



GEN SOLAR LED



GENERAL TECHNICAL DATA & WARRANTY INFORMATION

Typical applications:	<ul style="list-style-type: none"> • Class B Roadway lighting • Parking areas • Commercial areas • Residential areas
Light source:	High powered LED Modules
Colour temperature:	<ul style="list-style-type: none"> • 3000K* • 4000K • 5000K* • 5700K* [*Available on request]
Operating temperature range:	-30°C to 60°C
Relative humidity:	5% to 95%
Design life:	10 Years
Typical Lumen maintenance:	L70 @ 100 000 hours
Colour rendering index:	70
IP Rating:	<ul style="list-style-type: none"> • Luminaire IP66 • Charge controller and battery enclose IP54
Luminaire housing:	High-pressure die-cast LM6 aluminum finished with a durable dark grey* polyester epoxy powder coating. [*Grey is the standard colour , unpainted or other colours available on request]
Luminaire clips and fasteners:	304 Grade* stainless steel [*316 Grade available on request]
Diffuser:	4mm Clear tempered glass diffuser
Optics:	Optical grade acrylic (PMMA) Zhaga book 15 compliant lenses
Impact protection grade:	IK08
Power supply:	9V to 36V DC
Insulation classification:	Class 2



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Battery enclosure and PV Panel mount brackets	General specifications	<ul style="list-style-type: none"> • "Pole top mount" designed battery enclosure • Battery enclosure design allows 360° rotation • Battery enclosure and PV panel mount brackets are manufactured from mild steel (3CR12 optional) and hot dipped galvanized as well as epoxy powder coated for additional corrosion protection • Modular design battery enclosure allows easy installation • PV panel mount brackets are pre-set and indexed to optimal angle for best possible solar power generation – region specific 		
Pole and outreach bracket	Type	Planted		
	Lengths (mm)	<ul style="list-style-type: none"> • 6.0m Mount Height pole • 1.0m Planted depth • 7.0m Total length 	<ul style="list-style-type: none"> • 8.0m Mount Height pole • 1.2m Planted depth • 9.2m Total length 	
	General specifications	500mm / 15° rake – outreach bracket (Can be rotated 360°)		
Solar Panel	Type	Mono-Crystalline		
	Number of panels used	2		
	Panel Size - L x W x T (mm)	806 x 680 x 34		
	Total Rated Power (W)	160		
Battery	Type	Deep Cycle Rechargeable AGM / GEL Hybrid VRLA Solar Battery		
	Rated Voltage & Capacity per battery (VDC / Ahr)	12 / 60		
Solar Charge Controller characteristics	Type	Intelligent MPPT (Maximum Power Point Tracking)		
	System Control & Dimming	<ul style="list-style-type: none"> • Configuration and commissioning through Bluetooth and Andriod or iOS smart cell phone or tablet • Pre-set autonomous system on / off switch via PV panel voltage monitoring • Custom dimming profiles to extend operating hours and minimise discharge of system can be activated • Real time operational history and diagnostics 		
	Charging & discharging	Auto Voltage select (VDC)	12 or 24	
		Rated Charge Current (A)	15	
		Maximum PV open circuit voltage (VDC)	75	
		Peak efficiency (%)	98	
		Continuous / Peak load current (A)	15	
		Charge Algorithm	Multi stage - Adaptive	
	Low voltage load disconnect(VDC)	11.1 / 22.2		
Low voltage load reconnect (VDC)	13.1 / 26.2			
Protection	<ul style="list-style-type: none"> • IP43 (Electronics area) & IP22 (Connection area) • Battery reverse polarity (Fuse) • Output short circuit • Over temperature 			



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RENDERS

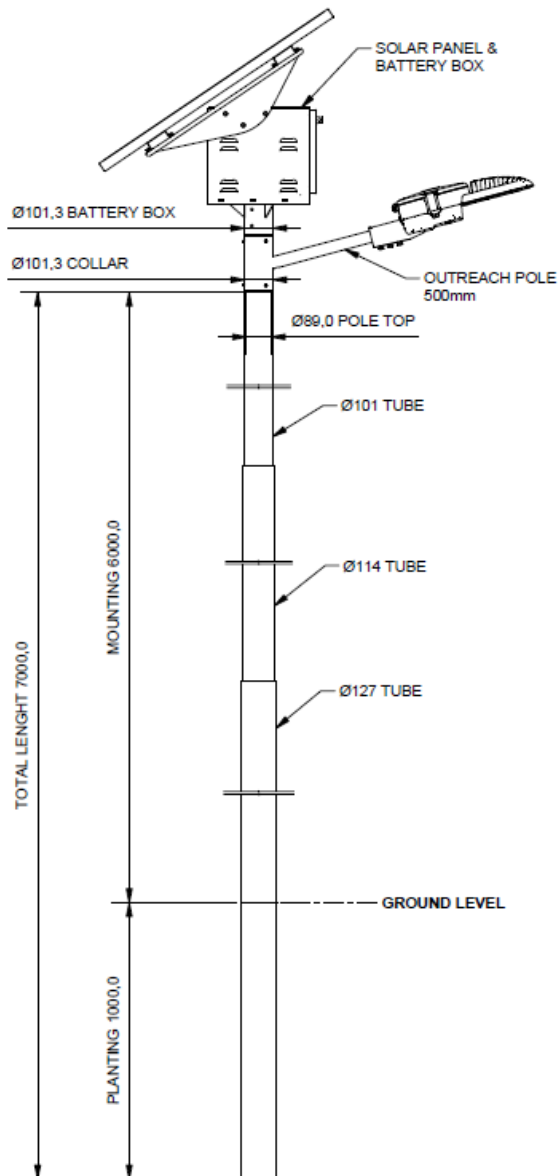




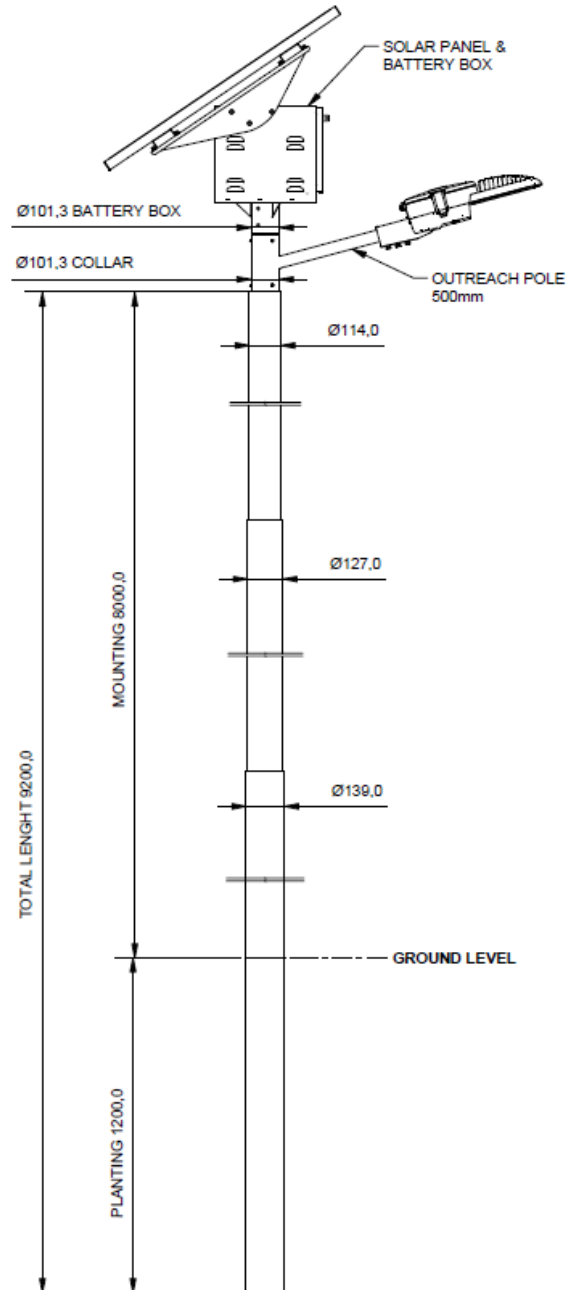
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DIMENSIONS

6 Meter Mount Height



8 Meter Mount Height

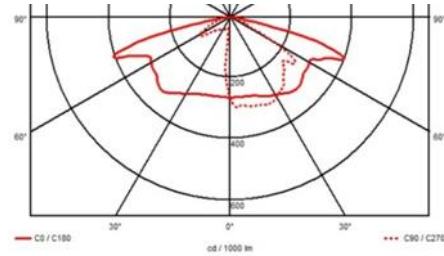




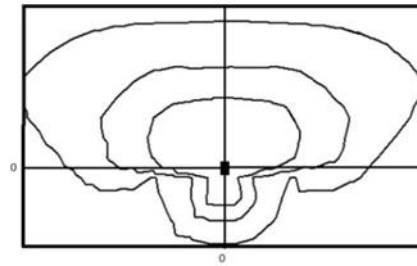
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TYPICAL LIGHT DISTRIBUTION OPTIONS*

- POLAR DIAGRAMS



- ISOLUX DIAGRAMS



Optic: 41803

- *Other light distribution options available on request.
- For best light distribution option please request a lighting design for specific application.



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PRODUCT VARIATIONS & ORDERING CODES

Operating voltage (VDC)	Variation	Driving Current (mA)	Rated System Power (W)	Effective Lumen flux (lm) ^{*1}	CCT (K)	CRI ^{*2}
9 - 36	GEN I SL 1	700	26	2 965	4000	70
	GEN I SL 2	500	36	4 429		
		700	53	5 930		
	GEN I SL 3	700	77	8 894		
	GEN I SL 4	700	103	11 859		

KEY'S & IMPORTANT NOTES

(*1) Measurement precision for flux +/- 5%, for efficacy +/- 6%, for CRI +/- 1.5
(*2) 80 CRI available on request
(*3) 2 Day discharge period is based on 11Hrs maximum operating time per day

- **E.&O.E.** (errors and omissions excepted)
- **Important note:**
Due to the rapid development in LED technology the performance values, power consumption and lumen output levels stated above are subject to change without prior notice.