

# TRUBLU™ SERIES - HIGH EFFICIENCY MULTICRYSTALLINE SOLAR MODULES

The TruBlu™ Series are high powered solar photovoltaic modules containing advanced encapsulation materials with multi-layer sheet lamination providing maximum protection from the harshest environmental conditions. It provides outstanding energy delivery for residential and commercial applications. They perform in any weather conditions including partial shading effects/clouds. They range from 220 – 240 Watts.



## ELECTRICAL SPECIFICATIONS

PARAMETER	VALUE				
Model	AP-220PK	AP-225PK	AP-230PK	AP-235PK	AP-240PK
Rated Power (Pmax)	220 W	225 W	230 W	235 W	240 W
Maximum Power Voltage Vmp(V)	29.07	29.44	29.81	30.18	30.54
Maximum Power Current Imp(A)	7.57	7.65	7.72	7.79	7.87
Open Circuit Voltage Voc(V)	36.46	36.66	36.86	37.06	37.26
Short Circuit Current Isc(A)	8.12	8.21	8.30	8.39	8.48
NOCT	48±2° C	48±2° C	48±2° C	48±2° C	48±2° C
Practical Module Efficiency ηc (%)	13.23	13.89	14.21	14.46	14.82
Watts per ft. <sup>2</sup>	12.48	12.77	13.05	13.34	13.62
Maximum System Voltage UL/IEC (VDC)	600/1000	600/1000	600/1000	600/1000	600/1000
Series Fuse Rating (A)	15	15	15	15	15
Output Tolerance (+/-)	±3%	±3%	±3%	±3%	±3%

Measured at Standard Test Conditions (STC): Irradiance of 1000W/m<sup>2</sup>, air mass of 1.5, cell temperature of 25° C

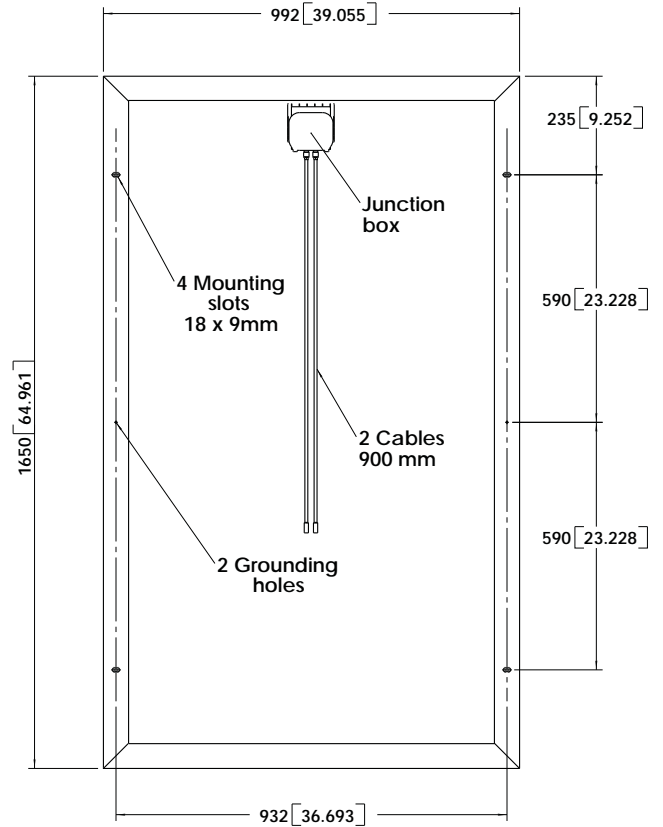
## MECHANICAL SPECIFICATIONS

PARAMETER	VALUE
Solar Cell	60 Cells, 6 x 10 Multicrystalline
Junction Box Internal Bypass Diodes	3 Internal Bypass Diodes, IP67
Glass Cover	Tempered Low E 0.126" (3.2mm) Glass Substrate
Performance Warranty	90% Output 10 Years – 80% Output 25 Years
Frame Type	Anodized Aluminum Alloy with Twin-Wall Profile
Dimensions (Length x Width x Depth)	64.96" x 39.05" x 1.97" (1650mm x 992mm x 50mm)
Weight	41 lbs. (18.5kg)
Cable Size/ Connector Type	No. 12 AWG/Tyco™ SolarLok
Cell Encapsulation	EVA (Ethylene Vinyl Acetate)

## TEMPERATURE COEFFICIENT

PARAMETER	VALUE
Power: Pmax (%/°C)	-0.40
Voltage: Voc (%/°C)	-0.34
Current: Isc (%/°C)	+0.06

## MODULE DIAGRAM



## OPERATION CONDITIONS & SAFETY RATINGS

PARAMETER	VALUE
Ambient Operating Temperature	-40° F to 185° F (-40° C to 85° C)
Fire Safety Classification	Class C Fire Rating
Max. Surface Resistance (Front & Back)	50PSF (2400Pa)
Hail Impact Rating	1"Ø (25mm) at 52 mph (23 m/s)

## WARRANTY & CERTIFICATIONS

PARAMETER	VALUE
Warranty	25 year limited 80% power warranty 10 year limited 90% power warranty 5 year limited product warranty
Warranted Tolerance (+/-)	±5%
Certifications	UL1703, IEC 61215, IEC 61730, CE, CEC FSEC and Class C Fire Rating