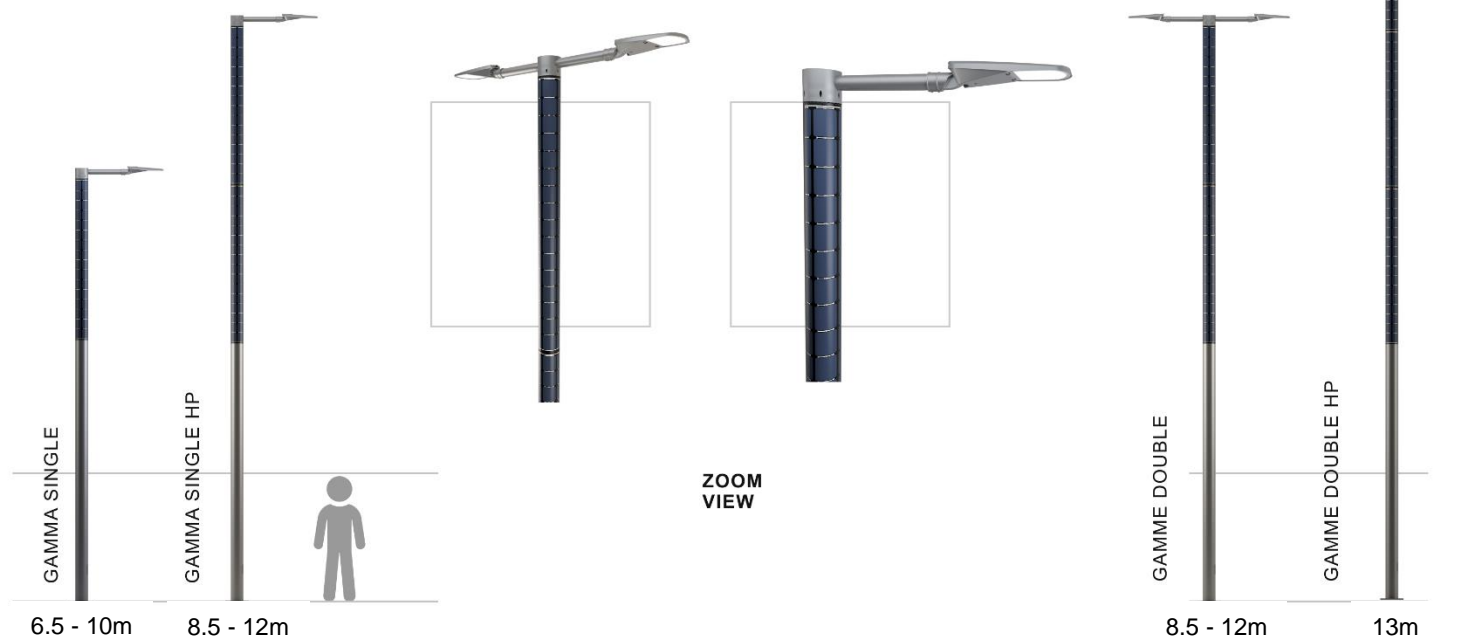


GAMMA Family

German Engineered
Solar Lighting

The smart and compact solar streetlight at an attractive price.



FEATURES

- High-performance street light for various lighting situations
- Fully autonomous and energy self-sufficient
- Smart, reliable and affordable
- Strong construction and closed design
- Easy to install and minimum maintenance

APPLICATIONS

- Roads and streets
- Industrial sites
- Intersections
- Pedestrian areas
- Parking lots

OPTIONS

HYBRID STREET LIGHTING - a combination of batteries and grid connectivity where the batteries serve as back-up.

SOLAR POWERED CAMERA - all types of IP cameras for wide area surveillance can be integrated.

SMART MONITORING - remote configuration and lighting control from anywhere via a modern web application.

CUSTOMIZATION

Solar smart street lights can be tailored to fit your specific needs: Choose the desired height, color, luminaire, light distribution and output to fit your demands.

TECHNICAL SPECIFICATIONS

	GAMMA Single	GAMMA Single HP	GAMMA Double	GAMMA Double HP
General information				
Pole Height	6.5 - 10 m	8.5 - 12 m	8.5 - 12 m	13 m
Diameter	170 mm			
Beam Angle	-10° to 25° degree adjustable			
Weight	~160 kg (6.5 m)	~220 kg (8.5 m)	~240 kg (8.5 m)	~320 kg (13 m)
Number of Days of Autonomy	> 3 days (luminous efficacy automatically reduced)			
LED Lighting				
Power	60 Watt	120 Watt	2x60 Watt	2x120 Watt
Lumen Output	10,365 lm	19,454 lm	2 x 10,365 lm	2 x 19,454 lm
Lumen Efficiency	~173 lm / W	~162 lm / W	~173 lm / W	~162 lm / W
Colour Temperature (CCT)	3000K / 4000K (standard) / 5000K / 6000K			
Operating Temperature	-20°C to +60°C (ambient temperature)			
Lifetime	L80 > 100,000 hrs			
Dimming	Continuously dimmable (0-100%)			
ON/OFF control	Programmable			
Light Profile	Programmable / Adaptive Light Control			
Motion Sensor	Optional			
Warranty	5 years			
Solar Module				
Type	vertical, cylindrical (Agamine's proprietary solar module)			
Technology	Monocrystalline silicon, efficiency > 24%			
Quantity	1 PV - 64 cells	2 PV - 128 cells	2 PV - 128 cells	4 PV - 256 cells
Pole				
Material	Steel hot-dip galvanized with powder coating			
Wind load	45 m/s (162 km/h); higher loads optional			
Warranty	20 years anti-corrosion C5m			
Battery				
Type	Lithium LiFePO4, High temperature (65°C)			
Lifetime	7,000 cycles; ~ 19 years			
Warranty	3 years (5 or 10 years optional)			
Position	Batteries in the pole			
Grid Connection (Optional)				
Hybrid Mode	Grid charging if insufficient energy from sun			
Charge Controller Input	110 V / 220 V; 47 Hz – 63 Hz; 95% Efficiency			
Options				
Camera	any POE camera possible; Wi-Fi/4G camera optional			
Communication	Remote communication 4G/GPRS or ZigBee/Lora Wan			
Protection and Security				
IP 66 Protection; IK09				
Glass cover for LED and PV unit to protect against sand abrasion				
Reverse polarity protection				
Low battery voltage cut-off				
Security pole door / vandal protection				