

STR9® IG

UNIBODY GVA TECHNOLOGY COLOR-AMP® GVA TECHNOLOGY



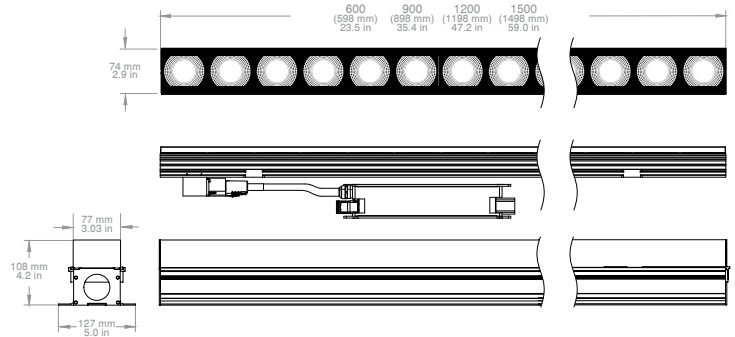
GVA LIGHTING

INGROUND Dynamic White Linear Wall Washing and Grazing LED Lighting

PRODUCT SPECIFICATION SHEET



DATE:	
TYPE:	
COMPANY:	
PROJECT:	



FEATURES

Lighting Performance:

- Up to 3514 lumens/meter (1071 lumens/foot)
- Any color temperature from 2200K to 6000K using a 4 in 1 package (2200K, 3000K, 4000K, 6000K)
- 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

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
- Designed to withstand walk-over loads up to 500 kg on all ground types, and up to 1,000 kg drive-over loads when installed in concrete.
- 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°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'	TL - Trimless	10W	DWT	10°x10° ¹	0 - No Tilt	NL - No Louver
	600		12°x 12°		MLH - Micro Louver, Horizontal		
	900		15W		15°x 15°		MLV - Micro Louver, Vertical
	1200		20W		30°x30°		IHL - Internal Honeycomb
	1500				60°x60°		Louver
					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							

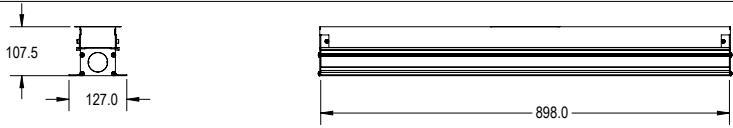
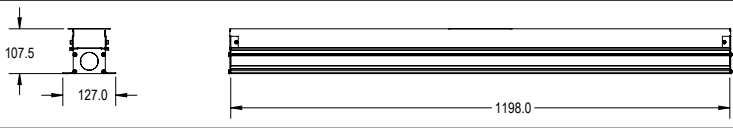
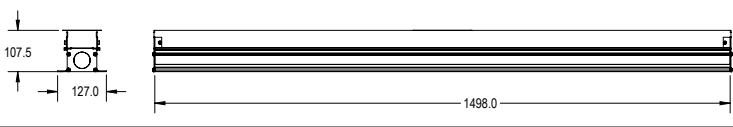
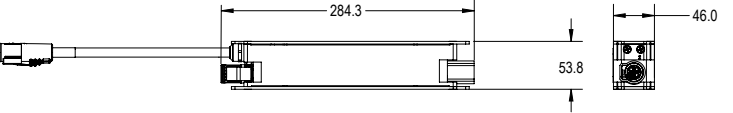
1. Custom; consult factory, some restrictions apply

2. Other distributions available; Consult factory.

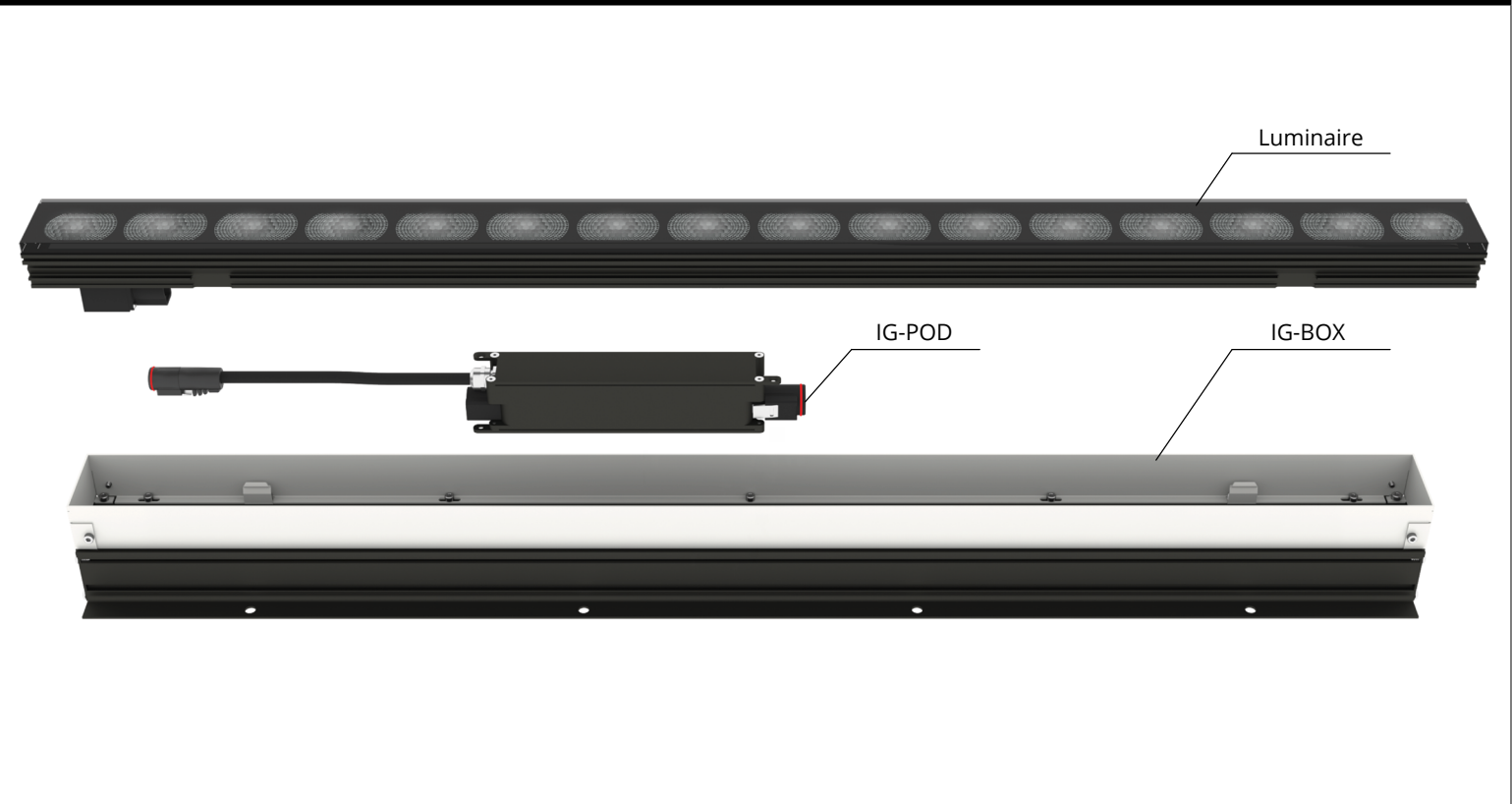


INGROUND Dynamic White Linear Wall Washing and Grazing LED Lighting

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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 Dynamic White Linear Wall Washing and Grazing LED Lighting

PRODUCT SPECIFICATION SHEET

PRODUCT SPECIFICATIONS						
Nominal Length			600	900	1200	1500
Electrical		Nominal Wattage				
	Power Consumption for 48VDC Input	10W/ft	20W	30W	40W	50W
		15W/ft	30W	45W	60W	75W
		20W/ft	40W	60W	75W	100W
Power Consumption for 120-277VAC Input	10W/ft	23.7W	34.5W	45.9W	56.8W	
	15W/ft	34.6W	51.2W	69W	85.2W	
	20W/ft	44.5W	65W	89W	110W	
Optical	Light Source	4 x High Power 4 in 1 LEDs per 300mm (1ft)				
	COLOR-AMP™ 10W Lumen Output (typical) ^{1,2}	White (2200K)	501 lm	751 lm	1,002 lm	1,252 lm
		White (3000K)	826 lm	1,240 lm	1,653 lm	2,066 lm
		White (4000K)	961 lm	1,441 lm	1,921 lm	2,402 lm
		White (6000K)	910 lm	1,364 lm	1,819 lm	2,274 lm
		All on	1,215 lm	1,823 lm	2,431 lm	3,039 lm
	COLOR-AMP™ 15W Lumen Output (typical) ^{1,2}	White (2200K)	632 lm	949 lm	1,265 lm	1,581 lm
		White (3000K)	1,043 lm	1,565 lm	2,087 lm	2,609 lm
		White (4000K)	1,213 lm	1,820 lm	2,426 lm	3,033 lm
		White (6000K)	1,149 lm	1,723 lm	2,297 lm	2,871 lm
All on		1,730 lm	2,595 lm	3,460 lm	4,325 lm	
COLOR-AMP™ 20W Lumen Output (typical) ^{1,2}	White (2200K)	686 lm	1,029 lm	1,372 lm	1,715 lm	
	White (3000K)	1,132 lm	1,698 lm	2,264 lm	2,830 lm	
	White (4000K)	1,316 lm	1,974 lm	2,632 lm	3,290 lm	
	White (6000K)	1,246 lm	1,869 lm	2,492 lm	3,115 lm	
Projected Lumen Maintenance	L70 > 65,000 hrs @ t _a = 50°C (122°F)					
Control		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
		Innovative and time proven UNIBODY™ design – machined from a solid aluminum extrusion to provide a hermetically sealed luminaire				
	IG-BOX	Stainless steel top frame fastened to aluminum channel				
	IG-POD	Innovative and time proven UNIBODY™ design – machined from a solid aluminum extrusion to provide a hermetically sealed enclosure				
	Corrosion Resistance	Assembled with parts made of corrosion resistant stainless steel and aluminum coated with multiple corrosion resistant layers				
Temperature Ranges	Rated Operation Temperature	-40°C to +50°C (-22°F to 122°F)				
	Minimum Starting Temperature	-30°C (-22°F)				
	Storage Temperature	-40°C to +85°C (-22°F to 185°F)				
Certification & Safety	IEC Classifications	Luminaire class III				
	Certifications	     				
		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				
	Environment	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

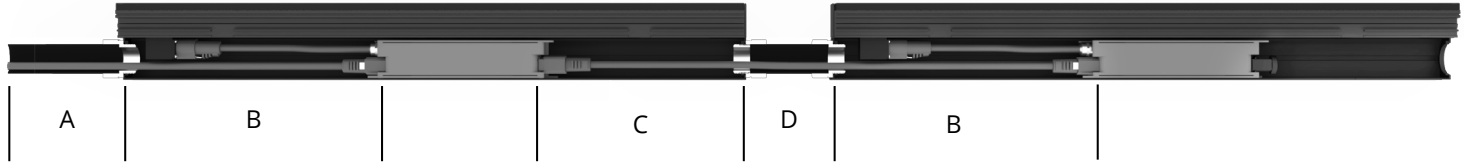
These figures are subject to change due to further development and innovations of LED light sources



MAXIMUM RUN LENGTHS¹								
		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
277VAC²	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:
 $L_{(Leader\ Cable)} = B + A$
 $L_{(Leader\ Cable)} = 0.43\ m + 5\ m$
 $L_{(Leader\ Cable)} = 5.43\ m$

Round up to next standard size. Refer to page 5.
 $L_{(Leader\ Cable)} = 6.0\ m$

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:
 $L_{(Jumper\ Cable)} = C + B + D$
 $L_{(Jumper\ Cable)} = 1.03\ m + 1.6\ m$
 $L_{(Jumper\ Cable)} = 2.63\ m$

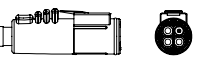
Round up to next standard size. Refer to page 5.
 $L_{(Jumper\ Cable)} = 3.0\ m$

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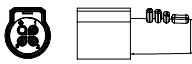
PRODUCT SPECIFICATION SHEET

ORDERING LOGIC: COMMON COMPONENTS

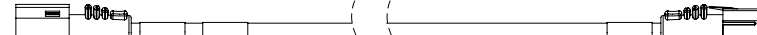
STR9 LEADER CABLE ELV

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)		

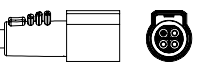
STR9 REVERSE LEADER CABLE ELV (ONLY USED WITH PDR)

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		
141603	END to END	105 g (0.23 lbs)	INPUT  OUTPUT	*Not all jumper lengths are shown. Lengths available in 300mm increments. It is mandatory to include jumpers to connect STR9 GEN3 luminaires.
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)		

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		
141602	END to END	105 g (0.23 lbs)	INPUT   OUTPUT	*Not all jumper lengths are shown. Lengths available in 300mm increments. It is mandatory to include jumpers to connect STR9 GEN3 luminaires.
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)		

STR9 CABLE 3X14 AWG + 1X24 AWG

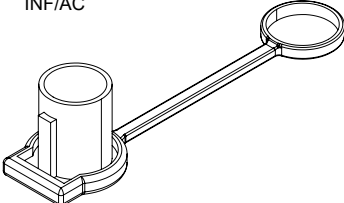
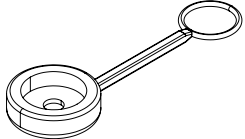
PART NUMBER	NOMINAL LENGTH	WEIGHT	
280253	Sold per m	132 g (0.291lbs)	
* Raw cable cut to length. Please specify required length.			

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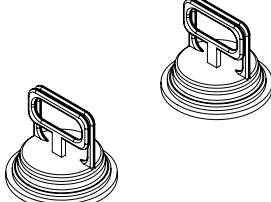
PRODUCT SPECIFICATION SHEET

ORDERING LOGIC: COMMON COMPONENTS

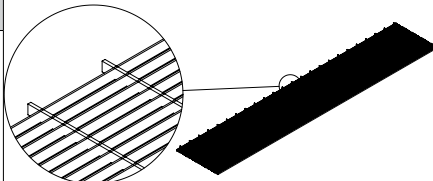
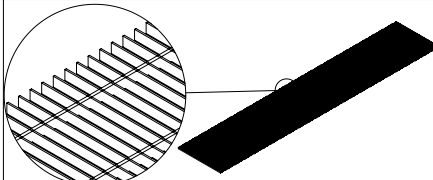
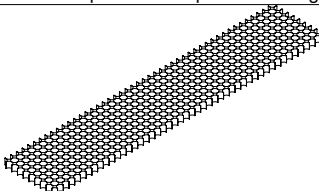
STR9 CONNECTOR CAP, IP67 (Must be used at the end of each run)

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	 *Please select option in the specification logic table if required. Item is factory installed only.
MLV - Micro Louver, Vertical	BLACK	10 g 0.35 oz	 *Please select option in the specification logic table if required. Item is factory installed only.
IHL - Internal Honeycomb Louver	BLACK	20 g 0.71 oz	 *Please select option in the specification logic table if required. Item is factory installed only.



INGROUND Dynamic White Linear Wall Washing and Grazing LED Lighting

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ORDERING LOGIC: POWER SUPPLIES & POWER DATA EQUIPMENT

ELV POWER DATA BOXES

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

POWER-DATA CONVERTORS IP66

PART NUMBER	DESCRIPTION	LENGTH	WIDTH	HEIGHT	WEIGHT	
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	
G20520 G20521	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	

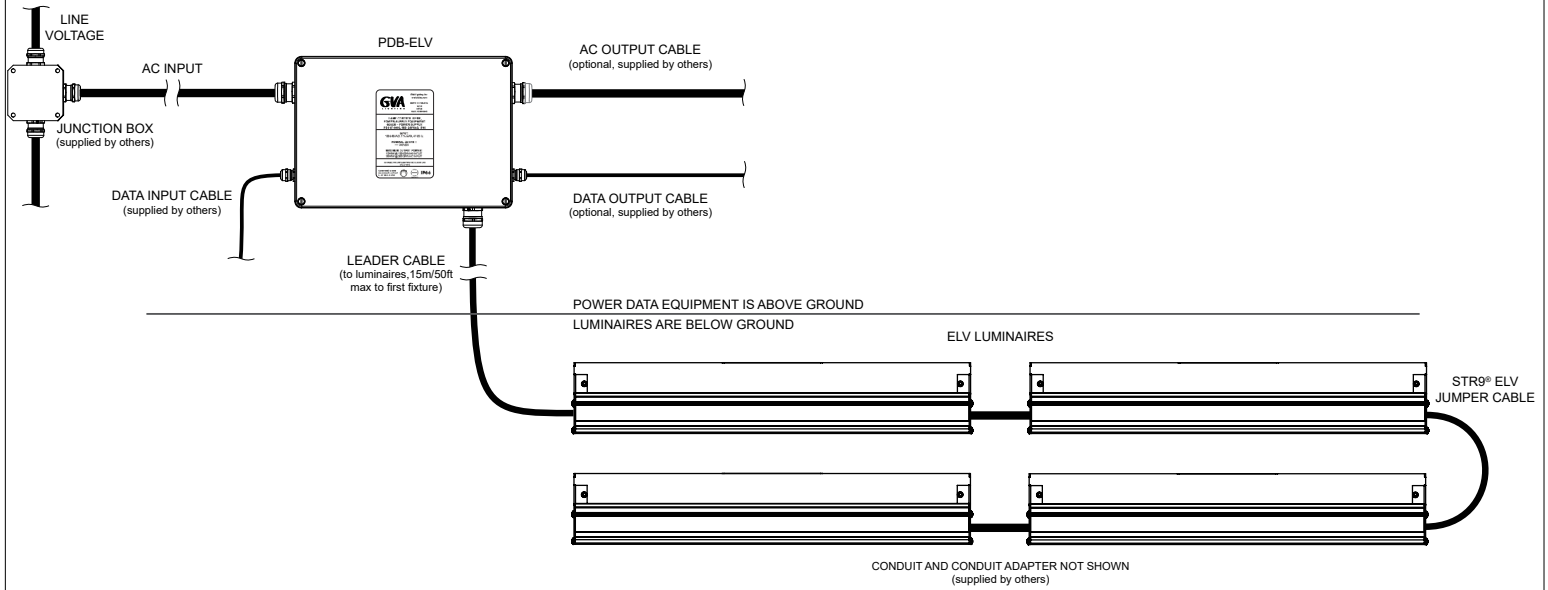
POWER-DATA CONVERTORS IP30

PART NUMBER	DESCRIPTION	LENGTH	WIDTH	HEIGHT	WEIGHT	
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	
G20522 G20523	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	

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TYPICAL SYSTEM DIAGRAM: ELV WITH CONTROL



TYPICAL SYSTEM DIAGRAM: AC WITH CONTROL

