

High Efficiency Solar PV Modules

ELDORA -MICRO SERIES

36 Cell Polycrystalline Solar PV Module

This Data Sheet is Applicable for: *Eldora 80P*.

Features

- Designed ideally for Street Lighting Applications.
- Guaranteed(0 to +4.99) Wp positive power output tolerance , ensuring high return on investment.
- Extremely reliable product suiting all environmental conditions
- Engineered to provide excellent low light response.

Quality and Safety

- 25 year limited power output warranty **
- Rigorous quality control meeting the highest international standards
- ISO 14001 (Environmental Health and Safety) Certified Factory
- ISO 9001:2008 (Quality Management System) Certified Factory
- BSOHSAS 18001(Occupational Health & Safety)Certified Factory
- IEC 61215, IEC 61730 ,MCS Certified
- Certified for Salt Mist Corrosion Resistance (IEC 61701)
- Certified for Ammonia Resistance (IEC 62716)

Recommended Applications

- Street Lighting Applications



High efficiency solar cells with advanced texturing and passivation process which provides enhanced power output



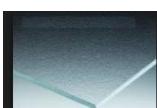
An IP65 and fire rated junction box, highly protected from moisture, dust and water. Ideal for good generation and measurement of electrical output . Consists of 10 A diodes, which prevent power loss resulting in no effect on the output.



High quality interconnecting ribbons used as a conductor which reduces power loss and increases efficiency and life of the solar module. This ribbon ensures the best soldering between solar cells.



High Dielectric Strength EVA with optimal gel content. Low water permittivity and UV Resistant Back sheets ensure durability up to 3000 hrs. of Damp Heat Test.



Low Iron Tempered Glass with Special Textured and high light transmission and capture .

TECHNICAL DATA

ELDORA 80P

Electrical Data – All data refers to STC (AM 1.5, 1000 W/m², 25°C)

Type	Eldora 80P
Nominal Power, P _{mpp} (0 ~+ 4.99 Wp)	80
Nominal Voltage, V _{mpp} (V)	18.09
Nominal Current, I _{mpp} (A)	4.43
Open Circuit Voltage, V _{oc} (V)	22.24
Short Circuit Current, I _{sc} (A)	4.76
Module Efficiency (%)	14.05

*Electrical Parameters' tolerance ± 3% except P_{mpp}

Temperature Coefficients (T_c) and permissible operating conditions

T _c of Open Circuit Voltage (β)	-0.31% /°C
T _c of Short Circuit Current (α)	0.058 % /°C
T _c of Power (γ)	-0.41% /°C
Maximum System Voltage	1000 V(TÜV)
NOCT	45°C ± 2°C
Temperature Range	-40°C to + 85°C

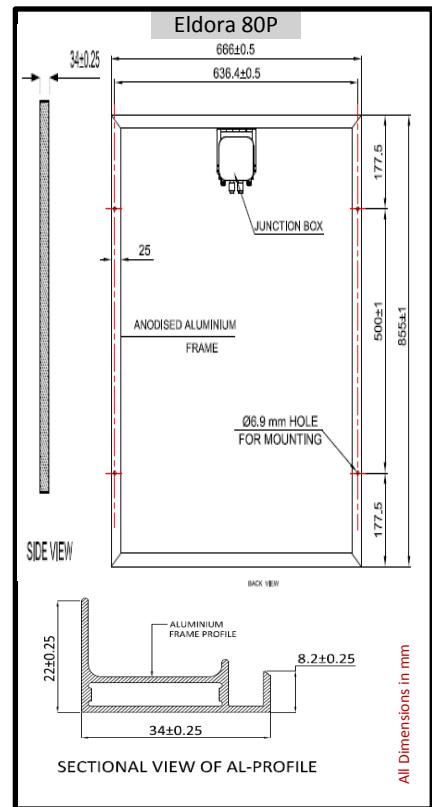
Mechanical Data

*NOCT irradiance 800 W/m², ambient temperature 20°C, wind speed 1 m/sec

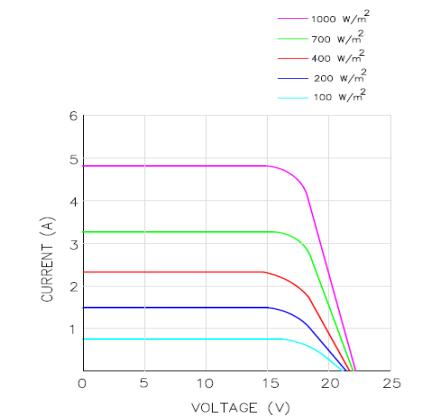
Length	33.35"	855 mm
Width	25.97"	666 mm
Height	1.33"	34 mm
Weight	15 lbs	6.8 kg
Junction Box	IP65, 2 Bypass Diodes	
Cable & Connectors	N.A	
Application Class	CLASS A (Safety Class II)	
Superstrate	High Transmission Low Iron Tempered Glass	
Cells	36 no's Poly-crystalline solar cells ; 2 or 3 bus bars	
Cell Encapsulation	EVA (Ethylene Vinyl Acetate)	
Back Sheet	Composite Film	
Frame	Anodized aluminum frame with twin wall profile	

Guarantees and Certifications

Product Warranty**	5 Years
Performance Guarantee**	Guaranteed Power Output of 90% for 12 years and 80% for 25 years
Approvals and Certificates	IEC 61215 Ed2, IEC 61730, IEC 61701, IEC 62716, MCS, PV Cycle



IV Curves of Eldora 80P



*CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE