

NITEKO SRL

Zona P.I.P. - Viale della Libertà, 8
74020 - Montemesola (TA) - Italy

Telefono e Partita IVA

Tel. (+39) 099 567 12 19
Fax (+39) 099 567 11 12

N° Iscrizione Reg. Imprese TA
C.F/P. IVA 02867530731

Web, Email & Pec

www.niteko.com
info@niteko.com

niteko@pec.it

Codice destinatario Fattura Elettronica: **A4707H7**

ICONA PRO

LED Road Lighting Fixture



Technical description

LED street luminaire for lighting rural, urban and residential roads, large areas, roundabouts, car parks, squares and gardens; **NITEKO** brand, **ICONA PRO** series, models **S**, **M**, **L** and **XL** models, suitable for pole-top or bracket mounting (with adjustment range from +15° to -15° in 5° increments) with a standard fitting compatible with **60mm** poles without the need for adaptors or reducers. Adaptors for **76mm** diameter poles/brackets are available on request.



The luminaire is fitted with **5050-type high-power LEDs** powered by a constant current of up to **500mA**, with a correlated colour temperature (CCT) of **3,000K** in the standard version, or with optional CCTs of **1,800K**, **2,200K**, **2,700K**, **4,000K**, **5,000K** and **5,700K**; a colour rendering index (**CRI**) of **>70** in the standard version, or **CRI >80** or **CRI >90** on request; and a photobiological risk class not exceeding **RG1**.

LEDs fitted with high-precision **PMMA secondary collimators** to concentrate the light beam, with a minimum overall optical system efficiency of not less than **80 per cent** and a wide choice of photometric curves suitable for any type of application, featuring asymmetric, rotosymmetric, elliptical or symmetrical light beams, or for pedestrian crossings, with a luminous intensity category of not less than **G*2**; all are **full cut-off**, in full compliance with legislation against light pollution, with zero luminous intensity beyond **90°** in the luminaire's standard installation position.

Light source efficiency greater than **190 lm/W** (3,000 K), and lifetime, under optimal operating conditions, of:

- Lifespan 100,000 h (L95 B10: $T_a = 25\text{ °C}$; $I_F \leq 500\text{ mA}$);
- Lifespan of 120,000 h (L90 B10: $T_a = 25\text{ °C}$; $I_F \leq 500\text{ mA}$);
- Lifespan 270,000 h (L80 B10: $T_a = 25\text{ °C}$; $I_F \leq 500\text{ mA}$);
- Lifespan 450,000 h (L70 B10: $T_a = 25\text{ °C}$; $I_F \leq 500\text{ mA}$).



The optical compartment is accessible by removing the toughened glass screen and the relevant stainless steel retaining screws, whilst the electrical compartment can be opened using clips, without the need for tools.

Luminaire with an effective power output of between **10 W** and **200 W**, supplied with 175–264 V AC – 50/60 Hz in the standard version, or, on request, available with 120–277 V AC – 50/60 Hz in the optional version. High-efficiency electronic ballasts integrated into the luminaire's electrical compartment, characterised by a power factor greater than **PF>0.95**, with a failure rate of less than 12% after 100,000 hours of operation and a minimum efficiency of 90%.

The standard version of the power supply unit is equipped with the following functions:

- Pre-programmed automatic dimming across up to 5 daily time bands (PRG5);
- Control via a 1–10 V analogue signal (DIM);
- Luminous flux control over the service life (CLO.LITE).

Thermal protection, short-circuit protection and standard surge protection up to **10 kV** in common mode and **6 kV** in differential mode. On request, additional protection can be provided with an **SPD** device incorporated into the electrical compartment, which protects the luminaire against overvoltages of **10 kV**, **12 kV** or **20 kV**, in both common-mode and differential-mode.

EOS-free luminaire equipped with specific technical features designed to prevent the build-up of parasitic capacitance, thereby minimising damage caused by electrical overstress (EOS).

V.O.C.-free luminaire constructed using non-metallic materials and components with high chemical compatibility with the LED source to prevent the release of volatile organic compounds (VOCs) that could, over time, affect performance, stability and colour temperature.

Class II insulated luminaire (or optional **Class I**) with an **IP66** protection rating for the optical and electrical compartments on all models, impact resistance rating of **IK10** for the **S** and **M** models and **IK09** for the **L** and **XL** models, with an operating temperature range of **-40°C** to **+50°C** and a storage temperature range of **-40°C** to **+80°C**, comprising:

- a die-cast aluminium body with an integrated heat sink, dimensioned to ensure a long service life and maximum LED efficiency, subjected to sandblasting, cataphoresis and polyester powder coating in **glossy aluminium RAL 9006**, or, on request, in a **customisable RAL colour**, free from VOCs and EOS, resistant to corrosion, abrasion, flaking and salt spray, with testing up to 1,000 hours.
- The optical and electrical compartments are separated by a hermetic partition;
- the electrical compartment opens from the top without the need for special tools and consists of modular power supplies;
- an adjustable fitting for pole-top or arm mounting, made of die-cast aluminium and integral with the luminaire body via screws which, when properly secured, allow the luminaire to be installed according to the two different mounting options with inclinations ranging from **-15°** to **+15°** in **5°** increments;
- a spirit level incorporated into the luminaire to ensure perfectly horizontal installation;
- 5 mm thick, extra-clear, flat tempered glass diffuser with a silicone rubber seal moulded to the shape of the optical compartment, ensuring the luminaire is airtight;



- LED modules mounted on the luminaire body using screws only, without the use of adhesives or special compounds, to facilitate maintenance and replacement;
- high-efficiency modular PMMA optical components mounted on the LED modules using specialised fixing screws, which can be removed to allow for easy replacement during maintenance;
- available on request with an H07RN-F type outgoing cable fitted with a pair of IP66/IP68 plug and socket connectors for a quick and secure connection to the mains supply.

The luminaire can be fitted, on request, with optional **remote control** devices, featuring interface components integrated into the luminaire body, available in the following versions:

- Control via DALI and DALI 2.0 digital signals (DALI/DALI 2.0);
- Automatic flux adjustment according to pre-programming (CLO-FULL);
- Voltage-regulated control (PLV);
- Power line loop (LPL) control;
- Interface with emergency lighting devices (DCE-DIM);
- Radio-frequency control (NEMA Socket and Zhaga Socket).

Luminaire compliant with the Minimum Environmental Criteria (**CAM**) in accordance with Ministerial Decree of 27 September 2017 (Official Gazette No. 244 of 18 October 2017), bearing **CE**, **RoHS**, **ENEC**, **ENEC+** (pending), **IP66**, **IK10** (S and M models), **IK09** (L and XL models), photobiological safety Class **R1**, and complies with the following standards:

- CEI 34-33;
- EN 60598-2-3: 2003 / A1:2011;
- EN 60598-1:2015 / A1:2018;
- EN 61000-3-2:2014;
- EN 61000-3-3:2013;
- EN 61000-4-2:2009;
- EN 61000-4-3:2006 / A1:2008 / IS1:2009;
- EN 61000-4-4:2004;
- EN 61000-4-5:2006;
- EN 61000-4-6:2009;
- EN 61000-4-8:1993 / A1:2001;
- EN 61000-4-11:2004;
- EN 61547:2009;
- EN 62493:2010;
- EN 55015:2013;
- EN 62471:2010;
- EN 62262:2002.



Technical specifications

MAIN MAIN	Luminaire type	LED street luminaire
	Applications	Lighting for urban and rural roads, large open spaces, roundabouts, squares and car parks
	Brand	Niteko
	Series	ICONA PRO
	Mounting	Pole head or whip head with tilt range -15° to +15° in 5° increments <i>Standard accessory:</i> compatible with poles/arms Ø60mm; <i>Optional accessory:</i> compatible with poles/arms Ø76mm;
	Luminaire power	10W – 200W (Tolerance ±5%)
	Luminaire luminous efficacy	$\eta_{app} > 135 \text{ lm/W}$ (3,000K)
	Energy efficiency class	> A+++
	Operating temperature	<i>Operating temperature:</i> -40°C to +50°C; <i>Storage temperature:</i> -40°C to +80°C
	Estimated service life	L95 B10: > 100,000 h ($T_a = 25^\circ\text{C} - I_F \leq 500 \text{ mA}$); L90 B10: > 120,000 h ($T_a = 25^\circ\text{C} - I_F \leq 500 \text{ mA}$); L80 B10: > 270,000 h ($T_a = 25^\circ\text{C} - I_F \leq 500 \text{ mA}$); L70 B10: > 450,000 h ($T_a = 25^\circ\text{C} - I_F \leq 500 \text{ mA}$);
	Certifications	CE, RoHS, ENEC, ENEC+ (pending), IP66, IK10 (S and M models), IK09 (L and XL models), photobiological safety, photometric certification, EOS-free, VOC-free
OPTICAL SPECIFICATIONS OPTICAL	Light source	High-power LEDs driven at a constant current not exceeding 500mA
	Optical system	Independent and replaceable PMMA LED and optical modules
	Luminous flux of the light source	From 1,430 lm (10 W, 1,800 K, CRI > 70) to 38,625 lm (200 W, 4,000 K, CRI > 70) (Tolerance ±5%)
	Luminous efficacy of the light source	$\eta_{LED} > 190 \text{ lm/W}$ (3,000K)
	Colour temperature	<i>Standard:</i> 3,000K; <i>Optional:</i> 1,800K, 2,200K, 2,700K, 4,000K, 5,000K, 5,700K
	Colour Rendering Index	<i>Standard:</i> CRI > 70; <i>Optional:</i> CRI > 80, CRI > 90
	Photometry	Asymmetrical, rotosymmetrical, elliptical and symmetrical photometric distributions, for pedestrian crossings and cycle/pedestrian paths
	Optical Efficiency	Greater than 80% (depending on the model)
	Photometric classes	Luminous intensity class G*2; Glare index class D.6
	Photobiological safety	<i>Risk class:</i> RG1; <i>IR and UV radiation:</i> absent
	Switch-on/re-switch-on time	$t_A < 1 \text{ sec.}$; $t_R < 1 \text{ sec.}$
ELECTRICAL CHARACTERISTICS	Power supply	<i>Standard:</i> 175/264 V AC – 50/60 Hz; <i>Optional:</i> 120/277 V AC – 50/60 Hz; Electronic power supplies incorporated into the appliance's electrical compartment with efficiency $\eta > 95\%$ and power factor PF > 0.97 (Active PFC). Standard functions available: - Pre-programmed automatic control for up to 5 daily time bands (PRG5); -Control via 1–10 V analogue signal (DIM); -Luminous flux control over the product's lifetime (CLO.LITE).
	Electrical connection	<i>Standard:</i> safety isolator with disconnection upon opening the electrical compartment <i>Optional:</i> outgoing power cable with IP68 electrical connector
	Insulation class	<i>Standard:</i> Class II; <i>Optional:</i> Class I
	Electrical protection	<i>Standard:</i> surge protection up to 10 kV M.C. and 6 kV M.D. <i>Optional:</i> additional surge protection with an SPD device incorporated into the electrical compartment, protecting the unit up to 10, 12 or 20 kV in M.C. and M.D.
FEATURES MECHANICS	Materials	<i>Housing:</i> die-cast aluminium with integrated heat sink; <i>Adjustable mounting bracket:</i> die-cast aluminium integrated into the body; <i>Screen:</i> 5mm-thick extra-clear flat tempered glass;
	Colour	<i>Standard:</i> RAL 9006; <i>Optional:</i> other RAL colours of your choice from the colour chart
	Protection rating	<i>Optical compartment:</i> IP66; <i>Electrical compartment:</i> IP66; <i>Impact resistance rating:</i> IK10;



Lighting characteristics

Icona Pro ^S							
Codice Articolo Prodotto (ICONAPRO-S-xyyy-zz-rr)	Potenza	Flusso Luminoso Nominale (xyyy)					
		4070 5070	3070	2770 3580 4080 5080 5780	3080	2270 2780	1870 2790
	[W]	[lm]					
ICONAPRO-S-40W-xyyy-zz-rr	10,9	2.031	1.920	1.878	1.749	1.697	1.430
	15,7	2.890	2.735	2.673	2.493	2.418	2.038
	20,7	3.860	3.672	3.452	3.222	3.125	2.634
	25,5	4.774	4.526	4.416	4.126	4.002	3.374
	30,5	5.640	5.346	5.217	4.873	4.727	3.985
	35,4	6.437	6.103	5.954	6.104	5.921	4.549
	38,3	6.962	6.601	6.439	6.123	5.939	4.921
ICONAPRO-S-70W-xyyy-zz-rr	20,9	4.273	4.036	3.952	3.678	3.568	3.007
	25,3	5.117	4.836	4.733	4.408	4.276	3.604
	30,4	6.091	5.760	5.634	5.251	5.093	4.293
	35,6	7.055	6.674	6.525	6.084	5.901	4.974
	40,1	7.872	7.449	7.281	6.790	6.586	5.552
	45,4	8.817	8.345	8.155	7.607	7.379	6.220
	50,8	9.752	9.232	9.020	8.415	8.163	6.881
	55,5	10.547	9.986	9.755	9.102	8.829	7.443
	61,0	11.466	10.734	10.484	9.569	9.282	8.001
	65,7	12.247	11.599	11.328	10.573	10.256	8.646
	70,5	13.023	12.335	12.045	11.243	10.906	9.194

Icona Pro ^M							
Codice Articolo Prodotto (ICONAPRO-M-xyyy-zz-rr)	Potenza	Flusso Luminoso Nominale (xyyy)					
		4070 5070	3070	2770 3580 4080 5080 5780	3080	2270 2780	1870 2790
	[W]	[lm]					
ICONAPRO-M-100W-xyyy-zz-rr	70,0	13.617	12.884	12.595	11.744	11.392	9.604
	75,2	14.531	13.751	13.440	12.534	12.158	10.250
	80,3	15.400	14.578	14.244	13.286	12.887	10.864
	85,6	16.303	15.432	15.079	14.066	13.644	11.502
	90,3	17.084	16.172	15.802	14.741	14.299	12.054
	95,4	17.939	16.982	16.592	15.479	15.015	12.658
	100,1	18.712	17.715	17.307	16.147	15.663	13.204
ICONAPRO-M-130W-xyyy-zz-rr	80,6	16.124	15.259	14.914	13.908	13.491	11.373
	85,3	16.988	16.078	15.713	14.656	14.216	11.984
	90,4	17.902	16.945	16.558	15.446	14.983	12.630
	95,5	18.812	17.808	17.400	16.233	15.746	13.273
	100,9	19.770	18.717	18.286	17.061	16.549	13.951
	110,7	21.463	20.323	19.852	18.525	17.969	15.148
	120,2	22.621	21.404	20.923	19.510	18.925	15.954
	130,2	24.265	22.961	22.443	20.930	20.302	17.115



Icona Pro ^L							
Codice Articolo Prodotto (ICONAPRO-L-xyyy-zz-rr)	Potenza	Flusso Luminoso Nominale (xyyy)					
		4070 5070	3070	2770 3580 4080 5080 5780	3080	2270 2780	1870 2790
	[W]	[lm]					
ICONAPRO-L-150W-xyyy-zz-rr	130,1	25.306	23.936	23.406	21.819	21.164	17.842
	140,2	27.050	25.590	25.020	23.326	22.626	19.074
	150,3	28.784	27.232	26.623	24.823	24.078	20.299

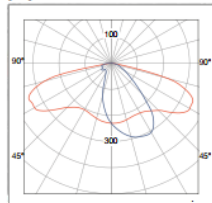
Icona Pro ^{XL}							
Codice Articolo Prodotto (ICONAPRO-XL-xyyy-zz-rr)	Potenza	Flusso Luminoso Nominale (xyyy)					
		4070 5070	3070	2770 3580 4080 5080 5780	3080	2270 2780	1870 2790
	[W]	[lm]					
ICONAPRO-XL-180W-xyyy-zz-rr	160,5	30.506	28.864	28.216	26.310	25.521	21.515
	170,1	32.943	31.162	30.470	28.405	27.553	23.228
	180,3	34.681	32.810	32.078	29.907	29.010	24.457
ICONAPRO-XL-200W-xyyy-zz-rr	180,4	35.177	33.251	32.536	30.308	29.399	24.787
	200,2	38.625	36.517	35.725	33.287	32.288	27.222

Lighting specifications

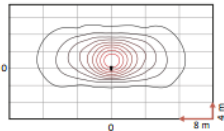


Asimmetrica

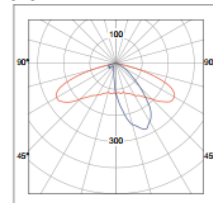
[A1] - Asimmetrica 150°×50°



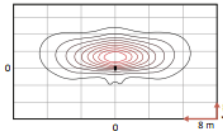
H = 8 m



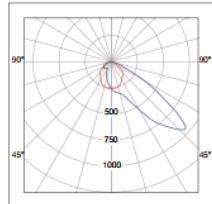
[A2] - Asimmetrica 140°×45°



H = 8 m



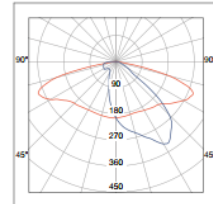
[A3] - Asimmetrica 90°×60°



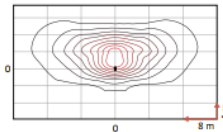
H = 8 m



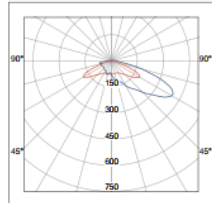
[A4] - Asimmetrica 145°×55°



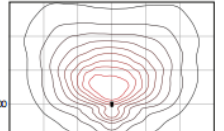
H = 8 m



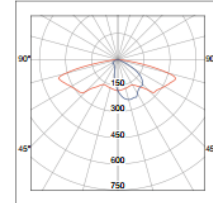
[A7] - Asimmetrica 140°×70°



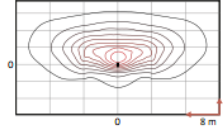
H = 8 m



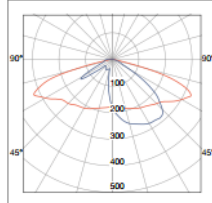
[A8] - Asimmetrica 155°×60°



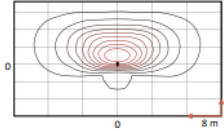
H = 8 m



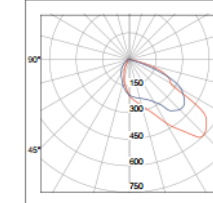
[A9] - Asimmetrica 145°×55°



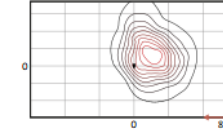
H = 8 m



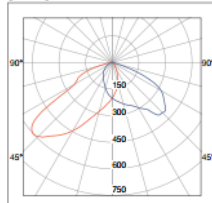
[PCDX] - Asimmetrica DX 65°×60°



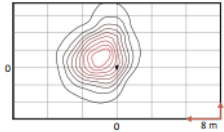
H = 8 m



[PCSX] - Asimmetrica SX 65°×60°

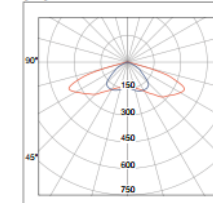


H = 8 m

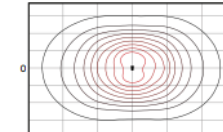


Ellittica

[E3] - Ellittica 145°×110°



H = 8 m



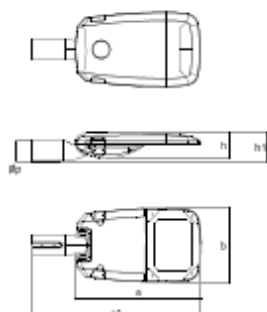
Optional: Other photometric data available on request

Technical drawing

ICONA PRO S

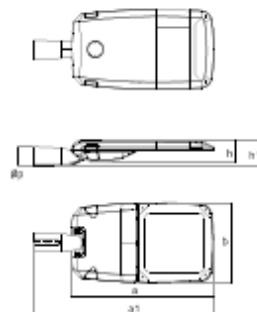
Montaggio
su braccio

Mast arm
mounting



a 475 mm
a1 283 mm
b 642 mm
h 94 mm
h1 112 mm
Øp 48-60 mm

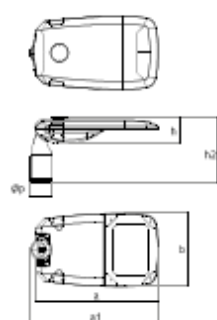
ICONA PRO M



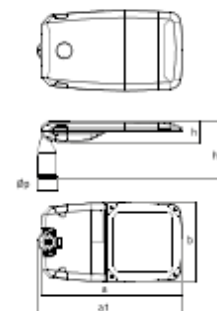
a 475 mm
a1 272 mm
b 473 mm
h 48-60 mm
h1 94 mm
Øp 237 mm

Montaggio
testa-palo

Head-pole
mounting



a 558 mm
a2 273 mm
b 720 mm
h 94 mm
h2 108 mm
Øp 48-60 mm



a 558 mm
a2 273 mm
b 574 mm
h 94 mm
h2 237 mm
Øp 48-60 mm

Peso | Weight 4,7 kg

Superficie di esposizione al vento
Wind exposure surface

Pianta / Base 0,12 m²

Laterale/ Side 0,04 m²

Peso | Weight 5,7 kg

Superficie di esposizione al vento
Wind exposure surface

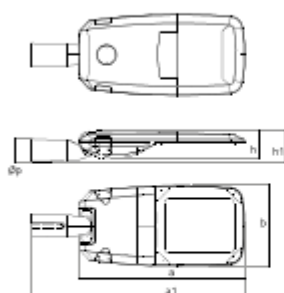
Pianta / Base 0,14 m²

Laterale/ Side 0,04 m²

ICONA PRO L

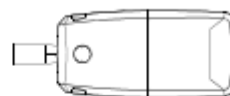
Montaggio
su braccio

Mast arm
mounting

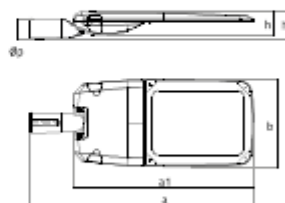


a 592 mm
a1 333 mm
b 750 mm
h 94 mm
h1 112 mm
Øp 48-60 mm

ICONA PRO XL



a 690 mm
a1 332 mm
b 850 mm
h 94 mm
h1 108 mm
Øp 48-60 mm

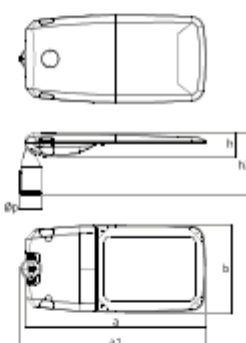


Montaggio
testa-palo

Head-pole
mounting



a 592 mm
a2 333 mm
b 604 mm
h 94 mm
h2 238 mm
Øp 48-60 mm



a 690 mm
a2 332 mm
b 705 mm
h 94 mm
h2 238 mm
Øp 48-60 mm

Peso | Weight 6,9 kg

Superficie di esposizione al vento
Wind exposure surface

Pianta / Base 0,18 m²

Laterale/ Side 0,04 m²

Peso | Weight 8,4 kg

Superficie di esposizione al vento
Wind exposure surface

Pianta / Base 0,22 m²

Laterale/ Side 0,05 m²

Product images



Applications

