

STR9® IG

UNIBODY COLOR-AMP®
GVA TECHNOLOGY GVA TECHNOLOGY

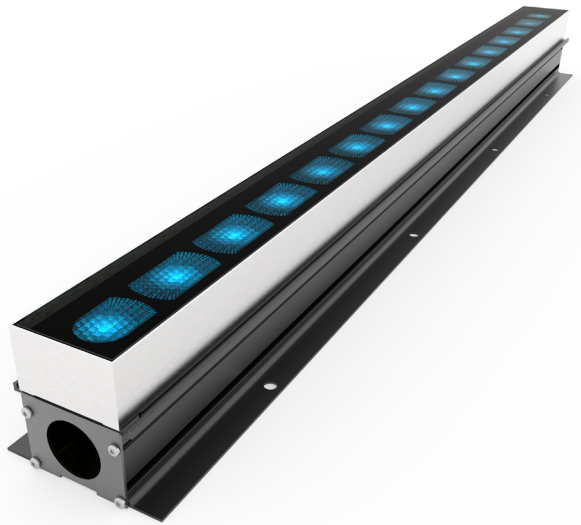


2021-11-09

GVA
LIGHTING

INGROUND Color Changing Linear Wall Washing and Grazing LED Lighting

PRODUCT SPECIFICATION SHEET

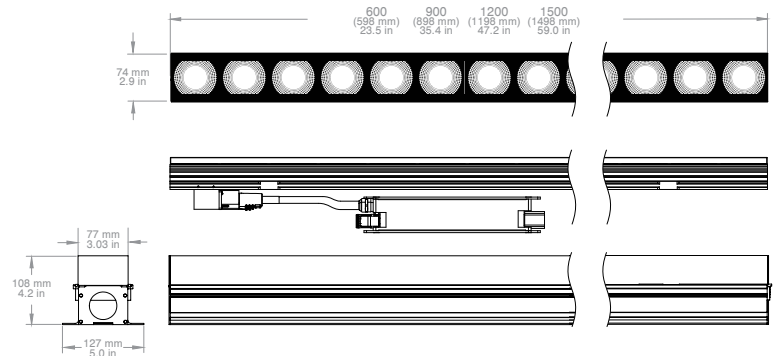


DATE: _____

TYPE: _____

COMPANY: _____

PROJECT: _____



FEATURES

Lighting Performance:

- Up to 2040 lumens/meter (626 lumens/foot)
- COLOR-AMP® technology allows up to three times higher light output in specific colors
- Outstanding color mixing (no striations or colour separation)
- Homogenous light output immediately adjacent to luminaire
- Color match with FL Series

Mechanical Details:

- Trimless inground luminaire, stainless steel top frame and aluminum body for improved thermal performance
- Compact size, 77 mm (3.03 in) wide, 108mm (4.2 in) high
- IP68 rated luminaire with proprietary sealing process and solid extruded, anodized aluminum UNIBODY™ design
- Electronic micro leak detection test performed for each hermetically sealed fixture
- Meets 3G ANSI C136.31-2010 Vibration Standard for Bridge and Overpass Applications
- IK10 with 10mm optically clear tempered glass lens (no yellowing over time)
- Through wiring via snap-in and lock connectors

Control:

- DMX control through GVA's power-data equipment
- 300mm resolution, each 300mm section can be addressed individually, self-addressing fixtures

Projected Lifetime: L70 > 65,000hrs @ $t_a = 50^\circ\text{C}$ (122°F)

Operating Temperatures: -40°C to $+50^\circ\text{C}$ (-40°F to 122°F)

SPECIFICATION LOGIC

LUMINAIRE + IG-BOX + IG-POD

LUMINAIRE							
FAMILY	NOMINAL LENGTH	FINISH	POWER per 300mm (1ft)	LED COLOR	OPTICS (FWHM)	TILT	OPTIONAL
STR9-IG	300 ¹	TL - Trimless	10W 15W 20W	RGB RGBA RGBW30K	10°x10° ¹	0 - No Tilt	NL - No Louver MLH - Micro Louver, Horizontal MLV - Micro Louver, Vertical IHL - Internal Honeycomb Louver
	600				12°x 12°		
	900				15°x 15°		
	1200				30°x30°		
	1500				60°x60°		
					80°x80°		
					10°x30°		
					10°x60°		
					10°x90°		
					30°x60°		
					15°x15°x20°L		
					15°x15°x20°R		
					20°x60°x8°L		
					20°x60°x8°R		
PRODUCT CONFIGURATION							

1. Custom; consult factory, some restrictions apply
2. Other distributions available; Consult factory.

STR9[®] IG

UNIBODY COLOR-AMP[®]
GVA TECHNOLOGY GVA TECHNOLOGY



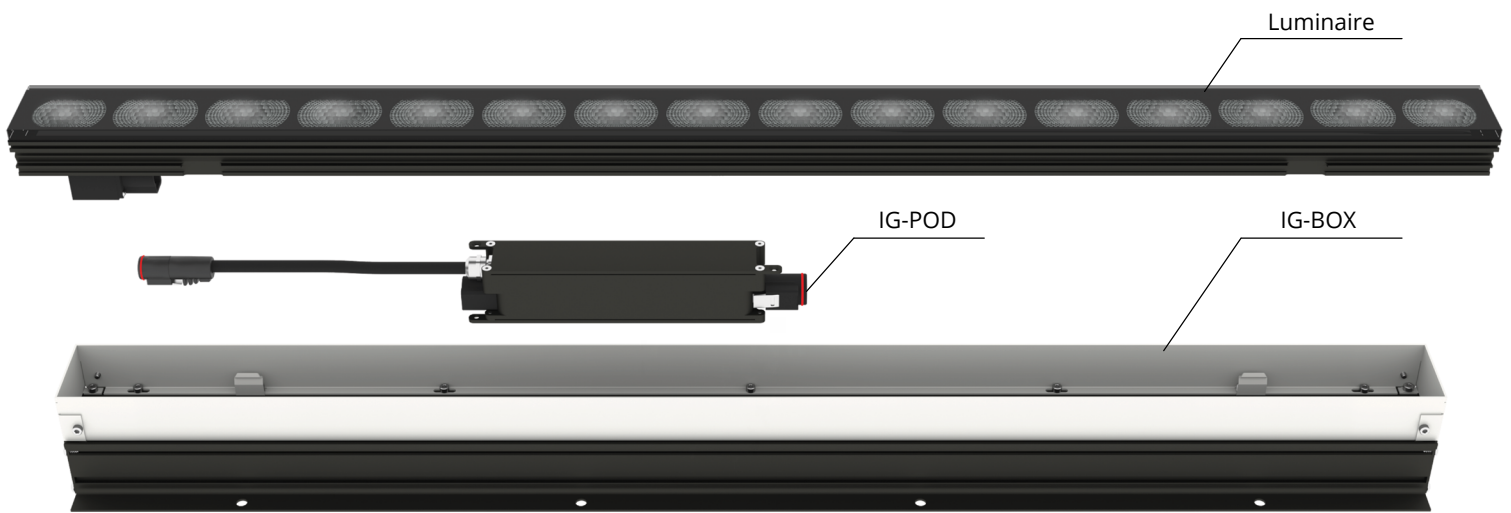
GVA
LIGHTING

INGROUND Color Changing Linear Wall Washing and Grazing LED Lighting

PRODUCT SPECIFICATION SHEET

IG-BOX						
PART NUMBER	DESCRIPTION	LENGTH	WIDTH	HEIGHT	WEIGHT	
G00762	IG-BOX-TL-600	598 mm 23.54in	127mm 5.0in	107.5mm 4.23in	3.7kg 8.2lbs	
G00647	IG-BOX-TL-900	898 mm 35.35in			5.5kg 12.1lbs	
G00648	IG-BOX-TL-1200	1198 mm 47.47in			7.3kg 16.09lbs	
G00649	IG-BOX-TL-1500	1498 mm 58.98in			9.1kg 20.0lbs	
IG-POD						
PART NUMBER	DESCRIPTION	LENGTH	WIDTH	HEIGHT	WEIGHT	
G20462	IG-POD-50W-120~277VAC	284.3 mm 11.19 in	46 mm 1.81 in	53.8 mm 2.11 in	1.04 kg 2.29 lbs	
G20463	IG-POD-100W-120~277VAC				1.2 kg 2.65 lbs	
G20482	IG-POD, ELV				0.9 kg 1.98 lbs	

STR9-IG EXPLODED VIEW





INGROUND Color Changing Linear Wall Washing and Grazing LED Lighting

PRODUCT SPECIFICATION SHEET

PRODUCT SPECIFICATIONS		600	900	1200	1500	
Nominal Length						
Electrical	Nominal Wattage					
	Power Consumption for 48VDC Input	10W/ft 15W/ft 20W/ft	20W 30W 40W	30W 45W 60W	40W 60W 75W	50W 75W 100W
	Power Consumption for 120-277VAC Input	10W/ft 15W/ft 20W/ft	23.7W 34.6W 44.5W	34.5W 51.2W 65W	45.9W 69W 89W	56.8W 85.2W 110W
Optical	Light Source	4 x High Power 4 in 1 LEDs per 300mm (1ft)				
	COLOR-AMP™ 10W Lumen Output (typical) ^{1,2}	Red	438 lm	657 lm	876 lm	1095lm
		Green	572 lm	858 lm	1,144 lm	1430lm
		Blue	198 lm	297 lm	396 lm	495lm
		Amber	338 lm	507 lm	676 lm	845lm
		White (3000K)	784 lm	1,176 lm	1,568 lm	1960lm
		All on RGB	542 lm	813 lm	1,084 lm	1355lm
		All on RGBA	552 lm	828 lm	1,104 lm	1380lm
		All on RGBW30K	690 lm	1,035 lm	1,380 lm	1725lm
	COLOR-AMP™ 15W Lumen Output (typical) ^{1,2}	Red	456 lm	684 lm	912 lm	1140lm
Green		736 lm	1,104 lm	1,472 lm	1840lm	
Blue		268 lm	402 lm	536 lm	670lm	
Amber		378 lm	567 lm	756 lm	945lm	
White (3000K)		990 lm	1,485 lm	1,980 lm	2475lm	
All on RGB		742 lm	1,113 lm	1,484 lm	1855lm	
All on RGBA		770 lm	1,155 lm	1,540 lm	1925lm	
All on RGBW30K		982 lm	1,473 lm	1,964 lm	2455lm	
COLOR-AMP™ 20W Lumen Output (typical) ^{1,2}	Red	642 lm	963 lm	1,284 lm	1605lm	
	Green	798 lm	1,197 lm	1,596 lm	1995lm	
	Blue	278 lm	417 lm	556 lm	695lm	
	Amber	390 lm	585 lm	780 lm	975lm	
	White (3000K)	1,074 lm	1,611 lm	2,148 lm	2685lm	
	All on RGB	884 lm	1,326 lm	1,768 lm	2210lm	
	All on RGBA	894 lm	1,341 lm	1,788 lm	2235lm	
	All on RGBW30K	1,216 lm	1,824 lm	2,432 lm	3040lm	
Projected Lumen Maintenance	L70 > 65,000 hrs @ t _a = 50°C (122°F)					
Control	Control Protocol	DMX control through GVA's Power-Data Equipment, 300mm (1ft) resolutions				
Physical	Luminaire	1.1kg 2.43lbs	2.2kg 4.85lbs	3.3kg 7.27lbs	4.4kg 9.70lbs	
	IG-BOX	Innovative and time proven UNIBODY™ design – machined from a solid aluminum extrusion to provide a hermetically sealed luminaire				
	IG-POD	Stainless steel top frame fastened to aluminum channel				
	Corrosion Resistance	Innovative and time proven UNIBODY™ design – machined from a solid aluminum extrusion to provide a hermetically sealed enclosure				
Temperature Ranges	Rated Operation Temperature	Assembled with parts made of corrosion resistant stainless steel and aluminum coated with multiple corrosion resistant layers				
	Minimum Starting Temperature	-40°C to +50°C (-22°F to 122°F)				
	Storage Temperature	-30°C (-22°F)				
Certification & Safety	IEC Classifications	-40°C to +85°C (-22°F to 185°F)				
	Certifications					
	Environment	Luminaire class III QPS (US Field Evaluation) or ETL (Special Electrical Equipment Inspection) where applicable CE Certified RoHS Compliant Constructed to meet requirements outlined in UL1598 & IEC60598 Meets ANSI C136.31, 3G Vibration standard for bridge and overpass applications Dry, damp, or wet locations, 0-100% humidity, IP68				

1. Measurement data provided for 10 degree beam angle fixtures
 2. Please consult factory for most recent photometric data

These figures are subject to change due to further development and innovations of LED light sources



MAXIMUM RUN LENGTHS ¹								
		10W	15W	20W		10W	15W	20W
ELV	600	15.6 m	10.2 m	7.8 m		51.2 ft	33.5 ft	25.6 ft
	900	15.3 m	9.9 m	8.1 m		50.2 ft	32.5 ft	26.6 ft
	1200	15.6 m	10.8 m	7.2 m		51.2 ft	35.4 ft	23.6 ft
	1500	15.0 m	10.5 m	7.5 m		49.2 ft	34.4 ft	24.6 ft
120VAC	600	46.2 m	31.2 m	23.4 m		151.6 ft	102.4 ft	76.8 ft
	900	46.8 m	31.5 m	23.4 m		153.5 ft	103.3 ft	76.8 ft
	1200	46.8 m	31.2 m	24.0 m		153.5 ft	102.4 ft	78.7 ft
	1500	48.0 m	31.5 m	24.0 m		157.5 ft	103.3 ft	78.7 ft
240VAC	600	92.4 m	63.6 m	48.6 m		303.1 ft	208.7 ft	159.4 ft
	900	95.4 m	64.8 m	46.8 m		313.0 ft	212.6 ft	153.5 ft
	1200	97.2 m	62.4 m	48.0 m		318.9 ft	204.7 ft	157.5 ft
	1500	97.5 m	64.5 m	48.0 m		319.9 ft	211.6 ft	157.5 ft
277VAC ²	600	10.8 m	10.8 m	10.8 m		35.4 ft	35.4 ft	35.4 ft
	900	16.2 m	16.2 m	8.1 m		53.1 ft	53.1 ft	26.6 ft
	1200	21.6 m	10.8 m	10.8 m		70.9 ft	35.4 ft	35.4 ft
	1500	27.0 m	13.5 m	13.5 m		88.6 ft	44.3 ft	44.3 ft

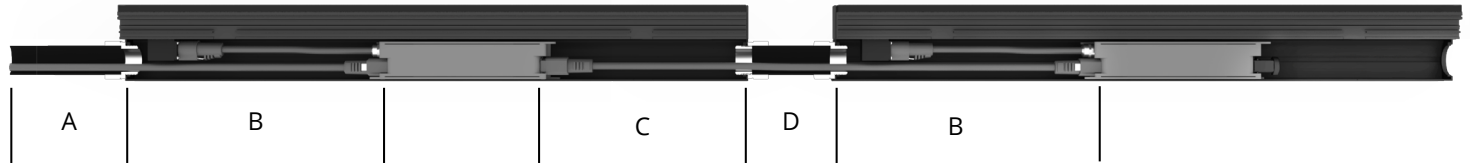
Ratings are for 30°C, de-rating will be used for higher ambient temperatures. Contact factory for applications support.

1. Run lengths may vary depending on luminaire length combination chosen. Please consult factory for layout configuration. Values calculated for 3 m leader cable and 0.3 m distance between luminaires.

2. Type D breaker required for 277VAC.



LEADER AND JUMPER CABLE SELECTION GUIDE



- A - Cable length from Power Data Equipment to input side of IG-BOX
- B - Cable length from input side of IG-BOX to input of IG-POD
- C - Cable length from output of IG-POD to output side of IG-BOX
- D - Cable length required for gap between STR9-IG assemblies

LEADER CABLE LENGTH SELECTION

STR9-IG NOMINAL LENGTH	B	A
600	0.43m 17 in	DETERMINED BY ON-SITE REQUIREMENT
900		
1200		
1500		

REQUIRED LEADER CABLE LENGTH = A + B
Round up to the next standard size. Refer to page 5.

Leader Cable Selection Example:

Input values:

- A = 5 m (value determined by on-site requirement)
- B = 0.43m (fixed value from Leader Cable Selection table)

Calculations:

$$L_{(\text{Leader Cable})} = B + A$$

$$L_{(\text{Leader Cable})} = 0.43 \text{ m} + 5 \text{ m}$$

$$L_{(\text{Leader Cable})} = 5.43 \text{ m}$$

Round up to next standard size. Refer to page 5.

$$L_{(\text{Leader Cable})} = 6.0 \text{ m}$$

JUMPER CABLE LENGTH SELECTION

STR9-IG NOMINAL LENGTH	C + B	D
600	0.43 m 17 in	DETERMINED BY ON-SITE REQUIREMENT
900	0.73 m 28 3/4 in	
1200	1.03 m 40 9/16 in	
1500	1.33 m 52 3/8 in	

REQUIRED JUMPER CABLE LENGTH = C + B + D
Round up to the next standard size. Refer to page 5.

Jumper Cable Selection Example:

Input values:

- C + B = 1.03 m (1200 mm STR9-IG used)
- D = 1.6 m (value determined by on-site requirement)

Calculations:

$$L_{(\text{Jumper Cable})} = C + B + D$$

$$L_{(\text{Jumper Cable})} = 1.03 \text{ m} + 1.6 \text{ m}$$

$$L_{(\text{Jumper Cable})} = 2.63 \text{ m}$$

Round up to next standard size. Refer to page 5.

$$L_{(\text{Jumper Cable})} = 3.0 \text{ m}$$



ORDERING LOGIC: COMMON COMPONENTS

STR9 LEADER CABLE ELV

PART NUMBER	NOMINAL LENGTH	WEIGHT	INPUT	OUTPUT
141481	3.0 m (9 ft)	420 g (0.93 lbs)		
141484	6.0 m (19 ft)	815 g (1.80 lbs)		
141487	9.0 m (30 ft)	1210 g (2.67 lbs)		
141489	15.0m (50 ft)	2000 g (4.41 lbs)		
141492	30.0 m (100 ft)	3975 g (8.76 lbs)		

STR9 REVERSE LEADER CABLE ELV (ONLY USED WITH PDR)

PART NUMBER	NOMINAL LENGTH	WEIGHT	INPUT	OUTPUT
142231	3.0 m (9 ft)	420 g (0.93 lbs)		
142234	6.0 m (19 ft)	815 g (1.80 lbs)		
142237	9.0 m (30 ft)	1210 g (2.67 lbs)		
142239	15.0m (50 ft)	2000 g (4.41 lbs)		
142242	30.0 m (100 ft)	3975 g (8.76 lbs)		

STR9 JUMPER CABLE ELV

PART NUMBER	NOMINAL LENGTH	WEIGHT	INPUT	OUTPUT
141603	END to END	105 g (0.23 lbs)		
141740	0.6 m (2 ft)	129 g (0.28 lbs)		
141741	0.9 m (3 ft)	169 g (0.37 lbs)		
141742	1.2 m (4 ft)	208 g (0.46 lbs)		
141743	1.5 m (5 ft)	248 g (0.55 lbs)		
141744	1.8 m (6 ft)	287 g (0.63 lbs)		
141758	6.0 m (20 ft)	840 g (1.85 lbs)		
141768	9.0 m (30 ft)	1235 g (2.72 lbs)		

*Not all jumper lengths are shown. Lengths available in 300mm increments. It is mandatory to include jumpers to connect STR9 GEN3 luminaires.

STR9 LEADER CABLE AC

PART NUMBER	NOMINAL LENGTH	WEIGHT	INPUT	OUTPUT
141509	3.0 m (9 ft)	420 g (0.93 lbs)		
141512	6.0 m (19 ft)	815 g (1.80 lbs)		
141515	9.0 m (30 ft)	1210 g (2.67 lbs)		
141517	15.0m (50 ft)	2000 g (4.41 lbs)		
141520	30.0 m (100 ft)	3975 g (8.76 lbs)		

STR9 REVERSE LEADER CABLE AC (ONLY USED WITH PDR)

PART NUMBER	NOMINAL LENGTH	WEIGHT	INPUT	OUTPUT
142792	3.0 m (9 ft)	420 g (0.93 lbs)		
142795	6.0 m (19 ft)	815 g (1.80 lbs)		
142798	9.0 m (30 ft)	1210 g (2.67 lbs)		
142800	15.0m (50 ft)	2000 g (4.41 lbs)		
141803	30.0 m (100 ft)	3975 g (8.76 lbs)		

STR9 JUMPER CABLE AC

PART NUMBER	NOMINAL LENGTH	WEIGHT	INPUT	OUTPUT
141602	END to END	105 g (0.23 lbs)		
141790	0.6 m (2 ft)	129 g (0.28 lbs)		
141791	0.9 m (3 ft)	169 g (0.37 lbs)		
141792	1.2 m (4 ft)	208 g (0.46 lbs)		
141793	1.5 m (5 ft)	248 g (0.55 lbs)		
141794	1.8 m (6 ft)	287 g (0.63 lbs)		
141808	6.0 m (20 ft)	840 g (1.85 lbs)		
141818	9.0 m (30 ft)	1235 g (2.72 lbs)		

*Not all jumper lengths are shown. Lengths available in 300mm increments. It is mandatory to include jumpers to connect STR9 GEN3 luminaires.

STR9 CABLE 3X14 AWG + 1X24 AWG

PART NUMBER	NOMINAL LENGTH	WEIGHT	
280253	Sold per m	132 g (0.291lbs)	

* Raw cable cut to length. Please specify required length.

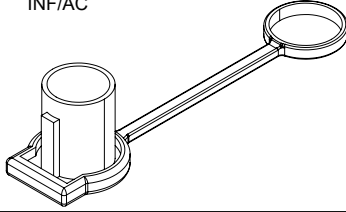
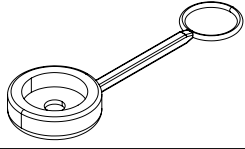


INGROUND Color Changing Linear Wall Washing and Grazing LED Lighting

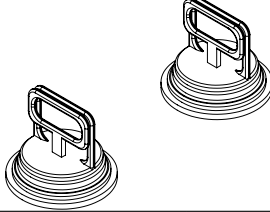
PRODUCT SPECIFICATION SHEET

ORDERING LOGIC: COMMON COMPONENTS

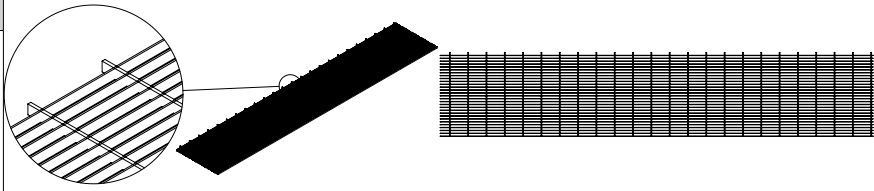
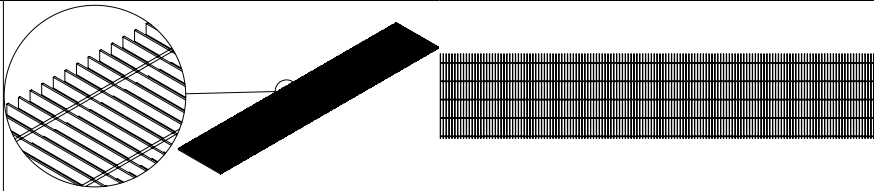
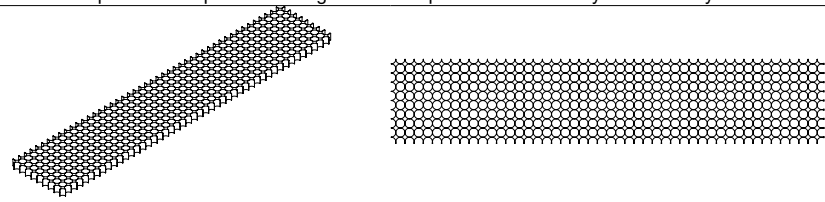
STR9 CONNECTOR CAP, IP67 (Must be used at the end of each run)

PART NUMBER	TYPE	WEIGHT	INF/AC	ELV
231182	STR-ELV	3.40 g (0.11 oz)		
230855	STR9-INF/AC	6.24 g (0.22 oz)		

LUMINAIRE INSTALLATION SUCTION CUP KIT

PART NUMBER	TYPE	WEIGHT	
310224	STR9-IG SUCTION CUPS	150 g (5.3 oz)	

OPTIONAL ACCESSORIES

TYPE	COLOR	WEIGHT (Per 300mm)	
MLH - Micro Louver, Horizontal	BLACK	10 g 0.35 oz	 <p>*Please select option in the specification logic table if required. Item is factory installed only.</p>
MLV - Micro Louver, Vertical	BLACK	10 g 0.35 oz	 <p>*Please select option in the specification logic table if required. Item is factory installed only.</p>
IHL - Internal Honeycomb Louver	BLACK	20 g 0.71 oz	 <p>*Please select option in the specification logic table if required. Item is factory installed only.</p>



INGROUND Color Changing Linear Wall Washing and Grazing LED Lighting

PRODUCT SPECIFICATION SHEET

ORDERING LOGIC: POWER SUPPLIES & POWER DATA EQUIPMENT

ELV POWER DATA BOXES

FAMILY	OUTPUT VOLTAGE	POWER (Watts)		CONTROL INPUT	CONTROL OUTPUT	INPUT VOLTAGE	CONSTRUCTION
		240W	480W				IP66
PDB	ELV (48V)	240W	480W	DMX	48V POWER & ZH DATA	120~277V AC	IP66
		320W	640W				IP30

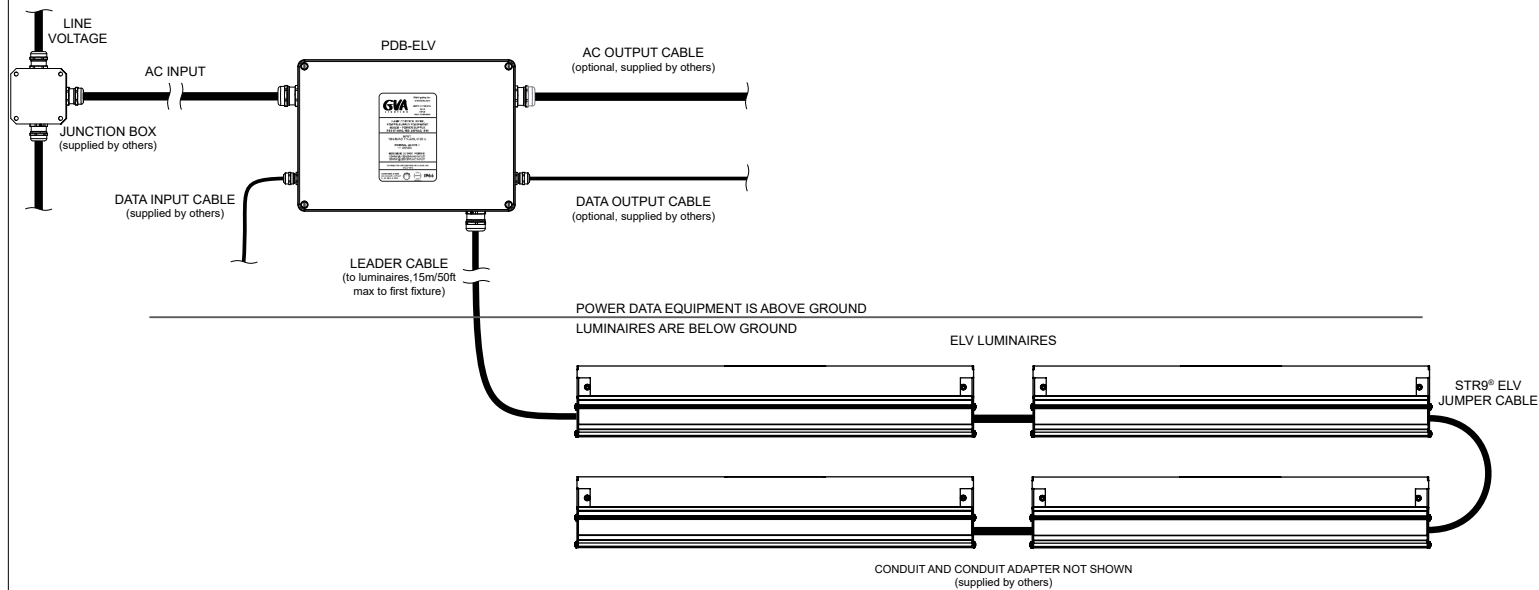
AC POWER-DATA CONVERTORS IP66

PART NUMBER	DESCRIPTION	LENGTH	WIDTH	HEIGHT	WEIGHT	DIMENSIONS	
G20510 G20511	PDC-AC-120~240-1DMX PDC-AC-120~240-DALI/0~10V	260 mm 10.26 in	160 mm 6.30 in	91 mm 3.58 in	3.35 kg 7.39 lbs		
G20250 G20251	PDC-AC-277-1DMX PDC-AC-277-DALI/0~10V	160 mm 6.30 in	160 mm 6.30 in	91 mm 3.58 in	2.06 kg 4.54 lbs		

AC POWER-DATA CONVERTORS IP30

PART NUMBER	DESCRIPTION	LENGTH	WIDTH	HEIGHT	WEIGHT	DIMENSIONS	
G20512 G20513	PDC-AC-120~240-1DMX PDC-AC-120~240-DALI/0~10V	260 mm 10.26 in	160 mm 6.30 in	91 mm 3.58 in	3.35 kg 7.39 lbs		
G20252 G20253	PDC-AC-277-1DMX PDC-AC-277-DALI/0~10V	160 mm 6.30 in	160 mm 6.30 in	91 mm 3.58 in	2.06 kg 4.54 lbs		

TYPICAL SYSTEM DIAGRAM: ELV WITH CONTROL



TYPICAL SYSTEM DIAGRAM: AC WITH CONTROL

