

LED luminaire for street lighting (suspended version)

ITALO 2 URBAN TS

Registered models – Design by Massimo Sacconi and Marzia Bandini



italo **URBAN** **2**TS
MADE IN ITALY



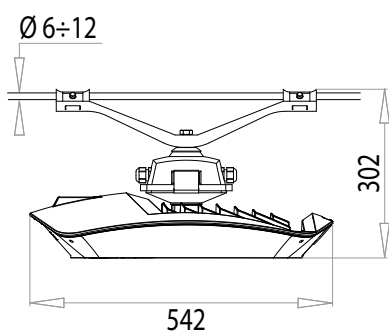
ITALO 2 URBAN TS



The series ITALO 2 URBAN has been designed for specific urban contexts such as residential areas, parks, squares, and city centers. The suspended version (ITALO 2 URBAN TS) is used where the installation of poles is not possible.

The squared shape featuring the luminaire comes from a sophisticated research on both shapes and the quality of materials.



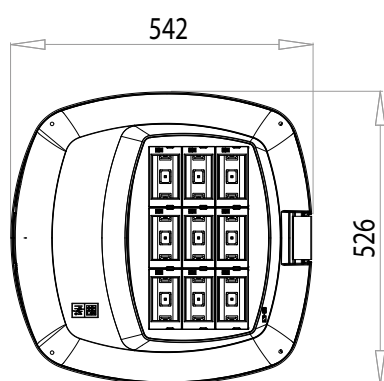


AVAILABLE COMPOSITIONS:

TS optic:
from 1 to 9 modules.
SL optic:
from 8 to 48 LED.

OPTICAL UNIT CHARACTERISTICS:

Modular optical system.
LED source colour temperature:
4000K (3000K, 5700K optional).
CRI > 70.



Please download ITALO 2 URBAN TS
photometric data at
www.aecilluminazione.com

MECHANICAL CHARACTERISTICS

- Frame and cover in die cast aluminum alloy UNI EN 1706.
- Heat sink in die cast aluminum UNI EN 1706 with lamellar design.
- Polyurethane seal.
- Closure screen in flat tempered glass (4mm thickness) featured by high transparency and optimum thermal and mechanical resistance (IK09).
- Optical unit (TS): 99.85% aluminium with special finish made by vacuum sealed deposition 99.95%. Aluminium class A+ (DIN EN 16268).
- Optical unit (SL): PMMA.
- Removable LED module.
- Removable metal gear plate.
- Opening connection compartment with line switch and integrated cable clamp. Versions: single or double cable gland.
- Suspended attachment in stainless steel AISI 316 L. Tilt and orientation adjustment by means of spherical component (360°).
- Closure hook in extruded aluminum with stainless steel spring.
- Colour: semi-gloss satiny grey. Code 2B.

IP66 protection degree.

ELECTRICAL CHARACTERISTICS

- Insulation class II, I - US: 1.
- Power supply: 220÷240V - 50/60Hz. (Standard tolerance +/-10%. Other voltages and tolerances upon request).
- LED current: 525/700mA.
- Power Factor: >0.9 (at full load).
- Connection for cables featured by a maximum cross section of 4mmq.
- Optional fuse.

- Optical unit lifetime 525mA (Ta=25°C): >70.000hr B20L80 (including critical failures); >100.000hr L80, TM-21; 700mA (Ta=25°C): >50.000hr B20L80 (including critical failures); >70.000hr L80, TM-21.
- Available dimming options:
DA: automatic dimming.
DAC: customizable DA profile.
PLM: power line communication light flux adjustment.



PROTECTION AGAINST OVERVOLTAGE

A lighting device installed in a standard electrical system may be subjected to voltage fluctuations and external disturbances due to different factors such as discontinuous loads on the line, faults on the lines (upstream or downstream) and atmospheric electrical discharges (in outdoor installations).

In those LED installations where the electronic components are predominant, an adequate resistance to surges is synonymous with reliability and proper functionality.

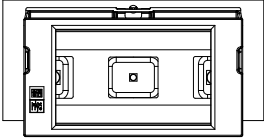
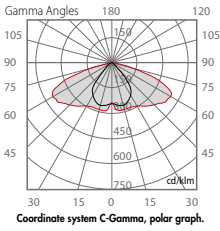

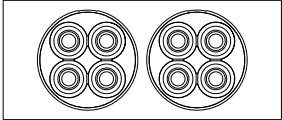
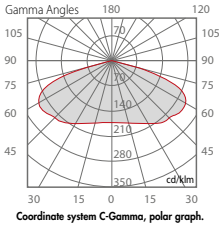

Thanks to the research and the experimentation performed in its own laboratories, AEC offers its customers customized solutions according to every specific installation.

CLASS I: protection up to 10kV.

CLASS II: protection from 6kV up to 10kV.

For more information about the protection against overvoltage, please download the technical report at www.aecilluminazione.com.

ITALO 2 URBAN TS

AVAILABLE OPTICS				
NAME	DESCRIPTION	DRAWING	PHOTOMETRY	OPERATING ENVIRONMENTS
TS	STREET OPTIC FOR ROAD CENTER Asymmetrical optic for street lighting (suspended mounting).		 <p>Gamma Angles 180 120 105 90 75 60 45 30 15 0 15 30</p> <p>Coordinate system C-Gamma, polar graph.</p>	
SL	SYMMETRIC OPTIC Rotosymmetrical optic for urban and parking areas lighting.		 <p>Gamma Angles 180 120 105 90 75 60 45 30 15 0 15 30</p> <p>Coordinate system C-Gamma, polar graph.</p>	

SELECTION OF THE OPTICS ACCORDING TO UNI EN 13201 LIGHTING CATEGORIES																			
Installation rep. L/H					ITALO 2 URBAN TS				ITALO 2 URBAN TS								ITALO 2 URBAN TS		
	1.5								TS										
	1.25				TS										SL				
	1								TS										
	0.75														TS				
	0.5								TS										
UNI EN 13201 Lighting categories		CEO	ME1 CE1	ME2 CE2											ME3 CE3	ME4 CE4	ME5 CE5	ME6 CE6	S1
		Street Application							Cycle path Application						Street Application WET Class				

Dimming options

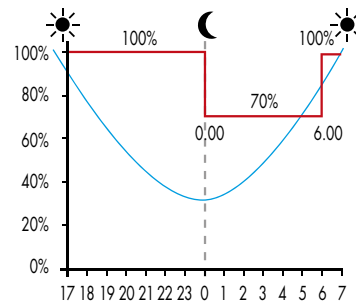
LED technology offers easy and reliable light flux adjustment. The devices are equipped with an electronic power supply capable of adjusting light emission by directly regulating the optical assembly LED input current. The standard version of the device is supplied with a constant LED input current of 525mA or 700mA.

The following options are available:

DA (DIM-AUTO) OPTION

Automatic light flux regulation

The power supply is configured using an automatic dimming profile which fully utilises the maximum light intensity during the first and last few hours of system operation, thereby reducing energy consumption in the middle of the night when a lower level of illumination is often sufficient. The reduction profile automatically adapts to the duration of the nighttime period during the year.



*Saving in relation to the fixed power version.

L1: 100%

L2: 70%

Tdim: 6hr

Saving*: 15%

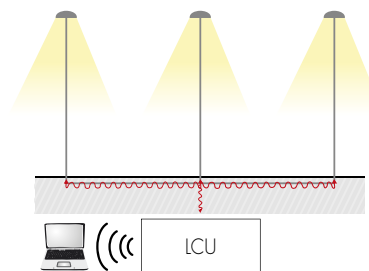
DAC OPTION (DIM-AUTO CUSTOM PROFILE)

The power supply is configured using a dimming profile totally customizable by the user (up to 5 levels in 4 steps).

PLM OPTION

Light flux regulation using power line communication

Light flux reduction can be associated with punctual and remote monitoring of the individual device via the power line communication remote control. This option, used in conjunction with an **LCU** (Light Control Unit), makes it possible to control an individual lighting point, allowing the creation of customised lighting scenarios. More complex remote control panels can be used as part of a wireless or GSM/GPRS network, to remotely monitor the energy consumption of the system and provide fault indications as necessary without the need for on-site maintenance procedures.



LCU

The Light Control Unit offers flexible system control. The reduction profile can be customised with simple local or remote programming. Devices can be divided into sub-groups with different dimming profiles. Option of using an astronomical clock or interfacing with external switching devices. Simplified installation, wiring and testing. Programming software free of charge.



OPTIONS ON REQUEST (SUBJECT TO FEASIBILITY CHECK)

D10 (DIM-10) OPTION Flux adjustment via 1-10V analogue control Allows lighting device adjustment via an analogue voltage signal between 1V and 10V, the minimum and maximum brightness levels respectively. The device is designed for connection of L-N-1/10V cables.	
DALI (DIGITAL ADDRESSABLE LIGHTING INTERFACE) OPTION Flux adjustment via digital interface DALI is the standard digital technology for the management of luminaires; it is based on a digital signal capable of univocally addressing up to 64 modules on the same bus. The device is designed for connection of L-N-DALI cables.	
DB (DIM-BIP) OPTION Bi-power light flux adjustment with pilot cable Option mainly designed for underpasses or small systems where a simple and synchronised flux reduction is required. The device is supplied with a bi-power switch which will establish an operating regime at full or reduced power, depending on whether in additional conductor (pilot cable) is also present or not.	
DR (DIM-REG) OPTION Light flux adjustment with flux controllers LED retrofit systems may include a discharge lamp flux controller. This option allows the LED device to follow up the voltage adjustment carried out within the system, varying the LED input current as a result. This means both HID and LED devices can be installed within the same system, thereby fully utilising existing energy saving systems. Operation is only guaranteed if amplitude modulation controllers are used instead of phase cut controllers.	

ADDITIONAL OPTIONS:

(Can be combined with all other flux reduction options, subject to feasibility check)

FLC OPTION - LED light flux recovery The natural depreciation of the light flux produced by the LEDs can be offset by progressively increasing the input current of the LEDs during operation. This option guarantees a virtually constant light flux output. The lighting system can therefore be designed while taking account of a maintenance factor which is higher than that usually used with the standard product, offering instant savings in terms of the energy consumed and/or the initial cost of the system. The FLC option also means the useful life of the system can be extended.	
FR (FULL RANGE) OPTION - Extended input voltage range Option of supplying the device with an extended input voltage (example: 120-277V). This option maintains device operation even in systems where the power supply voltage is adjusted by flux controllers.	<div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center;"> 120 - 277 VAC 50 / 60 Hz </div>
FC (PHOTOCELL) OPTION Possibility to install a twilight switch that allows to automatically turn the unit on at sunset and to turn it off at sunrise.	

SYSTEM FEATURES AND ADJUSTMENT SYSTEM INSTALLATION:

	DA/DAC	PLM & LCU	PLM	DB	DR	DALI	D10
Independent adjustment system	x						
Central adjustment system (switch / control unit / cabinet)		x	x	x	x	x	x
Remote reduction profile change		x	x	x	x	x	x
Use of additional cables				x		x	x
Remote management software required			x				
Free configuration software (LED and electronic HID systems only)		x					
Interfacing with external regulation systems (e.g. PIR sensors, traffic sensors, switches)		x	x		x	x	
Commissioning by specialist personnel			x		x	x	x



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catalogue aren't binding.
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updating of its products,
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the contents without notice.

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