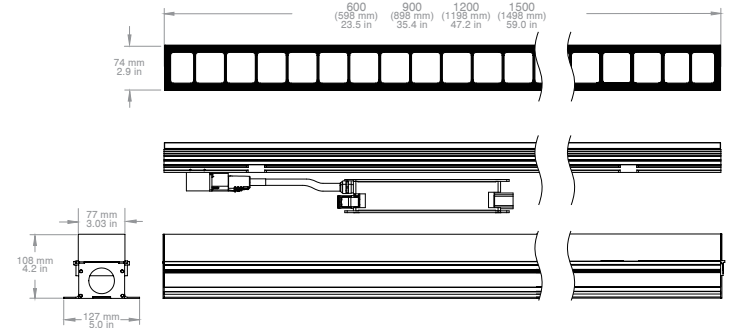


INGROUND Monochromatic Linear Wall Washing and Grazing LED Lighting

PRODUCT SPECIFICATION SHEET



DATE:	
TYPE:	
COMPANY:	
PROJECT:	



FEATURES

Lighting Performance:

- Up to 3755 lumens/meter (1144 lumens/foot)
- Superior quality of white light: excellent LED to LED color consistency
- Diffusing optical film creates uniform light output immediately adjacent to luminaire

Mechanical Details:

- Trimless in-ground 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 > 100,000hrs @ $t_a = 50^\circ\text{C}$ (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 ¹	TL - Trimless	3W	2200K	5°x5°	0 - No Tilt	NL - No Louver MLH - Micro Louver, Horizontal MLV - Micro Louver, Vertical IHL - Internal Honeycomb Louver
	600		5W - ASHRAE/ IESNA	2700K	8°x8°		
	900		10W	3000K	10°x10°		
	1200		15w	3500K	30°x30°		
	1500			4000K	60°x60°		
				5000K	80°x80°		
				6500K	100°x100°		
				RD - Red	5°x10°		
				AM - Amber	5°x30°		
				GR - Green	5°x60°		
				BL - Blue	10°x30°		
				RB - Royal Blue	10°x60°		
					10°x90°		
					20°x60°		
					30°x60°		

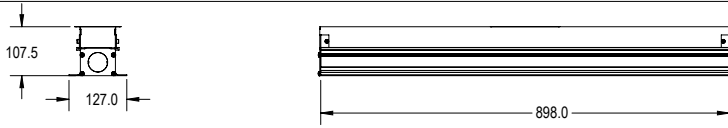
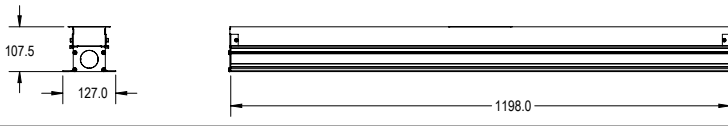
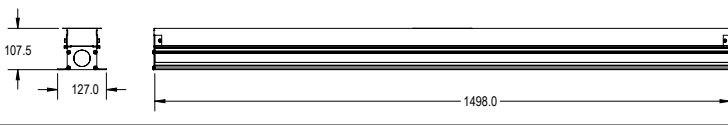
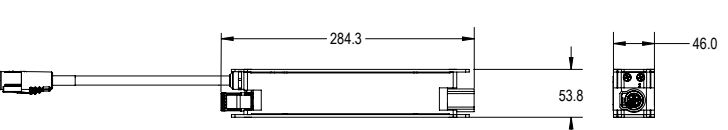
PRODUCT CONFIGURATION

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

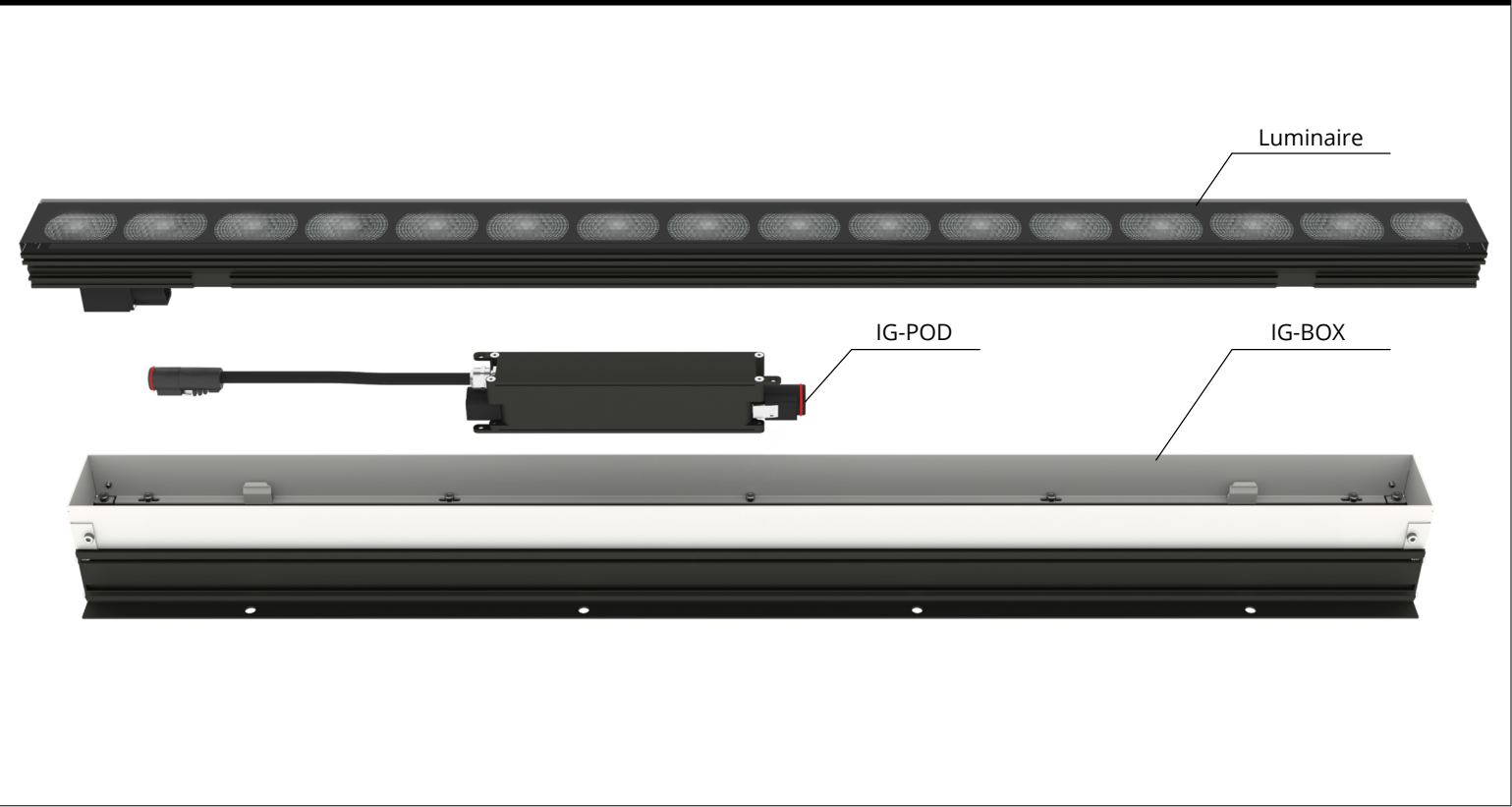


INGROUND Monochromatic Linear Wall Washing and Grazing LED Lighting

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 Monochromatic Linear Wall Washing and Grazing LED Lighting

PRODUCT SPECIFICATION SHEET

PRODUCT SPECIFICATIONS						
Nominal Length			600	900	1200	1500
Electrical	Power Consumption for 48VDC Input	Nominal Wattage				
		3W/ft	6W	9W	12W	15W
		5W/ft	10W	15W	20W	25W
		10W/ft	20W	30W	40W	50W
Electrical	Power Consumption ¹ for 120-277VAC Input	15W/ft	30W	45W	60W	75W
		3W/ft	8.9W	12.1W	15.3W	18.5W
		5W/ft	13.1W	18.5W	23.7W	29W
		10W/ft	23.7W	34.5W	45.9W	56.8W
Optical	Light Source	15W/ft	34.5W	51.2W	69W	85.2W
		6 x High Power LEDs per 300mm (1ft)				
		CRI	>80			
		Lumen Output (typical) ^{2,3}				
Optical	Lumen Output (typical) ^{2,3}	3W	480 lm	720 lm	960 lm	1,200 lm
		5W	794 lm	1,191 lm	1,588 lm	1,985 lm
		10W	1,560 lm	2,340 lm	3,120 lm	3,900 lm
		15W	2,238 lm	3,357 lm	4,476 lm	5,595 lm
Control	Control Protocol	Projected Lumen Maintenance	L70 > 65,000 hrs @ t _a = 50°C (122°F)			
		Control Protocol	DMX, DALI or 0-10V control through GVA Power-Data Equipment			
		Control Protocol for ELV and AC	DMX	300mm (1ft) resolutions		
			DALI	Each run is 1 address		
Physical	Luminaire	0-10V				
		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			
Temperature Ranges	Corrosion Resistance	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			
		Rated Operation Temperature	-40°C to +50°C (-22°F to 122°F)			
		Minimum Starting Temperature	-30°C (-22°F)			
Certification & Safety	Certifications	Storage Temperature	-40°C to +85°C (-22°F to 185°F)			
		IEC Classifications	Luminaire class III			
		Environment	Dry, damp, or wet locations , 0-100% humidity, IP68			
		Environment	Dry, damp, or wet locations , 0-100% humidity, IP68			

1. Measured for 120VAC input voltage

2. Data provided for 4000K, with 10 Degree beam angles. Warmer color temperatures typically have a lower lumen output

3. Please consult factory for most recent photometric data

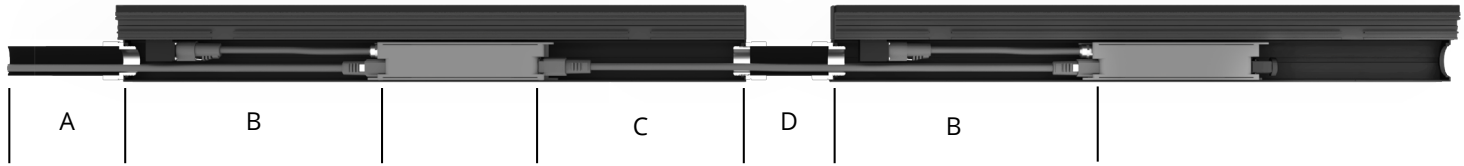
These figures are subject to change due to further development and innovations of LED light sources



MAXIMUM RUN LENGTHS¹										
		3W	5W	10W	15W		3W	5W	10W	15W
ELV	600	51.0 m	30.6 m	15.6 m	10.2 m		167.3 ft	100.4 ft	51.2 ft	33.5 ft
	900	51.3 m	30.6 m	15.3 m	9.9 m		168.3 ft	100.4 ft	50.2 ft	32.5 ft
	1200	51.6 m	31.2 m	15.6 m	10.8 m		169.3 ft	102.4 ft	51.2 ft	35.4 ft
	1500	51.0 m	30.0 m	15.0 m	10.5 m		167.3 ft	98.4 ft	49.2 ft	34.4 ft
120VAC	600	131.4 m	86.4 m	46.2 m	31.2 m		431.1 ft	283.5 ft	151.6 ft	102.4 ft
	900	142.2 m	90.0 m	46.8 m	31.5 m		466.5 ft	295.3 ft	153.5 ft	103.3 ft
	1200	147.6 m	92.4 m	46.8 m	31.2 m		484.3 ft	303.1 ft	153.5 ft	102.4 ft
	1500	150.0 m	93.0 m	48.0 m	31.5 m		492.1 ft	305.1 ft	157.5 ft	103.3 ft
240VAC	600	262.8 m	171.0 m	92.4 m	63.6 m		862.2 ft	561.0 ft	303.1 ft	208.7 ft
	900	280.8 m	179.1 m	95.4 m	64.8 m		921.3 ft	587.6 ft	313.0 ft	212.6 ft
	1200	291.6 m	184.8 m	97.2 m	62.4 m		956.7 ft	606.3 ft	318.9 ft	204.7 ft
	1500	298.5 m	189.0 m	97.5 m	64.5 m		979.3 ft	620.1 ft	319.9 ft	211.6 ft
277VAC²	600	10.8 m	10.8 m	10.8 m	10.8 m		35.4 ft	35.4 ft	35.4 ft	35.4 ft
	900	16.2 m	16.2 m	16.2 m	16.2 m		53.1 ft	53.1 ft	53.1 ft	53.1 ft
	1200	21.6 m	21.6 m	21.6 m	10.8 m		70.9 ft	70.9 ft	70.9 ft	35.4 ft
	1500	27.0 m	27.0 m	27.0 m	13.5 m		88.6 ft	88.6 ft	88.6 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.
 $L_{(Jumper\ Cable)} = 3.0\ m$



INGROUND Monochromatic Linear Wall Washing and Grazing LED Lighting

PRODUCT SPECIFICATION SHEET

ORDERING LOGIC: COMMON COMPONENTS

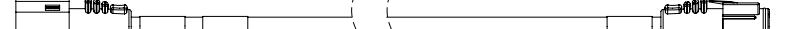
STR9 LEADER CABLE ELV

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	
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.

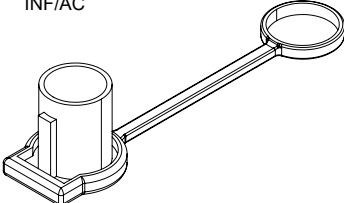
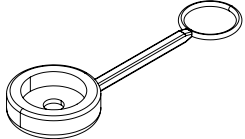
STR9 CABLE 3X14 AWG + 1X24 AWG

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

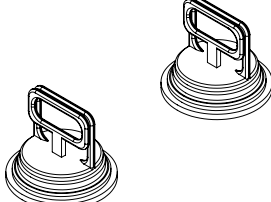


ORDERING LOGIC: COMMON COMPONENTS

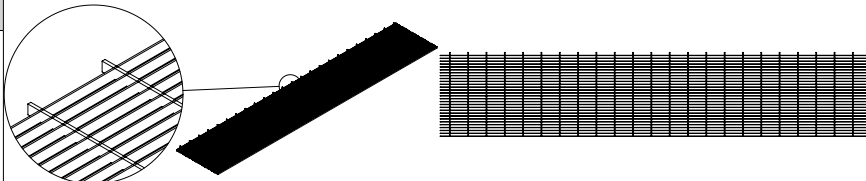
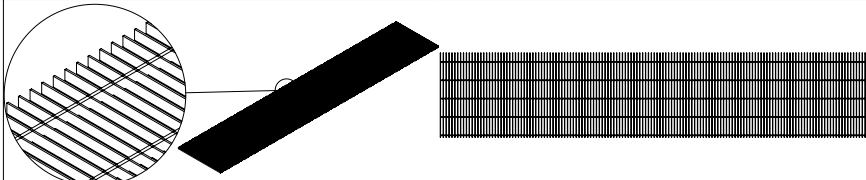
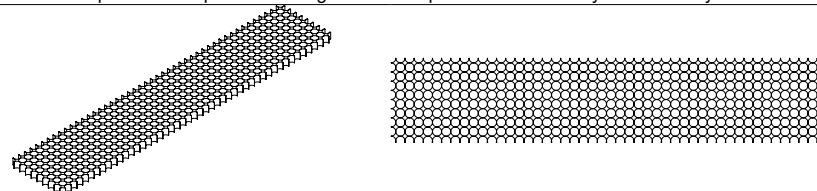
STR9 CONNECTOR CAP, IP67 (Must be used at the end of each run)

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 Monochromatic 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
PS	ELV (48V)	240W 320W	480W 640W	-	-	120~277V AC	IP66 IP30
PDB	ELV (48V)	240W 320W	480W 640W	DMX	48V POWER & ZH DATA	120~277V AC	IP66 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	

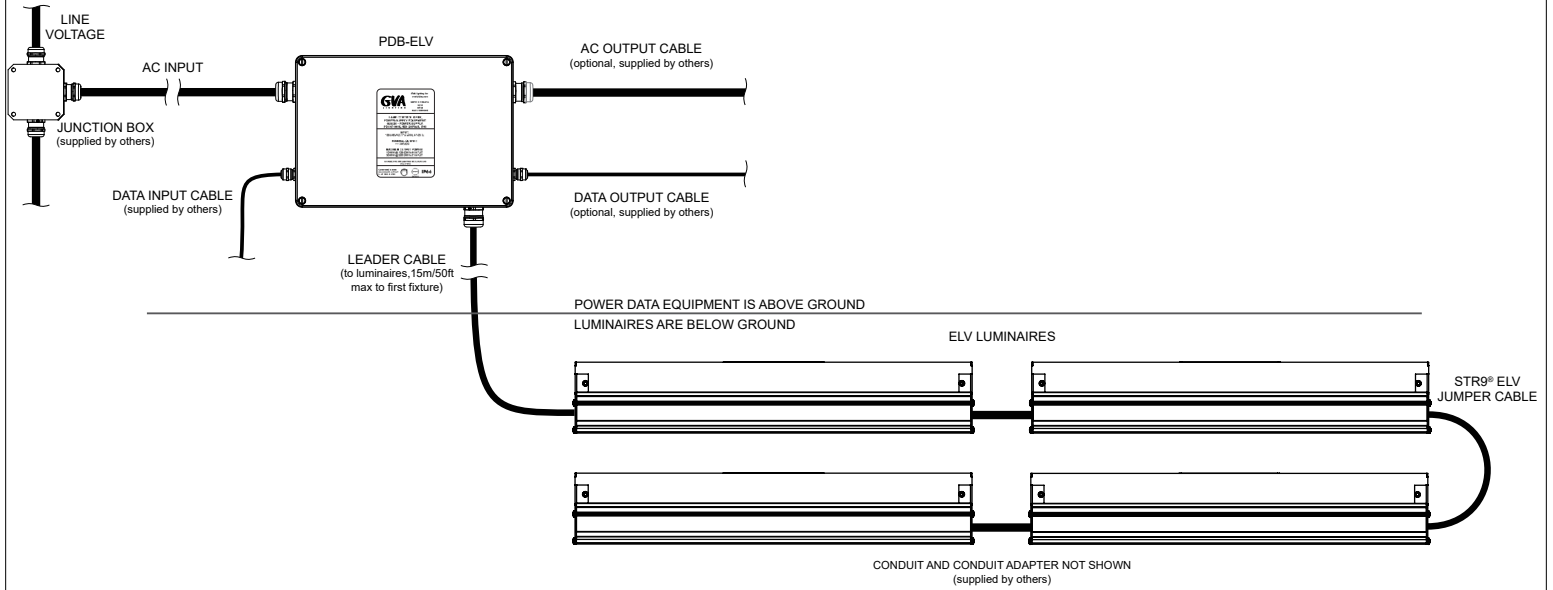
POWER-DATA CONVERTORS IP30

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	
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	

INGROUND Monochromatic Linear Wall Washing and Grazing LED Lighting

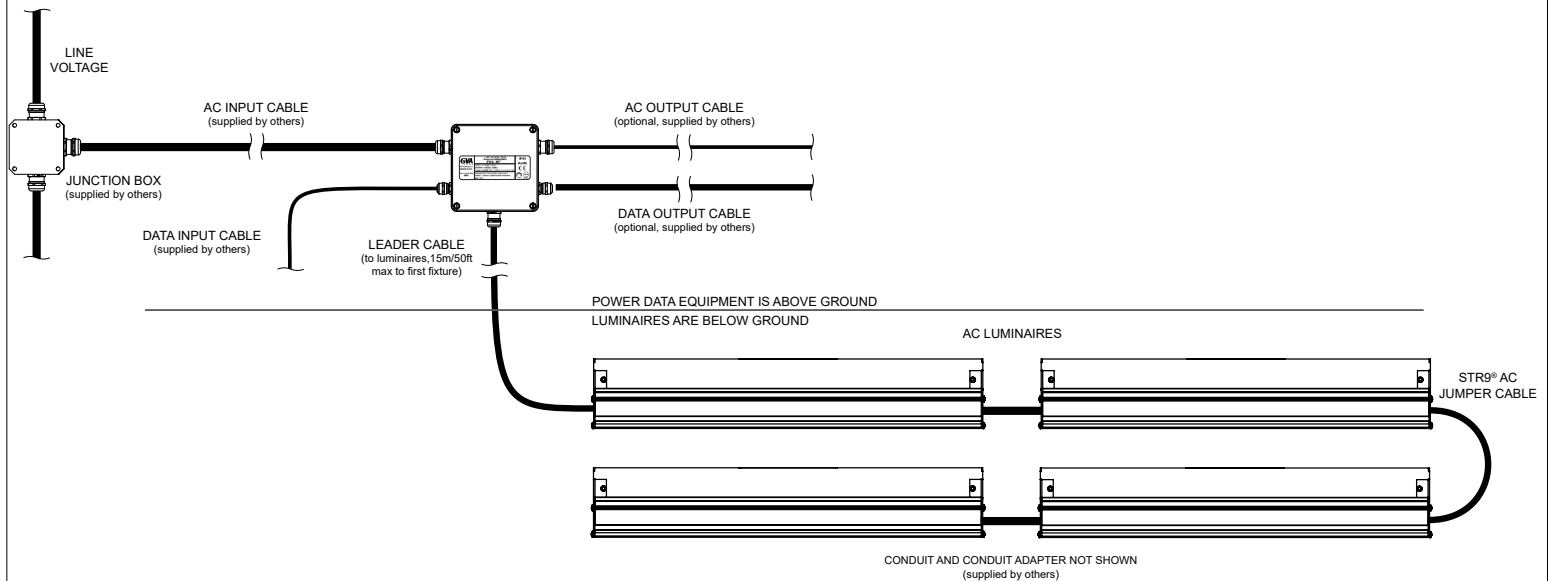
PRODUCT SPECIFICATION SHEET

TYPICAL SYSTEM DIAGRAM: ELV WITH CONTROL



*For applications that do not require control, replace PDB with PS ELV.

TYPICAL SYSTEM DIAGRAM: AC WITH CONTROL



*For applications that do not require control, do not include PDC.