

# Technical Features

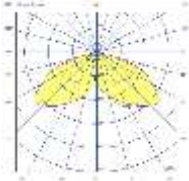
## Icona <sup>S</sup>

### LED Street Lighting Fixture

#### ICONA-S-100W-4070-A9-9023





<b>Technical Features</b>	
Brand	Niteko
Series	ICONA S
Model	ICONA-S-100W-4070-A9-9023
Description	LED Street Lighting Fixture
Mounting options	Arm and head-pole mounting. Adjustable integrated system for arm mounting (180°) or head – pole (90°) with a possible inclination of -15° / +15° in 5° steps;
Effective power	100W (Power consumption tolerance $\pm$ 5%)
Power Supply	175/264 V a.c. – 50 Hz Electronic power supply integrated into the lighting fixture with $\eta > 90\%$ efficiency.
LEDs modules power supply	Power supply in constant current
Power factor	PF > 0,95 (Active PFC) when operating in 100% mode
Optional functions/equipment	CLO (Constant light output) PRG5 (pre-programmed dimming up to 5 levels) DALI NEMA socket 7PIN
Insulation Class	Class II
Light source	HI Power LED
Optic	LED modules equipped with high precision secondary collimators for light beam concentration. Asymmetric street-type photometry – A9 
Laser security class	1M
Nominal luminous Flux	16.220 lm (Luminous flux tolerance $\pm$ 5%)
Output luminous Flux	14.845 lm (Luminous flux tolerance $\pm$ 5%)
Light Source Efficiency	$\eta > 170$ lm/W (5000K / 4000K / 3000K)
Output fixture efficiency	$\eta > 148$ lm/W
Correlated Color Temperature	“4070” version: Tcc = 4.000K CRI>70 (Neutral White)
Color Rendering Index	CRI>70 [standard]
Service Life	L90B10 = 100.000 h (Ta=25°C)
IR & UV radiations	Absent
Inorganic Toxic Elements	Absent
Operating temperature	-40°C ÷ +50°C
Turning on / restart	<ul style="list-style-type: none"><li>• <math>t_A &lt; 1\text{sec.}</math></li><li>• <math>t_R &lt; 1\text{sec.}</math></li></ul>
Material	<ul style="list-style-type: none"><li>• FIXTURE: incorporated die-cast aluminium single body with wide cooling fins</li><li>• SCREEN: flat tempered glass, minimum thickness of 4 mm</li></ul>
Color	RAL 9023 (sandblast, cataphoresis and polyester powder coating processes)
Protection Degree	Optic Unit: IP66 / Electric Compartment: <b>IP66</b> Impact resistance rating: <b>IK09</b>
Fixture size and weight	Occupancy area on arm: <b>647 x 255 x 117 mm</b> Occupancy area on head-pole: <b>540 x 255 x 224 mm</b> Weight 5,8 kg
Box size and weight	650 x 260 x 250 mm / 6,0 kg (Preformed cardboard container)
Certificates	CE – RoHS – ENEC - Salt Spray Test Report



### The fixtures of the ICONA series are certified according to the norms:

<b>LVD Directive 2014/35/EU</b>	EN 61000-4-5:2006
EN 60598-2-3: 2003 / A1:2011	EN 61000-4-6:2009
EN 60598-1:2015 / A1:2018	EN 61000-4-8:1993 / A1:2001
<b>EMC Directive 2014/30/EU</b>	EN 61000-4-11:2004
EN 61000-3-2:2014	EN 61547:2009
EN 61000-3-3:2013	EN 62493:2010
EN 61000-4-2:2009	EN 55015:2013
EN 61000-4-3:2006 / A1:2008 / IS1:2009	EN 62471:2010
EN 61000-4-4:2004	EN 62262:2002

Lighting fixtures are equipped with optional devices suitable for **Remote Control** with interface components integrated in the lighting body, available in the following versions:

- Luminous flux self-regulation through pre-programming (PRG5);
- Cable regulation (DIM/DALI);
- NEMA socket connector;

The **Automatic Regulation (PRG5)** is managed by a luminous flux self-regulator, incorporated in the lighting body and included in the power compartment, suitable for the control and reduction of the lighting fixture's luminous flux from 10% to 100% (incl. light turn-off) in its maximum value, without using dedicated cables. The device is equipped with a fully programmable micro-controller, capable of managing the power compartment, with LED sources of any wattage. The operation is based on the possibility of defining, through user-defined programming, from 1 to 5 brightness levels based on time set through a configuration software. The system calculates the "Midnight point" considering the period of time in which the device is powered and, over this, enables the reduced speed periods, considering the settings selected through software.

The **Cable regulation (DIM/DALI)** happens through reserved cables:

The DIM module provides the candlepower regulation through 1-10V analog signal.

Using the interface module DALI is possible a light smart regulation considering the specific requirements of the space. DALI is a digital communication protocol of the adjustable electronic converters. This new standard interface represents a distributive intelligence system. This means that the light emission values of different illuminating engineering settings and the light sources collection are stored inside the electronic converters. The control system has the feature of recalling the specific setting and the electronic converter that identifies its light emission level and responds in relation to it. It is also possible to recall every single electronic converters. In order to guarantee the interchangeability between the different DALI components realized by different producers, the DALI interface has been included in the E appendix of the IEC 929 law as a non-proprietary standard compliant to the modern lighting control requirements.



Lighting fixtures are equipped with **7-poles NEMA socket connector** with the following technical characteristics:

## MECHANICAL

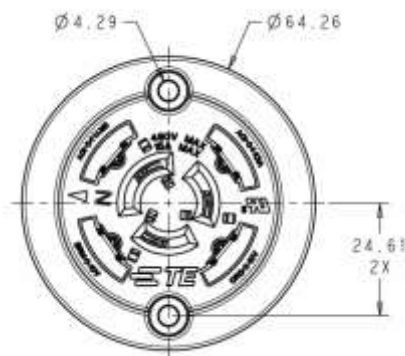
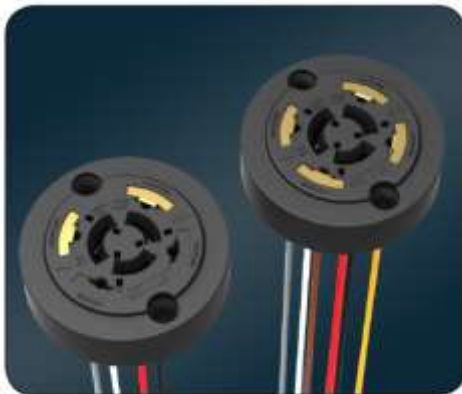
- Conforms to dimensional requirements of ANSI C136.41-2013
- Offer a 5 and 7 position version
  - 5 position: 3 power contacts + 2 dimming/signal contacts
  - 7 position: 3 power contacts + 4 dimming/signal contacts
- Power contacts terminated to 14AWG stranded wire per UL1015 or UL3321
- Signal Contacts terminated to 18AWG stranded wire per UL1015 or UL3321

## ELECTRICAL

	<u>Power contacts</u>	<u>Dimming contacts</u>
• Current rating:	15 A max	0.10 A max
• Voltage rating:	480 VAC/DC	10 VAC/DC
• cUR recognized to UL 773		

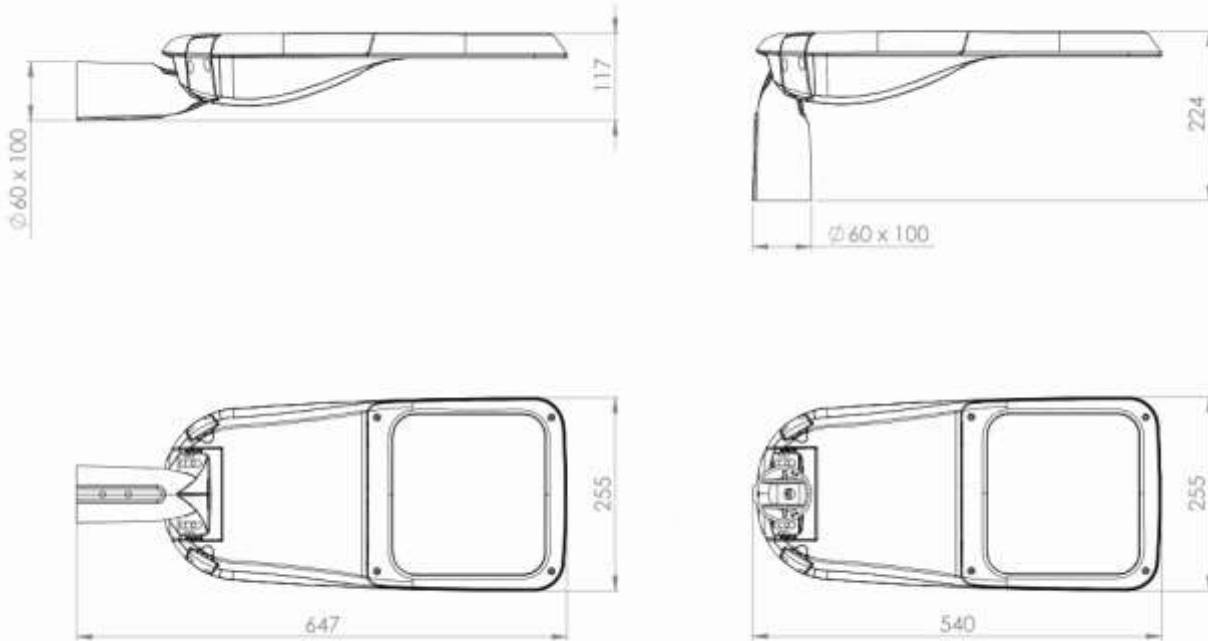
## MATERIALS

- Power contacts: Copper Alloy, tin over nickel plating
- Dimming contacts: Copper Alloy, gold over nickel plating
- Housing: Glass filled PBT, UL 94V-0 flammability rated

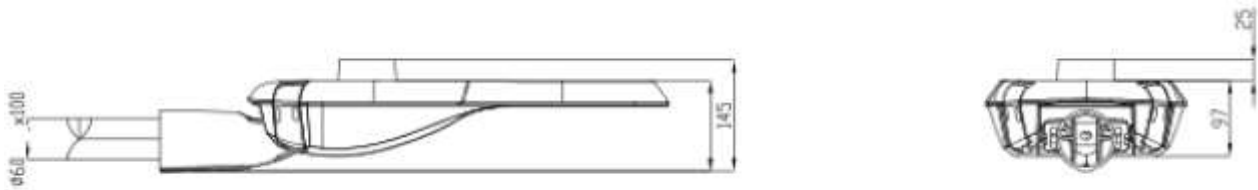




### Technical Drawings – ICONA S



### ICONA S with NEMA SOCKET (on request)



**Product Pictures – ICONA S**



**ICONA S with NEMA SOCKET (on request**

