

STR9® IG

UNIBODY COLOR-AMP®
GVA TECHNOLOGY GVA TECHNOLOGY

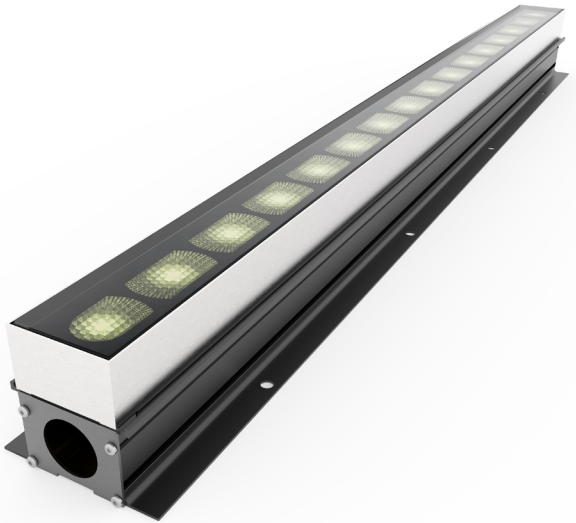


2021-07-07

GVA
LIGHTING

INGROUND Dynamic White Linear Wall Washing and Grazing LED Lighting

PRODUCT SPECIFICATION SHEET

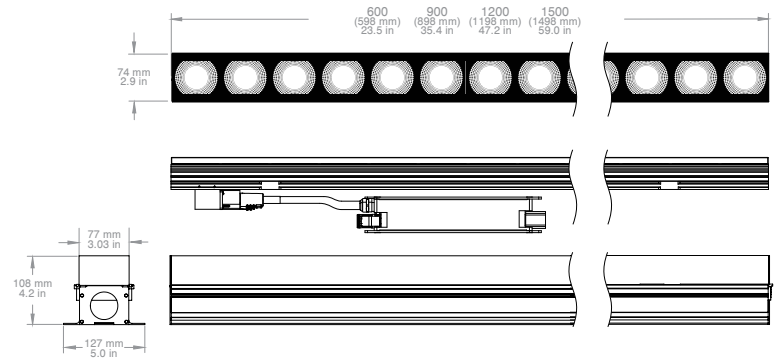


DATE:

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
- 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


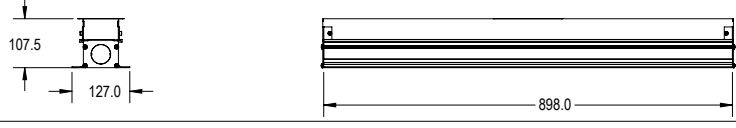
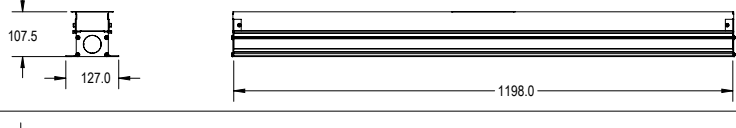
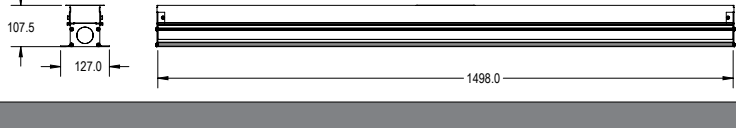
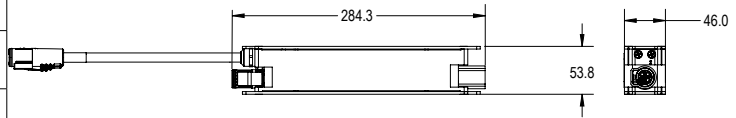
LUMINAIRE							
FAMILY	NOMINAL LENGTH	FINISH	POWER per 300mm (1ft)	LED COLOR	OPTICS (FWHM)	TILT	OPTIONAL
STR9-IG	300 ¹	TL - Trimless	10W 15W 20W	DWT	10°x10° ¹	0 - No Tilt	NL - No Louver
	600				12°x 12°		ILH - Internal Louver, Horizontal
	900				15°x 15°		ILV - Internal Louver, Vertical
	1200				30°x30°		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

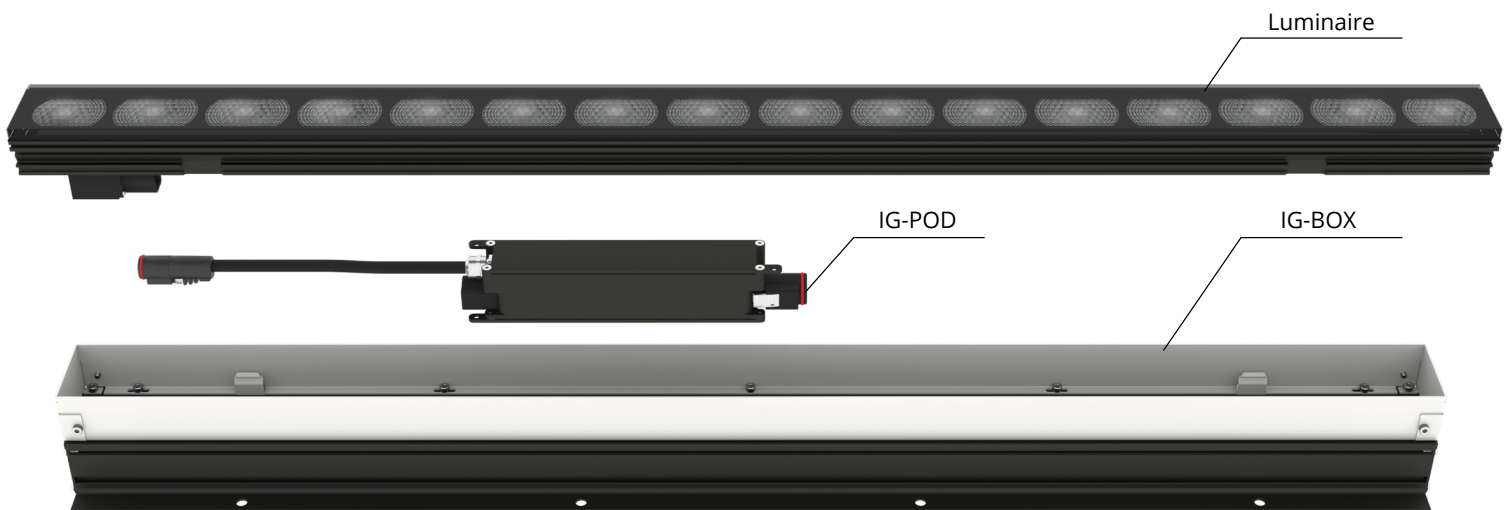
2. Other distributions available; Consult factory.

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	
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 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}	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	
	All on	2,142 lm	3,213 lm	4,284 lm	5,355 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	IES Classifications		Class 1 LED Luminaire			
	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, IP66			

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

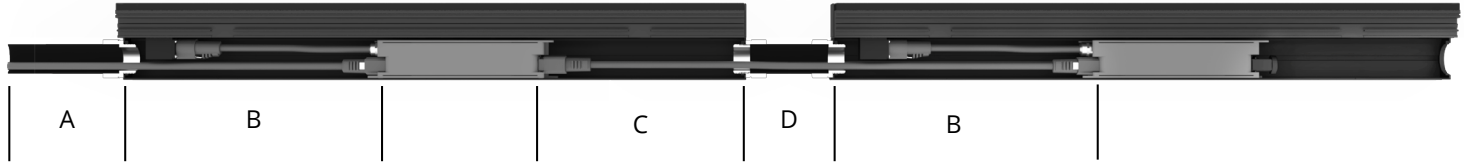
MAXIMUM RUN LENGTHS ¹							
	10W	15W	20W		10W	15W	20W
ELV	15 m	10 m	7 m		49 ft	33 ft	23 ft
120VAC	45 m	30 m	22 m		148 ft	100 ft	75 ft
240VAC	87 m	62 m	47 m		288 ft	204 ft	156 ft
277VAC ²	10 m	10 m	10 m		36 ft	36 ft	36 ft

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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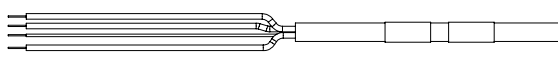
PRODUCT SPECIFICATION SHEET

ORDERING LOGIC: COMMON COMPONENTS

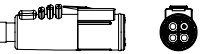
STR9 LEADER CABLE ELV

PART NUMBER	NOMINAL LENGTH	WEIGHT
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	15.0 m (50 ft)	2000 g (4.41 lbs)
141492	30.0 m (100 ft)	3975 g (8.76 lbs)

INPUT



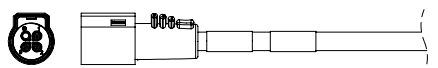
OUTPUT



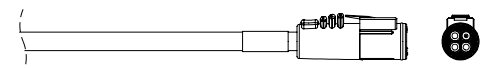
STR9 JUMPER CABLE ELV

PART NUMBER	NOMINAL LENGTH	WEIGHT
141739	0.3 m (1 ft)	90 g (0.20 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)

INPUT



OUTPUT

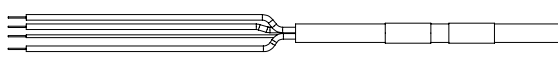


*Not all jumper lengths are shown. Lengths available in 300mm increments.

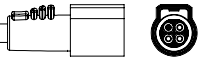
STR9 LEADER CABLE AC

PART NUMBER	NOMINAL LENGTH	WEIGHT
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	15.0 m (50 ft)	2000 g (4.41 lbs)
141520	30.0 m (100 ft)	3975 g (8.76 lbs)

INPUT



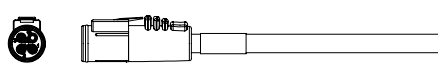
OUTPUT



STR9 JUMPER CABLE AC

PART NUMBER	NOMINAL LENGTH	WEIGHT
141789	0.3 m (1 ft)	90 g (0.20 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)

INPUT



OUTPUT



*Not all jumper lengths are shown. Lengths available in 300mm increments.

STR9 CABLE 3X14 AWG + 1X24 AWG

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

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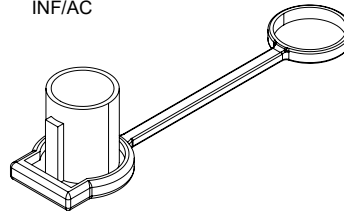


* Raw cable cut to length. Please specify required length.

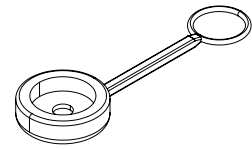
STR9 CONNECTOR CAP, IP67 (Must be used at the end of each run)

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

INF/AC

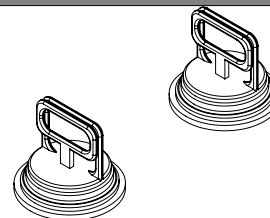


ELV



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)	
ILH - Internal Louver, Horizontal	BLACK	10 g 0.35 oz	 *Please select option in the specification logic table if required. Item is factory installed only.
ILV - Internal 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.

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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
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	
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	

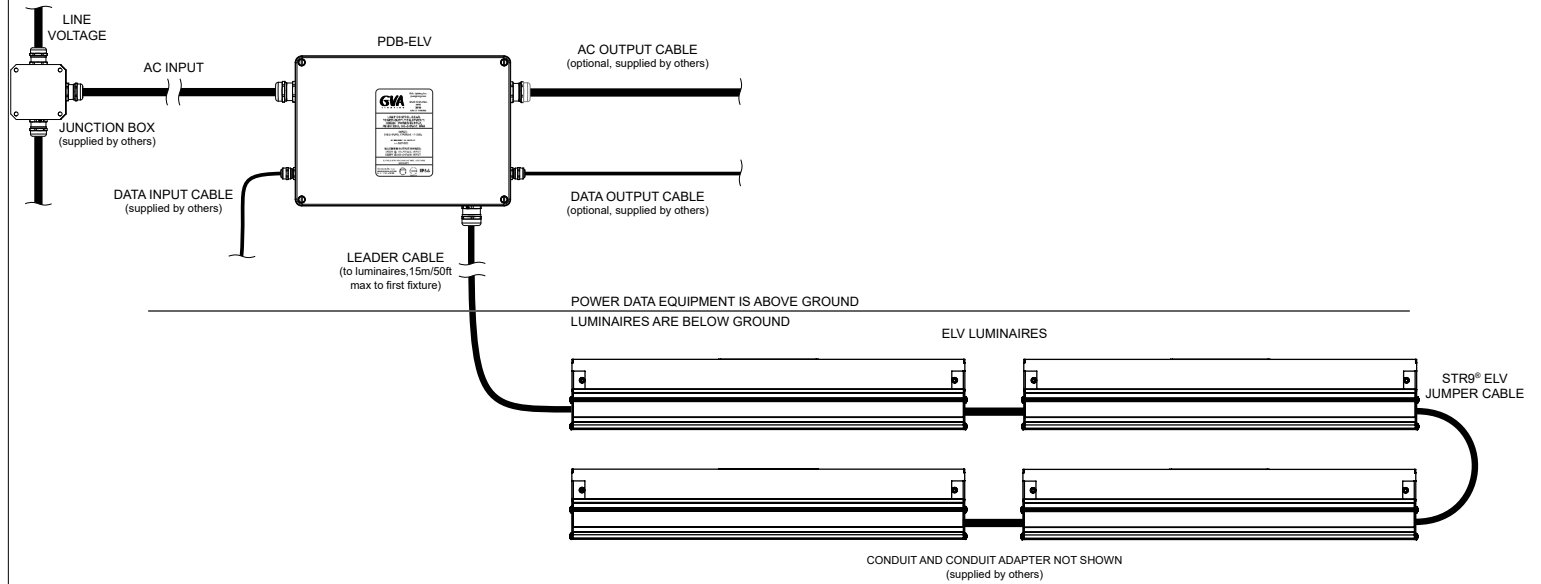
POWER-DATA CONVERTORS IP30

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 Dynamic White Linear Wall Washing and Grazing LED Lighting

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TYPICAL SYSTEM DIAGRAM: ELV WITH CONTROL



TYPICAL SYSTEM DIAGRAM: AC WITH CONTROL

