

**5 YEAR
WARRANTY**

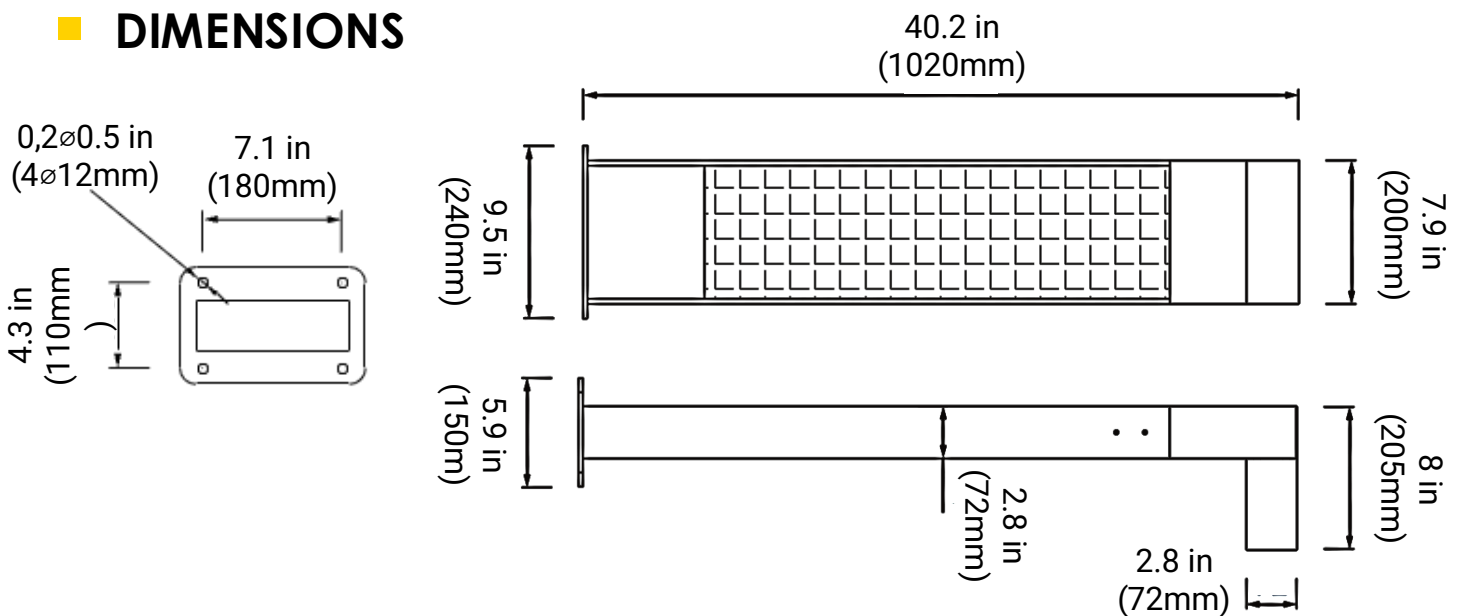
Alto

ARCHITECTURAL SOLAR BOLLARD

LED	High-efficiency LED Module	72 LEDs 2835
	Lumens	227
	Power consumption	4W
	Lighting profile	Post dusk 4 hours @ 100% / 2 hours @ 60% / 30% until dawn
	CRI	>70
	Optic system	PMMA lenses & tempered glass protection
	IK rating	IK08
	Upward light output ratio ULOR	0%
	Color temperature	3000 K
	LED useful lifetime L90B10	>75,000 hours
	LED module thermal dissipation	Passive dissipation by convection through the aluminum body
SOLAR PANEL	Technology	Monocrystalline silicon
	Power	44W (2 x 22W) / 18 VDC
	Lifetime	> 25 years at 80% of initial power
	Tilt	Vertical (90°)
	Structure	Frameless
BATTERY	Battery technology	High-grade LiFePO4 Battery (resistant to extreme temperatures, maintenance-free)
	Capacity	154Wh (3.2V 48Ah)
	Operating temperature	-4°F to +158°F (-20°C to +70°C)
	Protection	BMS protection in the battery
	Autonomy (up to)	3 nights
ELECTRONICS	Charge controller technology	MPPT charge controller with programmable lighting levels
	Electrical protection	Reverse polarity protection/over-voltage/overcharge and overdischarge/over temperature/open circuit and short circuit
	Connectors	Quick connectors (easy maintenance & components replacement)
	Protection class	Class III
GENERAL	Housing material	Aluminum die casting cover, extruded aluminum body
	Paint and finishes	Polyester powder paint coating. Resistant to corrosion.
	IP rating	IP65
	IK rating	IK08

GENERAL	Dimensions	40.16 x 7.87 x 2.83 in (1020 x 200 x 72 mm)
	EPA	N/A
	Weight	15.87 lb (7.2 kg)
	Height	3'4" (1.02m)
	Warranty	5 years
CERTIFICATES	Solar panel certificates	IEC 61215; IEC 61730 I and II
	Battery certificates	EN 62133
	LVD & Security certificates	EN 60598-1 / EN 60598-2-3 / EN 62493 / IEC 62471
	EMC certificates	EN 55015 / EN 61547 / EN 61000-3-2 / EN 61000-3-3 / EN 61347-2-13 / EN 61347-1 / EN 62384
	Other certifications	IEC 62262 / EN 13032-4 / EN 62717 / EN 6272-1 / EN 6272-2-1 / EN 61643-11

DIMENSIONS



LIGHT DISTRIBUTION

