



SP/LED

LED Traffic Signal

Traffic lights with LED optics offer the following advantages compared to traditional traffic lights with incandescent lamp optics:

1. Significantly reduced operating costs, thanks to:
 - Lower power consumption (installed power is reduced by 89%);
 - Much longer average lifespan (approximately 10 years);
 - No maintenance required throughout the product's life cycle (eliminates the need for preventive bulb replacement and corrective interventions for burnt-out lamps).
2. Elimination of false signals caused by sunlight reflections (Phantom effect).
3. Increased reliability and availability of the traffic light system, contributing to greater safety for road users.



MODULO LED



SCAE SP traffic lights feature innovative optical modules equipped with next-generation high-intensity LEDs. The optical unit is a monoblock with IP55 protection that replaces all traditional components such as lenses, reflectors, lamp holders, and bulbs.

A limited number of LEDs—no more than three—generate a high-intensity colored light source. The beam, focused through two special lenses, provides a bright, directional, and uniform signal.

The powerful and long-lasting optical system is housed inside a robust and elegant traffic light body.

Advantages

- Improved visibility;
- Enhanced traffic safety;
- Significant energy savings;
- Longer service life;
- Maintenance-free operation.

TECHNICAL SPECIFICATIONS – LED MODULES		
Diameter	210mm	300mm
Luminous Intensity	Red > 400cd Yellow > 200cd Green > 400cd White > 400cd	Red > 400cd Yellow > 400cd Green > 400cd
Dimmer	Night mode =50%	
Color	Red/Yellow/Green/White	
LED Type	DRAGON High Flux	
Operating Voltage	190-265Vac 12Vdc 32-42Vac 24Vdc	
Power Consumption	<10W (12/24V LE version <3W)	
EMC	EN50293: class B	
Power	>0.9	
Temperature Range	-40°C +60°C	
Relative Humidity	<95%	
Protection Rating	EN60529: IP65	
Material	Polycarbonate	
Weight	<1.0 Kg	<1.5 Kg
Dimensions	Ø210 x100.2mm	Ø300 x132.4mm

Standards Compliance

SCAE SP LED traffic lights are approved by the Italian Ministry with homologation certificate no. 46762 and are CE certified in accordance with the EN12368 standard, issued by an accredited laboratory (CE Certificate No. 1304-CPR-0062).

ENERGY COMPARISON			
Lantern Ø 210 mm	Incandescent optics	LED Optics	Savings
Power	70W	8W	81%
Annual Consumption	613 KW/h	113,80 KW/h	
Lantern Ø 300 mm	Incandescent optics	LED Optics	Savings
Power	100W	8W	87%
Annual Consumption	876 KW/h	113,80 KW/h	



COMPLIANCE TEST RESULTS – AT ACCREDITED LABORATORIES							
Parameter	200mm (230Vac)			300mm (230Vac)			Standard
	Green	Yellow	Red	Green	Yellow	Red	
Class TYPE N (Narrow beam signal)	A2/1, A3/1, B2/2, B3/2			A3/1, B2/2, B3/2			EN 12368
Class TYPE W (Wide beam signal)	A2/1, A3/1, B1/2, B2/1 B2/2, B3/2			A3/1, B1/2, B2/2, B3/2			EN 12368
Class TYPE M (Medium beam signal)	A2/1, A3/1, A2/2, A3/2			A3/1, A2/2, A3/2			EN 12368
Luminance Uniformity	≥ 10 (for Type E, W and M) ≥ 15 (for Type N)			≥ 10 (for Type E, W and M) ≥ 15 (for Type N)			EN 12368
Phantom Class	5			5			EN 12368
Trichromatic Coordinates	x=0,076 y=0,572	x=0,585 y=0,414	x=0,700 y=0,300	x=0,071 y=0,578	x=0,590 y=0,409	x=0,707 y=0,295	EN 12368
Temperature Range Classes	A, B, C			A, B, C			EN 12368
IP	IP55			IP55			EN 60529
Impact Resistance	IR3 (AC3)			IR3(AC3)			EN 12368
Vibration Resistance	Compliant			Compliant			EN 12368
Insulation Class	Class II			Class II			EN 60598-2-3

LED MODULE

DIMENSIONS

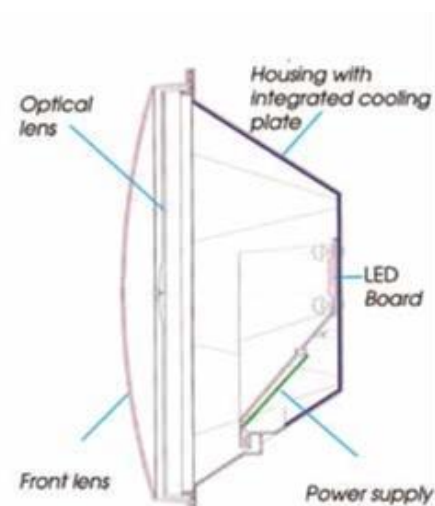
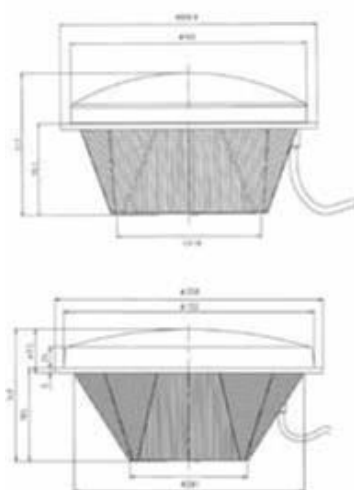
COMPOSITION

An excessive operating temperature reduces the lifespan of electronic components.

An intelligent housing design allows for efficient heat dissipation from the sealed enclosure.

Any faults in individual LEDs are electronically detected. These losses are compensated by the functioning LEDs to ensure consistent optical performance.

The optical module can be supplied pre-mounted on the door for quick replacement in conventional incandescent lamp traffic lights.



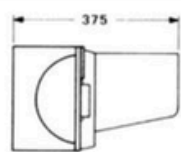


Construction Features

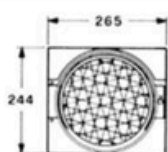
Modular design with combinable elements $\varnothing$ 210 mm and $\varnothing$ 300 mm, made of high-quality UV-stabilized polycarbonate, colored in the mass and available in standard colors: Green, Yellow, Black.

- Monoblock LED technology optics;
- Quick-insert front covers with snap-lock handle;
- Available with grey (colorless) lenses;
- Quick-insert sun visors;
- Vertical or horizontal mounting options;
- Fittings for pole mounting, bandit brackets, and suspension on cantilever or wire.

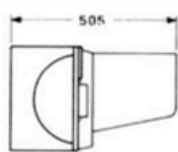
Dimensions



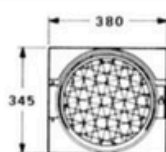
SP1/L



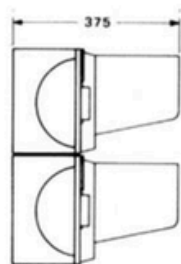
$\varnothing$ 210mm



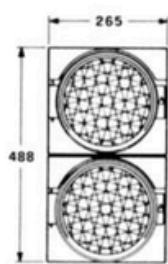
SPP1/L



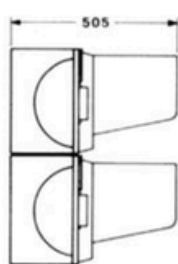
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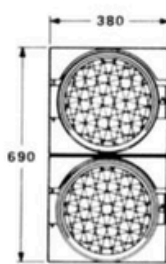
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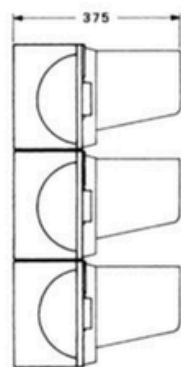
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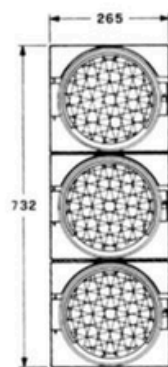
SPP2/L



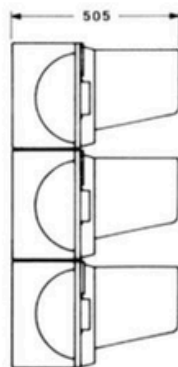
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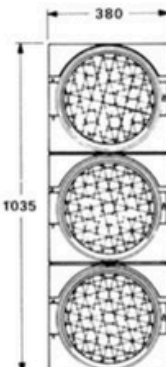
SP3/L



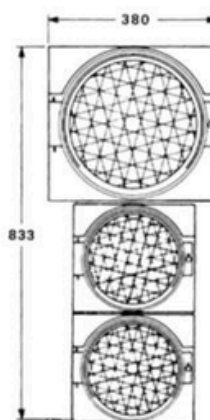
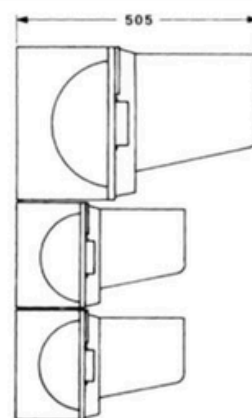
$\varnothing$ 210mm



SPP3/L



$\varnothing$ 300mm



SPP3/L 2 x $\varnothing$ 210mm
1 x $\varnothing$ 300mm

Black polycarbonate symbol masks $\varnothing$ 210 mm and $\varnothing$ 300 mm



SAFE MOBILITY

SCAE

SEMAFORI • CONTROLLI • AUTOMAZIONE • ELETTRONICA

SCAE S.p.A. - 20054 Segrate - MILANO (ITALY) - Via Volta, 6

Tel. +39 02 26 930.1 - Fax +39 02 26 930.310

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www.scae.net - e-mail: info@scae.net