

eluminocity

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L&C Product Family
LED Luminaire with Integrated Radar Sensor

Data Sheet



LED Streetlight with Integrated Radar Sensor

LED Key Data | Sensor Key Data



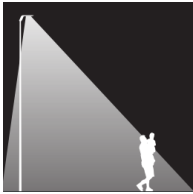


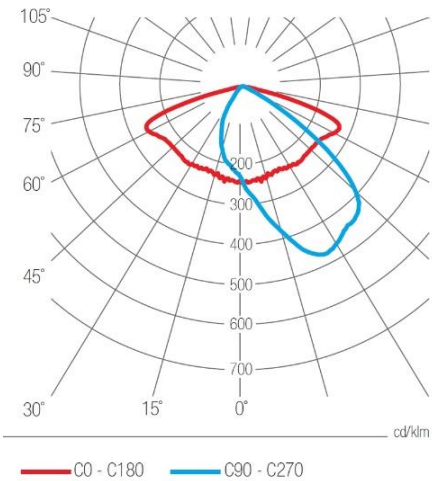
LED / Sensor Modules	1 LED + 1 Sensor	2 LED + 1 Sensor	3 LED + 1 Sensor
LED Power	35 W	70 W	105 W
Luminous Flux	3,400 - 4,000 lm	6,800 - 8,000 lm	10,200 - 12,000 lm
Color Temperature	3,000 K / 4,000 K		
Color Rendering Index	3,000 K \geq 70 / 4,000 K \geq 80		
Nominal Voltage	220-240 V, AC, 50/60 Hz		
Surge Voltage Resistance	10 kV		
Sensor Features	Recognition and detection of moving objects		
Over-the-Air Update	Firmware, software, configuration		
Remote Monitoring	eluminocity Backend (visualization of system and performance data)		
Remote Control	eluminocity Backend for configuration of light intensity and light profile		
Sensor Power Consumption	8-15 W (depending on the choice of connectivity)		

Radar Sensor | Hardware | Connectivity






LED / Sensor Modules	1 LED + 1 Sensor	2 LED + 1 Sensor	3 LED + 1 Sensor
Radar Technology	Radar, 24 GHz		
Number & Position of Sensors	2x lateral radar sensor (right, left), <i>optional 1x front radar sensor</i>		
Motion Detection	Pedestrians, cyclists and motor vehicles		
Detection Area Right / Left*	Pedestrians 20 m (65.6 ft) / cyclists and motor vehicles 90 m (295.3 ft)		
Detection Area Front*	8-10 m (26.2-32.8 ft)		
Speed Detection*	1-100 km/h (0.6-62.1 mph)		
Operating Range	5-12 m (16.4-39.4 ft) mounting height		
Controller	Infineon XMC 4700 Microcontroller		
Connectivity	Intel LTE Modem Cat.1 / Cat.M1 for M2M communication		
Data Processing	Direct data processing on microcontroller		
End-to-End Security	Hardware encryption via Infineon OPTIGA Trust X Security Chip		

* This information refers to 6.5 m (21.3 ft) mounting height

Lighting Technology I Lighting Characteristics

LED / Sensor Modules	1 LED + 1 Sensor	2 LED + 1 Sensor	3 LED + 1 Sensor
Optics	High-powered LEDs with four micro-faceted freeform optics		
Symmetry	Asymmetric distribution		
Thermal Management	Optimized through direct heat dissipation to the LED housing		
Leiterplatte	Optimized PCB design with Touchdown technology		
LED Betriebstemperatur	-30 °C - +55 °C (-22 °F - +131 °F)		
Light Distribution			
Luminous Intensity Distribution in cd/klm	 <p>— C0 - C180 — C90 - C270</p>		

LED Standards I LED Certificates

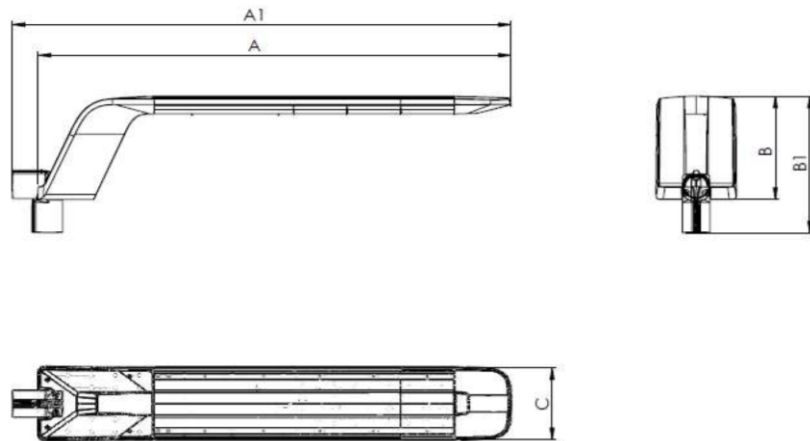
LED / Sensor Modules	1 LED + 1 Sensor	2 LED + 1 Sensor	3 LED + 1 Sensor
IP Code	IP66		
IK Code	IK08		
Protection Class according to EN 61140	Protection Class I  / Protection Class II 		
Certification Marks	  		

Optional

LED / Sensor Modules	1 LED + 1 Sensor	2 LED + 1 Sensor	3 LED + 1 Sensor
Light Management System	DALI or 1-10 V		
	NEMA socket for photocell		
Mastaufsatz	Special spigot (US only)		

Dimensions I Weight

LED / Sensor Modules	1 LED + 1 Sensor	2 LED + 1 Sensor	3 LED + 1 Sensor
Length A	109,5 cm	123,5 cm	137,5 cm
Length A1	116,5 cm	130,5 cm	144,5 cm
Height B	29,5 cm		
Height B1	39,0 cm		
Width C	20,5 cm		
Spigot Size	60 mm		
Inclination Adjustability	0° / 90°		



Material I Color

LED / Sensor Modules	1 LED + 1 Sensor	2 LED + 1 Sensor	3 LED + 1 Sensor
Material Luminaire Housing	Diecast aluminum, corrosion-resistant (atmospheric and seawater), surface electrostatically powder-coated		
Color Luminaire Housing	RAL 9006 white aluminum, HM1 silver grey		
Material Sensor Housing	Synthetics		

CEN Lighting Classes according to EN 13 201

1 LED	Lighting Classes	S1	S2	S3	S4	S5	S6	ME1	ME2	ME3	ME4	ME5	ME6
	Pole Height	6 m						6 m					
	Pole Distances	<20 m	<27 m	<37 m	<42 m								
2 LED	Lighting Classes	S1	S2	S3	S4	S5	S6	ME1	ME2	ME3	ME4	ME5	ME6
	Pole Height	6 m						6 m					
	Pole Distances	<25 m	<33 m	<42 m									
3 LED	Lighting Classes	S1	S2	S3	S4	S5	S6	ME1	ME2	ME3	ME4	ME5	ME6
	Pole Height	6 m						8 m					
	Pole Distances	<25 m	<33 m	<42 m									