



Green Tech Germany



antares

SOLAR, HYBRID AND AC GRID POWER SUPPLY

Trend – setting. Innovative. Attractive. Climate protection at its bright side !

We represents a technological unique product, striking a new path in professional outdoor lighting. The unrivaled aesthetics, economic efficiency and eco – friendliness are setting new standards.



The power tube is `Made in Austria`!

Highly efficient photovoltaic modul. A patented, worldwide unique and outstanding photovoltaic – modul technology assures continuous solar power supply. Highly efficient solar cells, optimized for poor light conditions, deliver excellent energy yields.



The power control unit comes from `Germany`!

A **programmable microcontroller** operates the light flexible and demand orientated. The intelligent electronic system monitors the charging condition of the energy storage device, optimizes the energy efficiency and ensures a trouble – free operation of solar lights even during longer periods of bad weather conditions.

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The highest power LED

Highly luminous and efficient. Easy to maintain, **high – efficiency LEDs** (185 lm/Watt). With optic lenses, a remarkable light output and an optimized light distribution provide an extraordinary high illuminance and reduce unwanted light pollution.

Discover the powerful range of four different heights and light heads – all available as solar, hybrid and AC grid.

The street light family is available in variations from 2.000 up to 24.000 lumen (12 up to 160 Watt LED power) – all as a solar, hybrid or a AC grid version. This variety offers you a wide range for using the street light to your special lighting problem.

The street light family provides a lengthwise aligned light distribution, which is perfect to suit the requirements of street light applications. Its equipped with highly modern LED – and photovoltaic technology (solar version).

The solar powered street light family is designed as an independent and self – sufficient solar light for professional exterior lighting system.

The unique energy management system of the solar light ensures operating reliability under all weather conditions and is also suitable for locations with moderate isolation. This street light is specially developed for the hardest conditions. And it's the only one where works reliable in the jungle and desert areas, hot and dirty areas with highest humidity and bad light conditions.

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Standards and options

The whole street light family is usually delivered with the following standards:

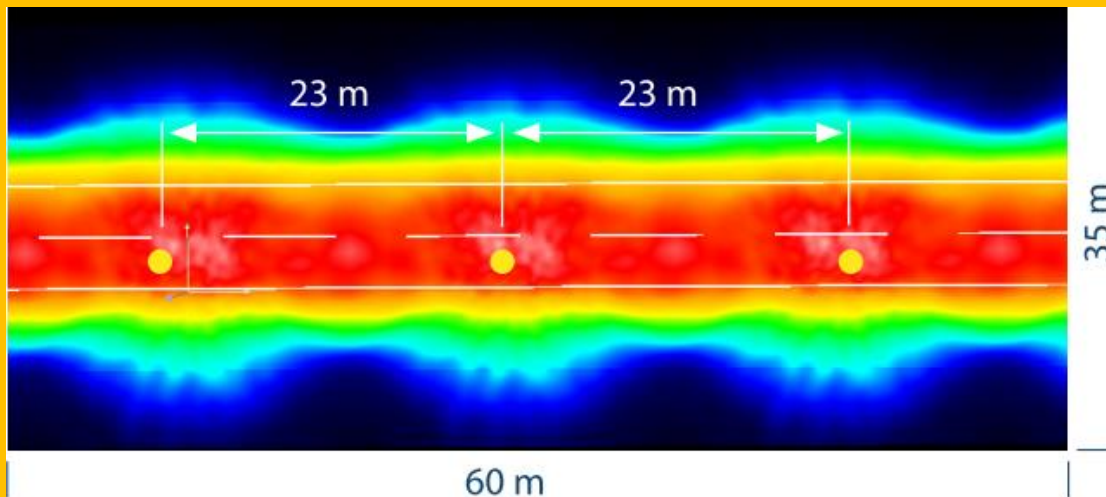
- Length wide aligned light distribution
- Light temperature neutral – with 5.300 Kelvin
(opt. neutral – white 5300 Kelvin. Or warm – with, 3.100 Kelvin)
- Typical service life of the LEDs more than 50.000 hours
- Program able microcontroller included (solar version)
- Customer – specific dynamic light profiles (solar version)
- Light head material paint – coated aluminum (in RAL 9006)
- Pole material hot – dipped galvanized steel (opt. in RAL colors)
- Optional Remote controller
- Optional Motion detector
- Thief – proof
- Designed for extreme application conditions (desert, high humidity period, bad light conditions, jungle)
- 2 year street light warranty, (5 year, 10 year, extra charge)
- 2 year battery warranty
- developed and manufactured in **Austria** and **West Germany** ``Made in EU``

Installation example

Street light type 4000 (20 Watt, 3.000lm), light spot height: 5.80m

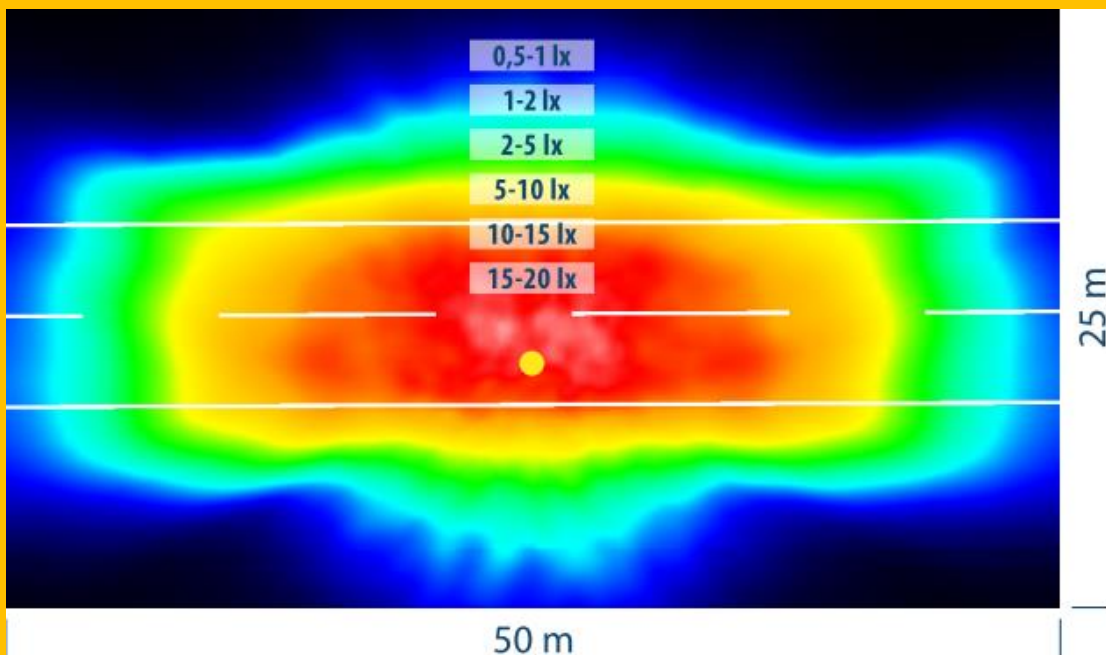
Distance between light: 23m

Average illuminance: 13 lx; Overall uniformity: 0,54



Light distribution

Street light type 4000 (20 Watt, 3.000 lm), light spot height: 5.80m



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Illuminance example

Street light type 4000 (20 Watt, 3.000lm) at full operation, street – width, 7m

Illuminance in operation depending on local site conditions (average daylight available for the solar version) and customer – specific lighting times.

distance [m]	E _{av} [lx]	E _{min} [lx]	U ₀
15	20	11	0,56
20	15	8,1	0,55
23	13	6,9	0,54
25	12	5,8	0,50
30	9,8	3,7	0,38
40	7,4	0,5	0,07

E_{av} [lx]: average illuminance; E_{min} [lx]: minimum illuminance;
U₀: overall uniformity; maintenance factor: 0,85

Standards and Compliances

STANDARDS / COMPLIANCES	
ISO-Certification	ISO 9001-2008
Illumination	according EN 13201
Degree of mechanical impact protection of PV module	IK06 (EN 62262)
Light poles certificates	EN 40-5, EN40-3-1, ISO 1461
Ingress protection rating of electronics	IP65
EMV, electronics certificates	EN 55015, EN 61547
Photovoltaics certificate	EN 61215 (adapted)
CE-certificate	✓
RoHS	✓

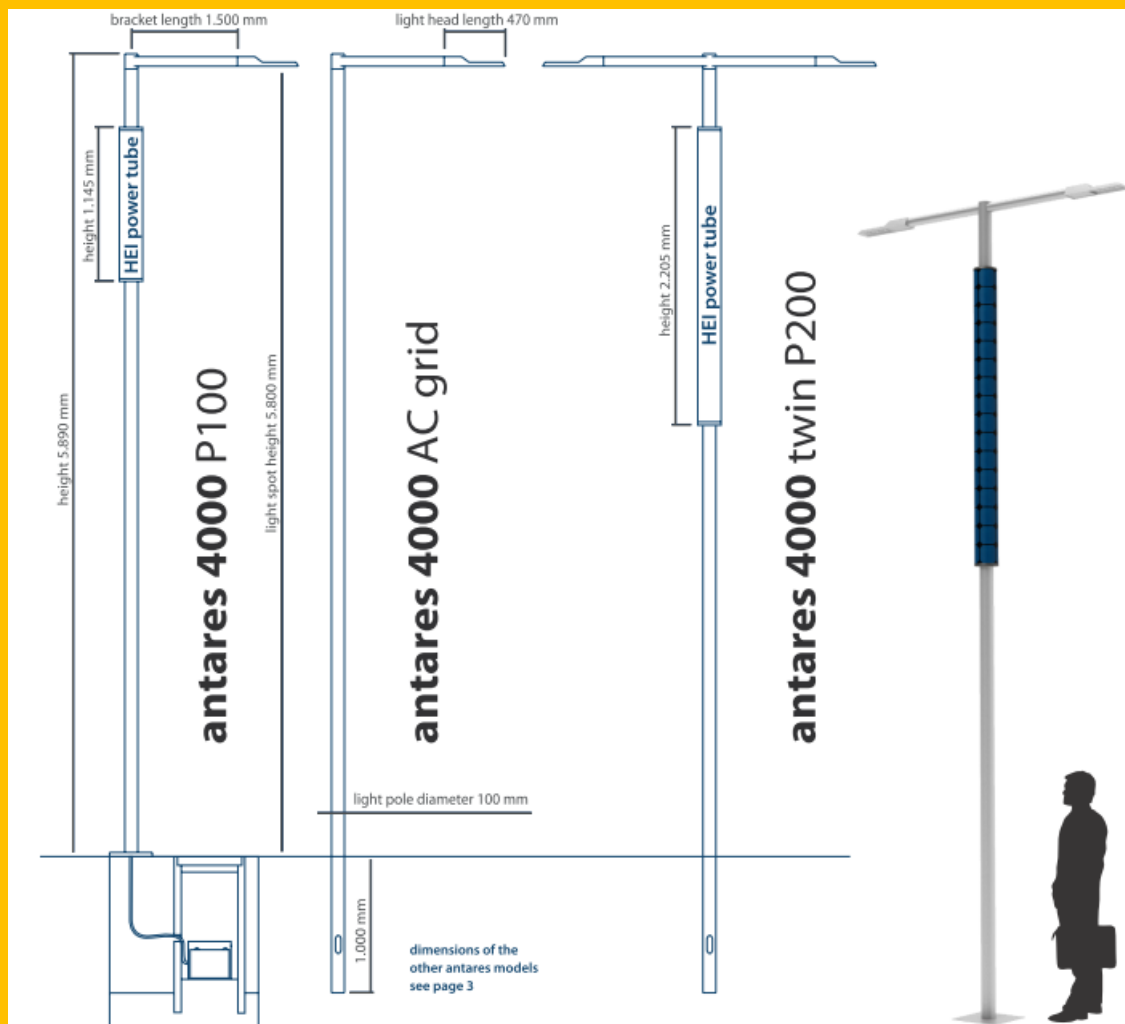
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Technical dates

Model	antares 2000			antares 4000			antares 8000		antares 16000	
	P70	P100	twin P200	P100	P200	twin P200	P200	twin P400	P400	twin P800
	LIGHT HEAD, OPTICAL FEATURES									
High-effency LEDs	3		2 x 3	5		2 x 5	10	2 x 10	20	2 x 20
Maximum power	12 Watt		2 x 12 Watt	20 Watt		2 x 20 Watt	40 Watt	2 x 40 Watt	80 Watt	2 x 80 Watt
Maximum luminous flux	2.000 lm		2 x 2.000 lm	3.000 lm		2 x 3.000 lm	6.000 lm	2 x 6.000 lm	12.000 lm	2 x 12.000 lm
Light output ratio	97%			97%			97%		97%	
	LIGHT HEAD, MECHANICS									
Light head width	130 mm			130 mm			130 mm		220 mm	
Light head height	70 mm			70 mm			70 mm		97 mm	
Light head length	470 mm			470 mm			670 mm		780 mm	
Lenght brackets	1.340 mm			1.500 mm			2.170 mm		2.500 mm	
Light head weight	3,2 kg		2 x 3,2 kg	3,2 kg		2 x 3,2 kg	4,2 kg	2 x 4,2 kg	12 kg	2 x 12 kg
	LIGHT SYSTEM									
Installation height	4.590 mm			5.890 mm			8.090 mm		10.090 mm	12.090 mm
Light spot height	4.500 mm			5.800 mm			8.000 mm		10.000 mm	12.000 mm
Diameter of light pole	100 mm			100 mm			100 mm		120 mm	
Weight (Solar)	ca. 100 kg	ca. 105 kg	ca. 125 kg	ca. 115 kg	ca. 130 kg	ca. 150 kg	ca. 200 kg	ca. 265 kg	ca. 335 kg	ca. 400 kg
	STREET LIGHTING									
Optimum pole distance	23 m	18 m	23 m	23 m	23 m	23 m	32 m	32 m	36 m	36 m
Typical street width	5 m	5 m	2 x 5 m	7 m	7 m	2 x 7 m	9 m	2 x 9 m	11 m	2 x 11 m
Typical illuminance	11 lx	14 lx	11 lx	13 lx	13 lx	13 lx	15 lx	15 lx	20 lx	20 lx
Lighting classes	CE5	ME5	ME5	CE4	ME4	CE4	CE3	CE3	CE3	CE3
	POWER SUPPLY OPTIONS									
Solar, Hybrid, AC	S, H, AC			S, H, AC			S, H, AC		S, H, AC	S, H, AC
	HEI POWER TUBE [SOLAR VERSION]									
Length of PV-tube	1.015 mm	1.545 mm	2.205 mm	1.145 mm	2.205 mm	2.205 mm	2.205 mm	2 x 2.205 mm	2 x 2.205 mm	4 x 2.205 mm
Diameter of PV-tube	140 mm	140 mm	180 mm	180 mm	180 mm	180 mm	180 mm	180 mm	180 mm	180 mm
Number of PV-cells	21 pcs	33 pcs	64 pcs	32 pcs	64 pcs	64 pcs	64 pcs	2 x 64 pcs	2 x 64 pcs	2 x 64 pcs
Nominal power output	69 Watt	109 Watt	210 Watt	105 Watt	210 Watt	210 Watt	210 Watt	2 x 210 Watt	2 x 210 Watt	2 x 210 Watt
	HEI POWER CONTROL [SOLAR VERSION]									
Capacity of battery 12 V	36 Ah		75 Ah	55 Ah		120 Ah		250 Ah		2x 250 Ah

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Drawing and dimension



Flange plate
according to EN 40-5
dimensions: 330 x 330 x 20 mm
hole spacing: 200 to 250 mm



Green Tech in Germany

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