



# I-TRON 2

## I-TRON 2

### 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 13 kg
<b>Exposed surface</b>	Side: 0.06m <sup>2</sup> – Top: 0.28 m <sup>2</sup>   SCx 0.059 m <sup>2</sup>
<b>Mounting</b>	Bracket: Ø33mm + Ø60mm   Ø60mm + Ø76mm(optional) Post-top: Ø42mm + Ø60mm   Ø60mm + Ø76mm (optional)
<b>Tilt Angle</b>	Post-top: -10°/+25° (step di 5°)   Bracket: -25°/+10° (step di 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>	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).
<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, 5mm 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 2 5P5 7040.060-7M	STE-M STU-M STW SV	60	12500	74.4	168	12928	65.8
I-TRON 2 5P5 7040.060-8M			14310	86.5	165.4	14775	75.2
I-TRON 2 5P5 7040.060-9M			16080	95.9	167.6	16622	84.6
I-TRON 2 5P5 7040.060-10M			17860	107	166.9	18468	94
I-TRON 2 5P5 7040.060-11M			19640	120	163.6	20315	103
I-TRON 2 5P5 7040.060-12M			21420	131	163.5	22162	113
I-TRON 2 5P5 7040.100-7M		100	20320	125	162.5	21161	112
I-TRON 2 5P5 7040.100-8M			23220	142	163.5	24184	128
I-TRON 2 5P5 7040.100-9M			26100	160	163.1	27207	144
I-TRON 2 5P5 7040.100-10M			28980	178	162.8	30230	160
I-TRON 2 5P5 7040.100-11M			31850	199	160	33253	176
I-TRON 2 5P5 7040.100-12M			34680	217	159.8	36276	191
I-TRON 2 5P5 7040.140-7M		140	27710	177	156.5	29047	159
I-TRON 2 5P5 7040.140-8M			31560	200	157.8	33197	181
I-TRON 2 5P5 7040.140-9M			35450	229	154.8	37346	204
I-TRON 2 5P5 7040.140-10M			39240	254	154.4	41496	227
I-TRON 2 5P5 7040.140-11M			43080	281	153.3	45645	249
I-TRON 2 5P5 7040.140-12M			46830	306	153	49795	272

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 2 5P5 7040.060-7M	S05 S07 STA STE-S STU-S	60	12220	74.4	164.2	12928	65.8
I-TRON 2 5P5 7040.060-8M			13990	86.5	161.7	14775	75.2
I-TRON 2 5P5 7040.060-9M			15720	95.9	163.9	16622	84.6
I-TRON 2 5P5 7040.060-10M			17470	107	163.2	18468	94
I-TRON 2 5P5 7040.060-11M			19200	120	160	20315	103
I-TRON 2 5P5 7040.060-12M			20940	131	159.8	22162	113
I-TRON 2 5P5 7040.100-7M		100	19870	125	158.9	21161	112
I-TRON 2 5P5 7040.100-8M			22700	142	159.8	24184	128
I-TRON 2 5P5 7040.100-9M			25520	160	159.5	27207	144
I-TRON 2 5P5 7040.100-10M			28340	178	159.2	30230	160
I-TRON 2 5P5 7040.100-11M			31140	199	156.4	33253	176
I-TRON 2 5P5 7040.100-12M			33910	217	156.2	36276	191
I-TRON 2 5P5 7040.140-7M		140	27090	177	153	29047	159
I-TRON 2 5P5 7040.140-8M			30860	200	154.3	33197	181
I-TRON 2 5P5 7040.140-9M			34660	229	151.3	37346	204
I-TRON 2 5P5 7040.140-10M			38370	254	151	41496	227
I-TRON 2 5P5 7040.140-11M			42130	281	149.9	45645	249
I-TRON 2 5P5 7040.140-12M			45780	306	149.6	49795	272

\*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 2 5P5 7030.060-7M	STE-M STU-M STW SV	60	11750	74.4	157.9	12152	65.8
I-TRON 2 5P5 7030.060-8M			13450	86.5	155.4	13888	75.2
I-TRON 2 5P5 7030.060-9M			15110	95.9	157.5	15624	84.6
I-TRON 2 5P5 7030.060-10M			16790	107	156.9	17360	94
I-TRON 2 5P5 7030.060-11M			18460	120	153.8	19096	103
I-TRON 2 5P5 7030.060-12M			20130	131	153.6	20832	113
I-TRON 2 5P5 7030.100-7M		100	19100	125	152.8	19891	112
I-TRON 2 5P5 7030.100-8M			21830	142	153.7	22733	128
I-TRON 2 5P5 7030.100-9M			24530	160	153.3	25575	144
I-TRON 2 5P5 7030.100-10M			27240	178	153	28416	160
I-TRON 2 5P5 7030.100-11M			29940	199	150.4	31258	176
I-TRON 2 5P5 7030.100-12M			32600	217	150.2	34100	191
I-TRON 2 5P5 7030.140-7M		140	26050	177	147.1	27304	159
I-TRON 2 5P5 7030.140-8M			29670	200	148.3	31205	181
I-TRON 2 5P5 7030.140-9M			33320	229	145.5	35105	204
I-TRON 2 5P5 7030.140-10M			36890	254	145.2	39006	227
I-TRON 2 5P5 7030.140-11M			40500	281	144.1	42907	249
I-TRON 2 5P5 7030.140-12M			44020	306	143.8	46807	272

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 2 5P5 7030.060-7M	S05 S07 STA STE-S STU-S	60	11480	74.4	154.3	12152	65.8
I-TRON 2 5P5 7030.060-8M			13150	86.5	152	13888	75.2
I-TRON 2 5P5 7030.060-9M			14780	95.9	154.1	15624	84.6
I-TRON 2 5P5 7030.060-10M			16420	107	153.4	17360	94
I-TRON 2 5P5 7030.060-11M			18050	120	150.4	19096	103
I-TRON 2 5P5 7030.060-12M			19690	131	150.3	20832	113
I-TRON 2 5P5 7030.100-7M		100	18680	125	149.4	19891	112
I-TRON 2 5P5 7030.100-8M			21340	142	150.2	22733	128
I-TRON 2 5P5 7030.100-9M			23990	160	149.9	25575	144
I-TRON 2 5P5 7030.100-10M			26640	178	149.6	28416	160
I-TRON 2 5P5 7030.100-11M			29270	199	147	31258	176
I-TRON 2 5P5 7030.100-12M			31880	217	146.9	34100	191
I-TRON 2 5P5 7030.140-7M		140	25460	177	143.8	27304	159
I-TRON 2 5P5 7030.140-8M			29010	200	145	31205	181
I-TRON 2 5P5 7030.140-9M			32580	229	142.2	35105	204
I-TRON 2 5P5 7030.140-10M			36070	254	142	39006	227
I-TRON 2 5P5 7030.140-11M			39600	281	140.9	42907	249
I-TRON 2 5P5 7030.140-12M			43030	306	140.6	46807	272

\*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 2 5P5 7027.060-7M	STE-M STU-M STW SV	60	11250	74.4	151.2	11635	65.8
I-TRON 2 5P5 7027.060-8M			12880	86.5	148.9	13297	75.2
I-TRON 2 5P5 7027.060-9M			14470	95.9	150.8	14959	84.6
I-TRON 2 5P5 7027.060-10M			16080	107	150.2	16622	94
I-TRON 2 5P5 7027.060-11M			17680	120	147.3	18284	103
I-TRON 2 5P5 7027.060-12M			19270	131	147	19946	113
I-TRON 2 5P5 7027.100-7M		100	18290	125	146.3	19045	112
I-TRON 2 5P5 7027.100-8M			20900	142	147.1	21766	128
I-TRON 2 5P5 7027.100-9M			23490	160	146.8	24486	144
I-TRON 2 5P5 7027.100-10M			26080	178	146.5	27207	160
I-TRON 2 5P5 7027.100-11M			28670	199	144	29928	176
I-TRON 2 5P5 7027.100-12M			31210	217	143.8	32648	191
I-TRON 2 5P5 7027.140-7M		140	24940	177	140.9	26142	159
I-TRON 2 5P5 7027.140-8M			28400	200	142	29877	181
I-TRON 2 5P5 7027.140-9M			31910	229	139.3	33612	204
I-TRON 2 5P5 7027.140-10M			35320	254	139	37346	227
I-TRON 2 5P5 7027.140-11M			38770	281	137.9	41081	249
I-TRON 2 5P5 7027.140-12M			42150	306	137.7	44815	272

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 2 5P5 7027.060-7M	S05 S07 STA STE-S STU-S	60	10990	74.4	147.7	11635	65.8
I-TRON 2 5P5 7027.060-8M			12590	86.5	145.5	13297	75.2
I-TRON 2 5P5 7027.060-9M			14150	95.9	147.5	14959	84.6
I-TRON 2 5P5 7027.060-10M			15720	107	146.9	16622	94
I-TRON 2 5P5 7027.060-11M			17280	120	144	18284	103
I-TRON 2 5P5 7027.060-12M			18850	131	143.8	19946	113
I-TRON 2 5P5 7027.100-7M		100	17880	125	143	19045	112
I-TRON 2 5P5 7027.100-8M			20430	142	143.8	21766	128
I-TRON 2 5P5 7027.100-9M			22970	160	143.5	24486	144
I-TRON 2 5P5 7027.100-10M			25510	178	143.3	27207	160
I-TRON 2 5P5 7027.100-11M			28030	199	140.8	29928	176
I-TRON 2 5P5 7027.100-12M			30520	217	140.6	32648	191
I-TRON 2 5P5 7027.140-7M		140	24380	177	137.7	26142	159
I-TRON 2 5P5 7027.140-8M			27770	200	138.8	29877	181
I-TRON 2 5P5 7027.140-9M			31190	229	136.2	33612	204
I-TRON 2 5P5 7027.140-10M			34530	254	135.9	37346	227
I-TRON 2 5P5 7027.140-11M			37920	281	134.9	41081	249
I-TRON 2 5P5 7027.140-12M			41200	306	134.6	44815	272

\*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: ±7%. Power tolerance: ±7%.

Power tolerance with ZHAGA version or power supply D4i/SR: ±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 2 5P5 7022.060-7M	STE-M STU-M STW SV	60	10120	74.4	136	10472	65.8
I-TRON 2 5P5 7022.060-8M			11590	86.5	133.9	11968	75.2
I-TRON 2 5P5 7022.060-9M			13020	95.9	135.7	13464	84.6
I-TRON 2 5P5 7022.060-10M			14470	107	135.2	14959	94
I-TRON 2 5P5 7022.060-11M			15910	120	132.5	16455	103
I-TRON 2 5P5 7022.060-12M			17350	131	132.4	17951	113
I-TRON 2 5P5 7022.100-7M		100	16460	125	131.6	17140	112
I-TRON 2 5P5 7022.100-8M			18810	142	132.4	19589	128
I-TRON 2 5P5 7022.100-9M			21140	160	132.1	22038	144
I-TRON 2 5P5 7022.100-10M			23470	178	131.8	24486	160
I-TRON 2 5P5 7022.100-11M			25800	199	129.6	26935	176
I-TRON 2 5P5 7022.100-12M			28090	217	129.4	29384	191
I-TRON 2 5P5 7022.140-7M		140	22450	177	126.8	23528	159
I-TRON 2 5P5 7022.140-8M			25560	200	127.8	26889	181
I-TRON 2 5P5 7022.140-9M			28710	229	125.3	30250	204
I-TRON 2 5P5 7022.140-10M			31780	254	125.1	33612	227
I-TRON 2 5P5 7022.140-11M			34890	281	124.1	36973	249
I-TRON 2 5P5 7022.140-12M			37930	306	123.9	40334	272



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 2 5P5 7022.060-7M	S05 S07 STA STE-S STU-S	60	9890	74.4	132.9	10472	65.8
I-TRON 2 5P5 7022.060-8M			11330	86.5	130.9	11968	75.2
I-TRON 2 5P5 7022.060-9M			12730	95.9	132.7	13464	84.6
I-TRON 2 5P5 7022.060-10M			14150	107	132.2	14959	94
I-TRON 2 5P5 7022.060-11M			15550	120	129.5	16455	103
I-TRON 2 5P5 7022.060-12M			16970	131	129.5	17951	113
I-TRON 2 5P5 7022.100-7M		100	16090	125	128.7	17140	112
I-TRON 2 5P5 7022.100-8M			18390	142	129.5	19589	128
I-TRON 2 5P5 7022.100-9M			20670	160	129.1	22038	144
I-TRON 2 5P5 7022.100-10M			22960	178	128.9	24486	160
I-TRON 2 5P5 7022.100-11M			25220	199	126.7	26935	176
I-TRON 2 5P5 7022.100-12M			27470	217	126.5	29384	191
I-TRON 2 5P5 7022.140-7M		140	21940	177	123.9	23528	159
I-TRON 2 5P5 7022.140-8M			25000	200	125	26889	181
I-TRON 2 5P5 7022.140-9M			28070	229	122.5	30250	204
I-TRON 2 5P5 7022.140-10M			31080	254	122.3	33612	227
I-TRON 2 5P5 7022.140-11M			34130	281	121.4	36973	249
I-TRON 2 5P5 7022.140-12M			37080	306	121.1	40334	272

\*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.