



BLACKSTAR™ 190 SERIES - HIGH EFFICIENCY MONOCRYSTALLINE SOLAR MODULES

The newest addition to the ASP BlackStar™ Series is a high powered 190 Watt photovoltaic module series. Popularized in Europe in the past year, they are ideally suited for one-man installations on residential projects. They perform best in clear weather conditions without shading effects or excess clouds. They range from 175 - 190 Watt.



ELECTRICAL SPECIFICATIONS

PARAMETER	VALUE			
Model	ASP-175M	ASP-180M	ASP-185M	ASP-190M
Rated Power(Pmax)	175 W	180 W	185 W	190 W
Maximum Power Voltage (Vmp)	35.7 V	36.2 V	36.4 V	37.0 V
Maximum Power Current (Imp)	4.9 A	4.97 A	5.09 A	5.13 A
Open Circuit Voltage (Voc)	44.5 V	45.2 V	45.5 V	46.2 V
Short Circuit Current (Isc)	5.21 A	5.29 A	5.43 A	5.47 A
NOCT	48±2° C	48±2° C	48±2° C	48±2° C
Practical Module Efficiency	16.4%	16.8%	17.3%	17.8%
Watts per Ft. ²	12.74 W	13.10 W	13.46 W	13.83 W
Maximum System Voltage	600 VDC	600 VDC	600 VDC	600 VDC
Series Fuse Rating	15 A	15 A	15 A	15 A
Output Tolerance (+/-)	±3%	±3%	±3%	±3%

Measured at Standard Test Conditions (STC): Irradiance of 1000W/m², air mass of 1.5, cell temperature of 25° C

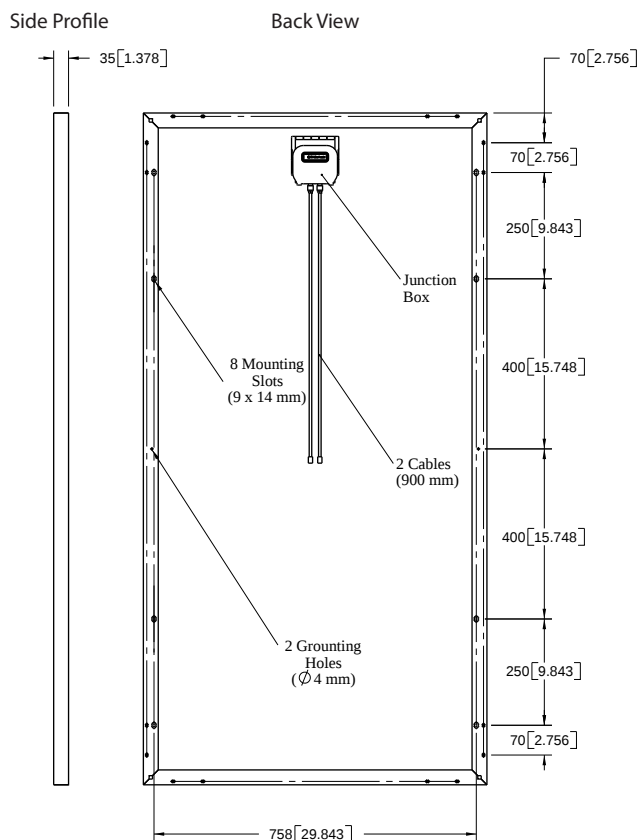
MECHANICAL SPECIFICATIONS

PARAMETER	VALUE
Solar Cell	72 Cells, 6x12 Monocrystalline
Junction Box Internal Bypass Diodes	3 Bypass Diodes, JH-1
Glass Cover	0.126" (3.2 mm)
Module Area	13.74 ft ² (1.28m ²)
Weight	32.62 lbs. (14.8kg)
Frame Type	Anodized Aluminum Alloy with Twin-Wall Profile
Dimensions (LxWxH)	62.2" x 31.8" x 1.378" (1580 x 808 x 35 mm)"
Cable Length (+Male/-Female)	35.5" (900 mm)
Cable Size/ Connector Type	No. 12 AWG / LQ-1, MC4™ Locking System
Cell Encapsulation	EVA (Ethylene Vinyl Acetate)

TEMPERATURE COEFFICIENT

PARAMETER	VALUE
Power: Pmax (%/°C)	-(0.5 ± 0.05)
Voltage: Voc (mv/°C)	-(115 ± 10)
Current: Isc (%/°C)	0.06 ± 0.01

MODULE DIAGRAM



OPERATION CONDITIONS & SAFETY RATINGS

PARAMETER	VALUE
Ambient Operating Temperature	-40 - +185°F (-40 - +85°C)
Fire Safety Classification	Class C Fire Rating
Max. Surface Resistance (Front & Back)	50 PSF (2400 Pa)
Hail Impact Rating	1"Ø(25mm) at 52mph (23m/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/CSA, IEC61215, IEC 61730, CE, ISO