



# I-TRON ZERO

## I-TRON ZERO

### MAIN CHARACTERISTICS

<b>Applications</b>	Street lighting.
<b>Optic</b>	<p>STE-M/S: Asymmetrical optic for suburban street lighting.                  STU-M/S: Asymmetrical optic for street, urban and cycle-path lighting.                  STW: Asymmetrical optic for wide urban and suburban road lighting, specific for wet asphalts.                  SV: Asymmetrical optic for very narrow urban streets or highway entrance/exit turns.                  S05/S07: Asymmetrical optic for street, urban and green areas lighting.                  STA: Asymmetrical optic for wide urban road and cycle-path lighting.                  Colour temperature: 4000K, 3000K, 2700K, 2200K (others in option)   CRI ≥ 70                  LOR= 100%, DLOR= 100%, ULOR= 0%                  Photobiological safety class: EXEMPT GROUP                  LED source efficiency: 185 lm/W @ 140mA, Tj=85°C, 4000K</p>
<b>Insulation class</b>	II, I
<b>Protection degree</b>	IP66/IP67   IK09 total
<b>Dimensions</b>	See the drawing
<b>Weight</b>	max 6 kg
<b>Exposed surface</b>	Side: 0.03m <sup>2</sup> – Top: 0.13 m <sup>2</sup>   SCx 0.04 m <sup>2</sup>
<b>Mounting</b>	Bracket / Post-top: Ø33mm + Ø60mm   Ø60mm + Ø76mm(optional)
<b>Tilt Angle</b>	Post-top: -10°/+25° (step 5°)   Bracket: -25°/+10° (step 5°)
<b>LED Modules</b>	Removable / Replaceable.
<b>Gear tray</b>	Removable. Gear tray integrated on luminaire body, separated from optic unit. Removable plate optional.
<b>Operating temp.</b>	-40°C / +55°C
<b>Storage temp</b>	-40°C / +80°C
<b>Main reference standards</b>	EN 60598-1, EN 60598-2-3, EN 62471, EN 55015, EN 61547, EN 61000-3-2, EN-61000-3-3



### ELECTRICAL CHARACTERISTICS

<b>Rated voltage</b>	220+240V 50/60Hz (Standard tolerance +/-10%, other voltages and tolerances upon request)
<b>Power factor</b>	>0,95 (at full load - F, DA, DAC)
<b>Mains connection</b>	Terminal block for cables max section 4mm <sup>2</sup>
<b>Surge protection</b>	Up to 12kV With SPD: CL.II: 10kV / 10kV CM/DM   CL.I: 12kV / 10kV CM/DM Without SPD: CL.II: 10kV / 6kV CM/DM   CL.I: 10kV / 6kV CM/DM
<b>SPD (optional)</b>	12kV-10kA, type 2+3, with LED signal and thermo fuse to disconnect load at the end of life.
<b>Control system (options)</b>	<p>F: Fixed power not dimmable.                  DA: Automatic dimming (virtual midnight) with default profile.                  DAC: Custom DA profile.                  FLC: Constant light flux.                  DALI: Digital dimming interface DALI.                  NEMA: Socket 7 pin (ANSI C136.41).                  ZHAGA: Socket 4 pin (ZHAGA Book 18).</p>
<b>Optical unit lifetime (Tq=25°C)</b>	>100.000hr L90B10 >100.000hr L90, TM-21

### MATERIALS

<b>Fixing</b>	Die-cast aluminum UNI EN1706 powder painted.
<b>Lower frame</b>	
<b>Upper canopy</b>	
<b>Closure hook</b>	Extruded aluminium with stainless steel spring.
<b>Optic</b>	99.85% aluminum with a surface finish in 99.95% with vacuum-sealed deposition. Aluminum grade class A+ (DIN EN 16268)
<b>Screen</b>	Flat tempered glass, 4mm thickness high transparency.
<b>Cable gland</b>	Plastic M20x1.5 - IP68
<b>Gasket</b>	Polyurethane
<b>Colour</b>	Graphite - Cod. 01



LUMINAIRE	OPTIC	LED CURRENT (mA)	RATED LUMINAIRE FLUX* (Tq=25°C, 4000K, lm)	RATED LUMINAIRE POWER* (Tq=25°C, Vin=230Vac, F/DA/DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX* (Tj=85°C, 4000K, lm)	RATED LED POWER* (Tj=85°C, W)
I-TRON ZERO 5P5 7040.060-1M	STE-M STU-M STW SV	60	1760	11.9	147.8	1847	9.4
I-TRON ZERO 5P5 7040.060-2M			3550	23	154.3	3694	18.8
I-TRON ZERO 5P5 7040.060-3M			5330	33.8	157.6	5541	28.2
I-TRON ZERO 5P5 7040.060-4M			7170	43.4	165.2	7387	37.6
I-TRON ZERO 5P5 7040.100-1M		100	2890	19.1	151.3	3023	16
I-TRON ZERO 5P5 7040.100-2M			5790	37.4	154.8	6046	31.9
I-TRON ZERO 5P5 7040.100-3M			8670	54.8	158.2	9069	47.9
I-TRON ZERO 5P5 7040.100-4M			11550	72	160.4	12092	63.8
I-TRON ZERO 5P5 7040.140-1M		140	4000	26.8	149.2	4150	22.7
I-TRON ZERO 5P5 7040.140-2M			7930	52.3	151.6	8299	45.4
I-TRON ZERO 5P5 7040.140-3M			11860	76.7	154.6	12449	68
I-TRON ZERO 5P5 7040.140-4M			15610	102	153	16598	90.7
I-TRON ZERO 5P5 7040.180-1M		180	5000	34.8	143.6	5227	29.6
I-TRON ZERO 5P5 7040.180-2M			9870	67.7	145.7	10453	59.1
I-TRON ZERO 5P5 7040.180-3M			14750	100	147.5	15680	88.7
I-TRON ZERO 5P5 7040.180-4M			19410	132	147	20906	118
I-TRON ZERO 5P5 7040.060-1M	S05 S07 STA STE-S STU-S	60	1730	11.9	145.3	1847	9.4
I-TRON ZERO 5P5 7040.060-2M			3460	23	150.4	3694	18.8
I-TRON ZERO 5P5 7040.060-3M			5210	33.8	154.1	5541	28.2
I-TRON ZERO 5P5 7040.060-4M			7010	43.4	161.5	7387	37.6
I-TRON ZERO 5P5 7040.100-1M		100	2830	19.1	148.1	3023	16
I-TRON ZERO 5P5 7040.100-2M			5650	37.4	151	6046	31.9
I-TRON ZERO 5P5 7040.100-3M			8480	54.8	154.7	9069	47.9
I-TRON ZERO 5P5 7040.100-4M			11290	72	156.8	12092	63.8
I-TRON ZERO 5P5 7040.140-1M		140	3900	26.8	145.5	4150	22.7
I-TRON ZERO 5P5 7040.140-2M			7760	52.3	148.3	8299	45.4
I-TRON ZERO 5P5 7040.140-3M			11600	76.7	151.2	12449	68
I-TRON ZERO 5P5 7040.140-4M			15260	102	149.6	16598	90.7

LUMINAIRE	OPTIC	LED CURRENT (mA)	RATED LUMINAIRE FLUX* (Tq=25°C, 4000K, lm)	RATED LUMINAIRE POWER* (Tq=25°C, Vin=230Vac, F/DA/DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX* (Tj=85°C, 4000K, lm)	RATED LED POWER* (Tj=85°C, W)
I-TRON ZERO 5P5 7040.180-1M			4870	34.8	139.9	5227	29.6
I-TRON ZERO 5P5 7040.180-2M		180	9670	67.7	142.8	10453	59.1
I-TRON ZERO 5P5 7040.180-3M			14420	100	144.2	15680	88.7
I-TRON ZERO 5P5 7040.180-4M			18980	132	143.7	20906	118

\*RATED LUMINAIRE FLUX / RATED LUMINAIRE POWER: Rated data obtained in laboratory.

\*RATED LED FLUX / RATED LED POWER: Rated data extrapolated from LED manufacturer datasheet.

Values indicated in this technical sheet are to be considered rated values. Flux tolerance:  $\pm 7\%$ . Power tolerance:  $\pm 7\%$ .

Power tolerance with ZHAGA version or power supply D4i/SR:  $\pm 10\%$ .

Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.

The characteristics of the product listed above are subjected to change without notice.

LUMINAIRE	OPTIC	LED CURRENT (mA)	RATED LUMINAIRE FLUX* (Tq=25°C, 3000K, lm)	RATED LUMINAIRE POWER* (Tq=25°C, Vin=230Vac, F/DA/DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX* (Tj=85°C, 3000K, lm)	RATED LED POWER* (Tj=85°C, W)
I-TRON ZERO 5P5 7030.060-1M	STE-M STU-M STW SV	60	1660	11.9	139.4	1736	9.4
I-TRON ZERO 5P5 7030.060-2M			3340	23	145.2	3472	18.8
I-TRON ZERO 5P5 7030.060-3M			5010	33.8	148.2	5208	28.2
I-TRON ZERO 5P5 7030.060-4M			6740	43.4	155.2	6944	37.6
I-TRON ZERO 5P5 7030.100-1M		100	2720	19.1	142.4	2842	16
I-TRON ZERO 5P5 7030.100-2M			5440	37.4	145.4	5683	31.9
I-TRON ZERO 5P5 7030.100-3M			8150	54.8	148.7	8525	47.9
I-TRON ZERO 5P5 7030.100-4M			10860	72	150.8	11367	63.8
I-TRON ZERO 5P5 7030.140-1M		140	3760	26.8	140.2	3901	22.7
I-TRON ZERO 5P5 7030.140-2M			7450	52.3	142.4	7801	45.4
I-TRON ZERO 5P5 7030.140-3M			11150	76.7	145.3	11702	68
I-TRON ZERO 5P5 7030.140-4M			14670	102	143.8	15602	90.7
I-TRON ZERO 5P5 7030.180-1M		180	4700	34.8	135	4913	29.6
I-TRON ZERO 5P5 7030.180-2M			9280	67.7	137	9826	59.1
I-TRON ZERO 5P5 7030.180-3M			13870	100	138.7	14739	88.7
I-TRON ZERO 5P5 7030.180-4M			18250	132	138.2	19652	118
I-TRON ZERO 5P5 7030.060-1M	S05 S07 STA STE-S STU-S	60	1630	11.9	136.9	1736	9.4
I-TRON ZERO 5P5 7030.060-2M			3260	23	141.7	3472	18.8
I-TRON ZERO 5P5 7030.060-3M			4900	33.8	144.9	5208	28.2
I-TRON ZERO 5P5 7030.060-4M			6590	43.4	151.8	6944	37.6
I-TRON ZERO 5P5 7030.100-1M		100	2660	19.1	139.2	2842	16
I-TRON ZERO 5P5 7030.100-2M			5310	37.4	141.9	5683	31.9
I-TRON ZERO 5P5 7030.100-3M			7970	54.8	145.4	8525	47.9
I-TRON ZERO 5P5 7030.100-4M			10610	72	147.3	11367	63.8
I-TRON ZERO 5P5 7030.140-1M		140	3670	26.8	136.9	3901	22.7
I-TRON ZERO 5P5 7030.140-2M			7290	52.3	139.3	7801	45.4
I-TRON ZERO 5P5 7030.140-3M			10900	76.7	142.1	11702	68
I-TRON ZERO 5P5 7030.140-4M			14340	102	140.5	15602	90.7

LUMINAIRE	OPTIC	LED CURRENT (mA)	RATED LUMINAIRE FLUX* (Tq=25°C, 3000K, lm)	RATED LUMINAIRE POWER* (Tq=25°C, Vin=230Vac, F/DA/DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX* (Tj=85°C, 3000K, lm)	RATED LED POWER* (Tj=85°C, W)
I-TRON ZERO 5P5 7030.180-1M			4580	34.8	131.6	4913	29.6
I-TRON ZERO 5P5 7030.180-2M		180	9090	67.7	134.2	9826	59.1
I-TRON ZERO 5P5 7030.180-3M			13560	100	135.6	14739	88.7
I-TRON ZERO 5P5 7030.180-4M			17840	132	135.1	19652	118

\*RATED LUMINAIRE FLUX / RATED LUMINAIRE POWER: Rated data obtained in laboratory.

\*RATED LED FLUX / RATED LED POWER: Rated data extrapolated from LED manufacturer datasheet.

Values indicated in this technical sheet are to be considered rated values. Flux tolerance:  $\pm 7\%$ . Power tolerance:  $\pm 7\%$ .

Power tolerance with ZHAGA version or power supply D4i/SR:  $\pm 10\%$ .

Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.

The characteristics of the product listed above are subjected to change without notice.

LUMINAIRE	OPTIC	LED CURRENT (mA)	RATED LUMINAIRE FLUX* (Tq=25°C, 2700K, lm)	RATED LUMINAIRE POWER* (Tq=25°C, Vin=230Vac, F/DA/DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX* (Tj=85°C, 2700K, lm)	RATED LED POWER* (Tj=85°C, W)
I-TRON ZERO 5P5 7027.060-1M	STE-M STU-M STW SV	60	1590	11,9	133,6	1662	9.4
I-TRON ZERO 5P5 7027.060-2M			3200	23	139,1	3324	18.8
I-TRON ZERO 5P5 7027.060-3M			4800	33,8	142	4986	28.2
I-TRON ZERO 5P5 7027.060-4M			6450	43,4	148,6	6649	37.6
I-TRON ZERO 5P5 7027.100-1M		100	2600	19,1	136,1	2721	16
I-TRON ZERO 5P5 7027.100-2M			5210	37,4	139,3	5441	31.9
I-TRON ZERO 5P5 7027.100-3M			7800	54,8	142,3	8162	47.9
I-TRON ZERO 5P5 7027.100-4M			10400	72	144,4	10883	63.8
I-TRON ZERO 5P5 7027.140-1M		140	3600	26,8	134,3	3735	22.7
I-TRON ZERO 5P5 7027.140-2M			7140	52,3	136,5	7469	45.4
I-TRON ZERO 5P5 7027.140-3M			10670	76,7	139,1	11204	68
I-TRON ZERO 5P5 7027.140-4M			14050	102	137,7	14938	90.7
I-TRON ZERO 5P5 7027.180-1M		180	4500	34,8	129,3	4704	29.6
I-TRON ZERO 5P5 7027.180-2M			8890	67,7	131,3	9408	59.1
I-TRON ZERO 5P5 7027.180-3M			13280	100	132,8	14112	88.7
I-TRON ZERO 5P5 7027.180-4M			17470	132	132,3	18816	118
I-TRON ZERO 5P5 7027.060-1M	S05 S07 STA STE-S STU-S	60	1560	11,9	131	1662	9.4
I-TRON ZERO 5P5 7027.060-2M			3120	23	135,6	3324	18.8
I-TRON ZERO 5P5 7027.060-3M			4690	33,8	138,7	4986	28.2
I-TRON ZERO 5P5 7027.060-4M			6310	43,4	145,3	6649	37.6
I-TRON ZERO 5P5 7027.100-1M		100	2550	19,1	133,5	2721	16
I-TRON ZERO 5P5 7027.100-2M			5090	37,4	136	5441	31.9
I-TRON ZERO 5P5 7027.100-3M			7630	54,8	139,2	8162	47.9
I-TRON ZERO 5P5 7027.100-4M			10160	72	141,1	10883	63.8
I-TRON ZERO 5P5 7027.140-1M		140	3510	26,8	130,9	3735	22.7
I-TRON ZERO 5P5 7027.140-2M			6980	52,3	133,4	7469	45.4
I-TRON ZERO 5P5 7027.140-3M			10440	76,7	136,1	11204	68
I-TRON ZERO 5P5 7027.140-4M			13730	102	134,6	14938	90.7

LUMINAIRE	OPTIC	LED CURRENT (mA)	RATED LUMINAIRE FLUX* (Tq=25°C, 2700K, lm)	RATED LUMINAIRE POWER* (Tq=25°C, Vin=230Vac, F/DA/DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX* (Tj=85°C, 2700K, lm)	RATED LED POWER* (Tj=85°C, W)
I-TRON ZERO 5P5 7027.180-1M			4380	34,8	125,8	4704	29.6
I-TRON ZERO 5P5 7027.180-2M		180	8700	67,7	128,5	9408	59.1
I-TRON ZERO 5P5 7027.180-3M			12980	100	129,8	14112	88.7
I-TRON ZERO 5P5 7027.180-4M			17080	132	129,3	18816	118

\*RATED LUMINAIRE FLUX / RATED LUMINAIRE POWER: Rated data obtained in laboratory.

\*RATED LED FLUX / RATED LED POWER: Rated data extrapolated from LED manufacturer datasheet.

Values indicated in this technical sheet are to be considered rated values. Flux tolerance:  $\pm 7\%$ . Power tolerance:  $\pm 7\%$ .

Power tolerance with ZHAGA version or power supply D4i/SR:  $\pm 10\%$ .

Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.

The characteristics of the product listed above are subjected to change without notice.

LUMINAIRE	OPTIC	LED CURRENT (mA)	RATED LUMINAIRE FLUX* (Tq=25°C, 2200K, lm)	RATED LUMINAIRE POWER* (Tq=25°C, Vin=230Vac, F/DA/DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX* (Tj=85°C, 2200K, lm)	RATED LED POWER* (Tj=85°C, W)
I-TRON ZERO 5P5 7022.060-1M	STE-M STU-M STW SV	60	1430	11.9	120.1	1496	9.4
I-TRON ZERO 5P5 7022.060-2M			2880	23	125.2	2992	18.8
I-TRON ZERO 5P5 7022.060-3M			4320	33.8	127.8	4488	28.2
I-TRON ZERO 5P5 7022.060-4M			5810	43.4	133.8	5984	37.6
I-TRON ZERO 5P5 7022.100-1M		100	2340	19.1	122.5	2449	16
I-TRON ZERO 5P5 7022.100-2M			4690	37.4	125.4	4897	31.9
I-TRON ZERO 5P5 7022.100-3M			7020	54.8	128.1	7346	47.9
I-TRON ZERO 5P5 7022.100-4M			9360	72	130	9795	63.8
I-TRON ZERO 5P5 7022.140-1M		140	3240	26.8	120.8	3361	22.7
I-TRON ZERO 5P5 7022.140-2M			6420	52.3	122.7	6722	45.4
I-TRON ZERO 5P5 7022.140-3M			9610	76.7	125.2	10083	68
I-TRON ZERO 5P5 7022.140-4M			12640	102	123.9	13445	90.7
I-TRON ZERO 5P5 7022.180-1M		180	4050	34.8	116.3	4233	29.6
I-TRON ZERO 5P5 7022.180-2M			8000	67.7	118.1	8467	59.1
I-TRON ZERO 5P5 7022.180-3M			11950	100	119.5	12700	88.7
I-TRON ZERO 5P5 7022.180-4M			15730	132	119.1	16934	118
I-TRON ZERO 5P5 7022.060-1M	S05 S07 STA STE-S STU-S	60	1400	11.9	117.6	1496	9.4
I-TRON ZERO 5P5 7022.060-2M			2810	23	122.1	2992	18.8
I-TRON ZERO 5P5 7022.060-3M			4220	33.8	124.8	4488	28.2
I-TRON ZERO 5P5 7022.060-4M			5680	43.4	130.8	5984	37.6
I-TRON ZERO 5P5 7022.100-1M		100	2290	19.1	119.8	2449	16
I-TRON ZERO 5P5 7022.100-2M			4580	37.4	122.4	4897	31.9
I-TRON ZERO 5P5 7022.100-3M			6870	54.8	125.3	7346	47.9
I-TRON ZERO 5P5 7022.100-4M			9140	72	126.9	9795	63.8
I-TRON ZERO 5P5 7022.140-1M		140	3160	26.8	117.9	3361	22.7
I-TRON ZERO 5P5 7022.140-2M			6290	52.3	120.2	6722	45.4
I-TRON ZERO 5P5 7022.140-3M			9400	76.7	122.5	10083	68
I-TRON ZERO 5P5 7022.140-4M			12360	102	121.1	13445	90.7



LUMINAIRE	OPTIC	LED CURRENT (mA)	RATED LUMINAIRE FLUX* (Tq=25°C, 2200K, lm)	RATED LUMINAIRE POWER* (Tq=25°C, Vin=230Vac, F/DA/DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX* (Tj=85°C, 2200K, lm)	RATED LED POWER* (Tj=85°C, W)
I-TRON ZERO 5P5 7022.180-1M			3940	34.8	113.2	4233	29.6
I-TRON ZERO 5P5 7022.180-2M		180	7830	67.7	115.6	8467	59.1
I-TRON ZERO 5P5 7022.180-3M			11680	100	116.8	12700	88.7
I-TRON ZERO 5P5 7022.180-4M			15370	132	116.4	16934	118

\*RATED LUMINAIRE FLUX / RATED LUMINAIRE POWER: Rated data obtained in laboratory.

\*RATED LED FLUX / RATED LED POWER: Rated data extrapolated from LED manufacturer datasheet.

Values indicated in this technical sheet are to be considered rated values. Flux tolerance:  $\pm 7\%$ . Power tolerance:  $\pm 7\%$ .

Power tolerance with ZHAGA version or power supply D4i/SR:  $\pm 10\%$ .

Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.

The characteristics of the product listed above are subjected to change without notice.