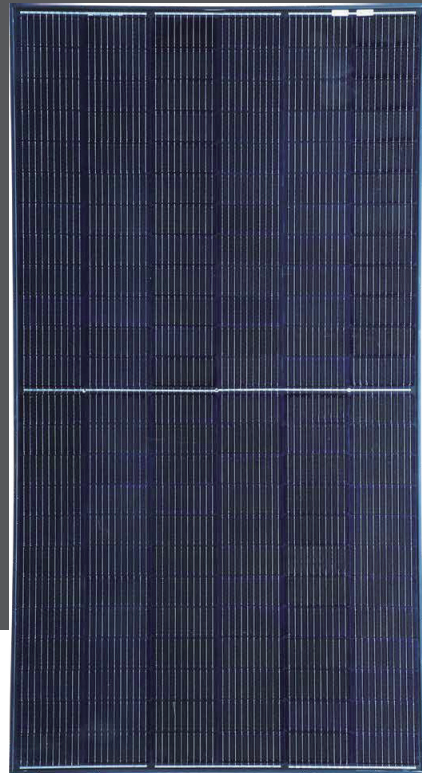


440W

**144 Cut Cell Black Back
Sheet Module**



**LIGHTNING
SERIES**



Residential Solar Panel

Mono-Facial Module (Positive power tolerance +5W)

- Half Cut Cell Technology
- Best Warranty
- 10BB instead of 5BB
- Enhanced Mechanical Load
- Higher lifetime Power Yield
- Multi Busbar Technology
- Longer Life-time Power Yield
- PID Resistance
- Excellent Low-light Performance
- Higher Power Output



Product Warranty



Performance Warranty

Features

- AR Coated High Transmission Glass
- MC4Compatible Connectors
- PID Resistance
- Anodised Aluminum Frame
- Mechanical Load of 5400Pa

Benefits

- Low LCOE. Faster Payback Period
- Best in Class Efficiency Up to 215%
- Multi-Bus Bar Technology for better current collection
- Lowest Guaranteed First Year and Annual Degradation
- Well-Composed Components Stress to reduce Micro Cracks

TECHNICAL SPECIFICATION

Electrical data at 1000W/m², 25°C and A.M 1.5 (STC in accordance with IEC 60904-3)

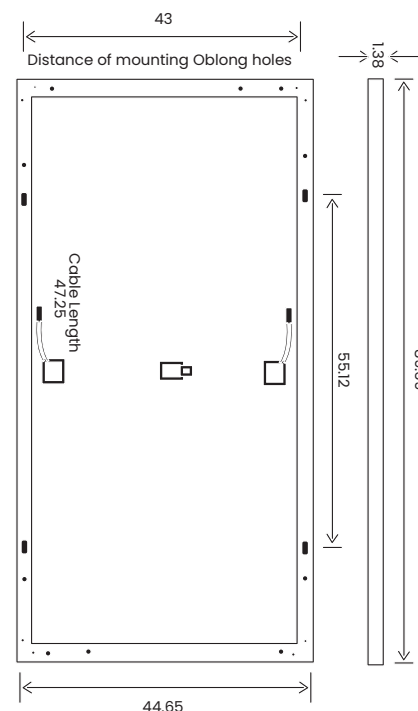
MODEL NAME	E530HCM144-B	E535HCM144-B	E540HCM144-B
RATED POWER AT STC	530	535	540
POWER TOLERANCE	+5W	+5W	+5W
MODULE EFFICIENCY AT STC	20.52%	20.71%	20.90%
OPEN CIRCUIT VOLTAGE - VOC(VOLTS) (±10%)	49.2	49.35	49.5
SHORT CIRCUIT CURRENT - ISC (AMPS) (± 10%)	13.56	13.59	13.62
MAX POWER VOLTAGE - VPM (VOLTS)	41.1	41.32	41.54
MAX POWER CURRENT - IPM (AMPS)	12.9	12.95	13
AT LOW IRRADIANCE (200W/M ² , 25°C AND AM1.5) THE MODULE YIELDS AT LEAST 95% OF THE STC EFFICIENCY.			

Thermal data

TEMPERATURE COEFFICIENT OPEN-CIRCUIT VOLTAGE	-0.28%/°C
TEMPERATURE COEFFICIENT SHORT CIRCUIT CURRENT	0.05%/°C
TEMPERATURE COEFFICIENT RATED POWER	-0.35%/°C
NOCT (NORMAL OPERATING CELL TEMPERATURE)	45°C ± 2°C
OPEN CIRCUIT VOLTAGE - VOC(VOLTS) (±10%)	49.2
SHORT CIRCUIT CURRENT - ISC (AMPS) (± 10%)	13.56
MAX POWER VOLTAGE - VPM (VOLTS)	41.1
MAX POWER CURRENT - IPM (AMPS)	12.9

Mechanical data

NUMBER OF CELLS AND CELL TYPE	144 MONO PERC SOLAR CELLS (182mm X 91mm)
DIMENSIONS: (L X W X H)	89.69 inch X 44.65 inch X 1.38 inch
WEIGHT	57.32 Pounds
FRONT GLASS	3.2 mm HIGH TRANSMISSION, SOLAR GLASS
EMBEDDING	EVA
BACK SHEET	BLACK BACK SHEET
JUNCTION BOX	3 SPLIT JUNCTION BOX IP68
NUMBER OF BYPASS DIODES	3
CABLES	4mm ² SOLAR CABLES, LENGTH 1200±10mm
CONNECTORS	MULTI CONTACT OR STAUBLI OPTION AVAILABLE



Permissible operating conditions

OPERATING TEMPERATURE RANGE	-40°C TO 85°C
MAX.SYSTEM VOLTAGE	1500V DC
MAXIMUM SNOW LOAD CAPACITY	5400PA
RESISTANCE AGAINST HAIL	MAX Ø24 mm WITH IMPACT SPEED OF 83KM/H
PROTECTION CLASS AGAINST ELECTRICAL SHOCK	II
MAXIMUM REVERSE CURRENT	25 A

Warranty

PRODUCT WARRANTY	12 YEARS
PERFORMANCE WARRANTY	25 YEARS
ANNUAL DEGRADATION	1 ST YEAR DEGRADATION, 2%, FROM 2ND YEAR 0.55% ANNUAL DEGRADATION."

