium (Balanced white 5600K)	on)	Efficacy: 8.7 lumens per watt Half-peak angle: 33° Total output: 280 lm
300mm, Medium (Only 3 x blue LEDs on)	on)	Efficacy: 1.6 lumens per watt Half-peak angle: 33° Total output: 30 lm
300mm, Medium (Only 3 x green LEDs on)	on)	Efficacy: 9.2 lumens per watt Half-peak angle: 34° Total output: 160 lm
300mm, Wide (Only 3 x white LEDs on)	on)	Efficacy: 8.7 lumens per watt Half-peak angle: 39° Total output: 150 lm
300mm, Wide (Only 3 x red LEDs on)	on)	Efficacy: 5 lumens per watt

Half-peak angle: 40°
Total output: 60 lm

300mm, Wide (All LEDs on) Efficacy: 7.2 lumens per watt
Half-peak angle: 40°
Total output: 230 lm

300mm, Wide (Balanced white 5600K) Efficacy: 8.3 lumens per watt
Half-peak angle: 40°
Total output: 270 lm

300mm, Wide (Only 3 x blue LEDs on) Efficacy: 1.4 lumens per watt
Half-peak angle: 40°
Total output: 20 lm

300mm, Wide (Only 3 x green LEDs on) Efficacy: 8.5 lumens per watt
Half-peak angle: 42°
Total output: 140 lm

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