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Solar Panel Guide Specification Data Sheet

**Moser Baer Solar Limited
MBSL eLITE
MBSL eLITE210**

Also available on the web at
EnergyPal.com/moser-baer-solar-limited-solar-panels/mbsl-elite210

MBSL eLITE 60 Series

(200 W_p – 250 W_p)

Model No: MBSL eLITE



- ▶ **One of the smallest modules in its class** – High efficiency product resulting in optimization of space usage especially for roof-top installations
- ▶ **Light-Weight Modules** – Facilitates easier handling, ensures ease of installation and savings on transportation costs
- ▶ **Extended Mechanical Warranty** – Modules come with 10 years mechanical warranty against manufacturing defects with performance warranty of 12 years at 90% of rated output power and 25 years at 80% of rated output power
- ▶ **Rigorous Quality Control** – The only solar company in the world to be awarded a 5-star rating for quality systems by TUV three years in a row
- ▶ **Manufacturing Excellence** – Top-of-the-line manufacturing equipment from Europe and Japan backed by in-house reliability testing capabilities
- ▶ **Robust Design** – Anodized frames ensure protection in all weather-conditions. High quality, low iron, high transmissivity, tempered and textured glass to ensure higher light absorption
- ▶ **Superior Aesthetics** – Uniform cell color and high quality anodization on the frame
- ▶ **Certifications:** IEC 61215 (Edition II), IEC 61730 (Safety Class II), UL (USA & Canada), CE, CEC Listed, JET, MCS, IEC 61701 (Salt mist corrosion test), Ammonia Resistance Test



Member of PV Cycle for voluntary take-back and Recycling Program

MBSL eLITE 60 Series modules are high efficiency modules specifically designed to withstand roughest of conditions and provide high power output per square meter. All modules conform to highest safety standards and come with IEC and UL approved IP65 rated junction box. The modules can be used in a variety of applications suited for residential, commercial and industrial purposes.

MBSL eLITE 6o Series (200 W_p – 250 W_p)

Model No: MBSL eLITE



ELECTRICAL CHARACTERISTICS 200W_p 205W_p 210W_p 215W_p 220W_p 225W_p 230W_p 235W_p 240W_p 245W_p 250W_p

Maximum Power, P _{max} (W)	200	205	210	215	220	225	230	235	240	245	250
Voltage at Pmax, V _{mp} (V)	28.02	28.29	28.58	28.79	29.03	29.27	29.30	29.61	30.15	30.61	30.71
Current at Pmax, I _{mp} (A)	7.14	7.25	7.35	7.47	7.58	7.69	7.88	7.94	7.98	8.03	8.15
Open Circuit Voltage V _{oc} (V)	36.05	36.25	36.38	36.50	36.64	36.95	36.80	36.89	37.47	37.61	37.84
Short Circuit Current I _{sc} (A)	7.95	7.99	8.04	8.07	8.14	8.23	8.39	8.48	8.52	8.63	8.71
Temperature Coefficient of P _{max} (%/K)	-0.447										
Temperature coefficients of V _{oc} (%/K)	-0.353										
Temperature coefficients of I _{sc} (%/K)	0.104										
Power Tolerance (W)	-0/+5										
Maximum System Voltage (IEC/UL) (V DC)	1000/600										
Cells per By-pass Diode (Nos)	20										

- Standard Test Conditions (STC): Irradiance 1000 W/m², Module temperature at 25°C and AM 1.5G Spectrum
- Max Series fuse ratings: 15A
- Operating Temperature (°C): (-)40 to (+)85
- NOCT (Nominal Operating Cell Temperature) (°C) 47.0

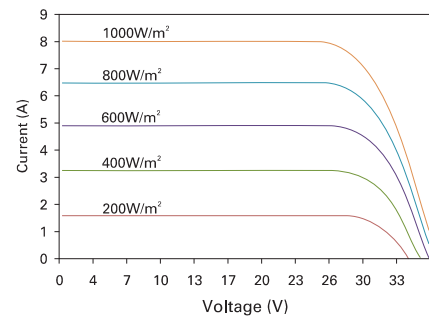
ENVIRONMENTAL TEST CONDITIONS

- Operating Temperature (temperature cycling range): (-)40°C to (+)85°C for 200 cycles
- Static Load Front and Back (e.g. wind): 50 lbs/ft² or 2400 Pa
- Impact Resistance (e.g. hail): 25mm at 23 m/s at 11 impact locations
- Humidity Freeze, Damp Heat: 85°C and 85 % relative humidity for 1000 hours
- Front Loading (e.g. snow): 113 lbs/ft² or 5400 Pa

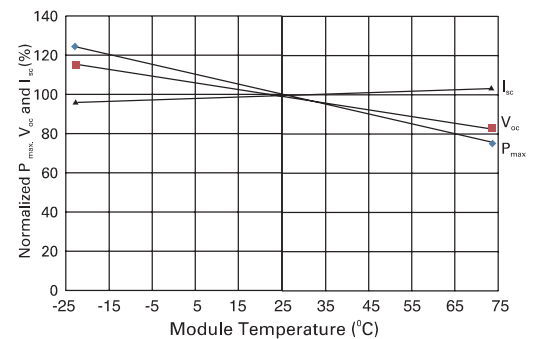
MECHANICAL CHARACTERISTICS

Number and Arrangement of Cells	156mmx156mm (6") Multicrystalline Silicon Cells, 6x10 configuration
Dimensions (mm/inches)	1633 x 987 x 37 / 64.29 x 38.85 x 1.45
Weight (kgs/lbs)	18.4 / 40.56
Frame	Anodized aluminum frame with twin-wall profile
Anodization Thickness	17 μm
Front Glass	High transmission, low iron, tempered and textured glass, 3.2mm / 0.126"
Junction Box	IEC/ UL approved IP65 rated 4 terminal junction box with 3 by-pass diodes (15A, 45V)
Output Cables	USE-2 Solar cables, 4mm ² / 0.0062" ² cross-section, asymmetric length
Type of Connector	Low resistance, IEC/UL approved (compatible with MC4)
Mounting Holes	Elliptical and 4 nos (9mm x 7mm/ 0.354 x 0.276"
Grounding Hole	Circular and 2 nos (4mm / 0.157" dia) – In accordance with NEC Article 250 (USA) or CEC (Canada)

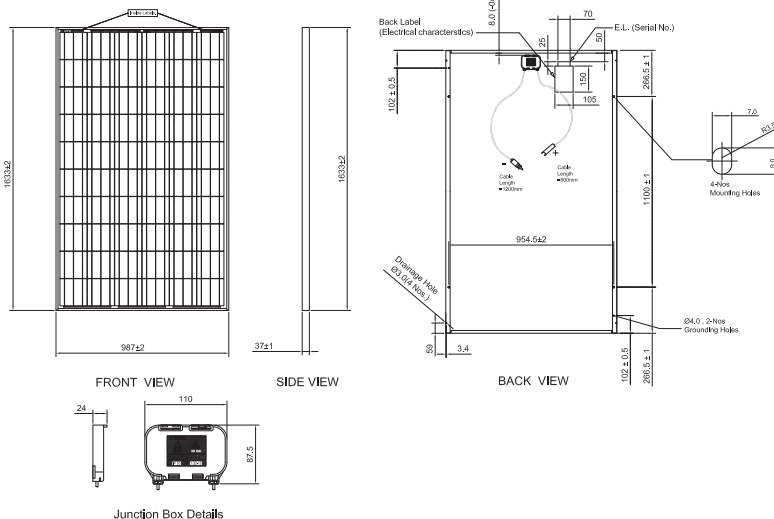
IV CURVES AT VARIOUS IRRADIANCE LEVELS AT 25°C



P_{MAX}, V_{OC}, I_{SC} AS A FUNCTION OF MODULE TEMPERATURE



ENGINEERING DRAWING



PACKAGING

Dimensions of Pallets (mm/in)	1690 x 750 x 1183
	66.53 x 29.52 x 46.57
Modules/pallet	18
Pallets/40ft HC container	42 (756 modules)
Gross weight per pallet (kgs/lbs)	366 / 806.89 (Approx)

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