VEICHI

N-TOPCON

182-144 Monocrystalline Module

Product characteristics

16BB Half Cell Technology

New circuit design, lower internal current, lower internal current Resistance loss gallium doped silicon wafer, first year attenuation<1%, linear attenuation Minus ≤ 0.4%

Significantly reduce the risk of hot spots

Unique circuit design significantly reduces hot spot temperature and reduces work Rate loss increases component power generation

Lower electricity cost

Increase power generation by 3% and reduce cost per kilowatt hour

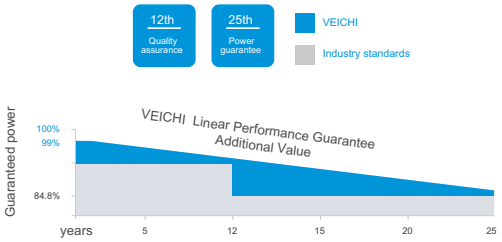
Excellent anti PID performance

TUV SGS has twice the industry standard PID resistance(Potential induced attenuation) test (85"C/85% RH 192 hours)

IP68 junction box

High standard waterproof performance, effective protection against harsh environments

Quality assurance



Comprehensive product and system certification

IEC 61215, IEC 61730

ISO9001: 2015/Quality Management System

ISO14001: 2015/Environmental Management Systems

ISO45001: 2018/Occupational Health and Safety Management System Certification

Electrical performance parameters	VCS-144H-555-D	VCS-144H-560-D	VCS-144H-565-D	VCS-144H-570-D	VCS-144H-575-D	VCS-144H-580-D
Component performance under STC standard (tolerance: 0~+5W)						
Maximum rated power (W)	555	560	565	570	575	580
Maximum power voltage (V)	42.08	42.20	43.32	42.44	42.56	42.68
Maximum power current (A)	13.19	13.27	13.35	13.43	13.51	13.59
Open circuit voltage (V)	50.77	50.90	51.03	51.16	51.29	51.42
Short circuit current (A)	13.92	14.00	14.08	14.16	14.24	14.32
Component efficiency (%)	21.48	21.67	21.86	22.06	22.25	22.44
Component performance under the NOCT standard						
Maximum rated power (W)	422.7	426.9	430.7	434.6	438.4	442.1
Maximum power voltage (V)	39.70	39.80	39.90	40.10	40.20	40.30
Maximum power current (A)	10.65	10.72	10.79	10.85	10.91	10.97
Open circuit voltage (V)	48.20	48.30	48.50	48.60	48.70	48.80
Short circuit current (A)	11.22	11.29	11.35	11.42	11.48	11.55

Temperature Characteristic	
Maximum power temperature coefficient (Pmax)	-0.34%℃
Open circuit voltage temperature coefficient (Voc)	-0.26%℃
Short circuit voltage temperature coefficient (Isc)	-0.05%℃
Working temperature	-40~ + 85℃
Rated operating cell temperature (NMOT)	42±2℃

STC (standard test environment): irradiance 1000W/ ㎡ , battery temperature 25 ℃ ,spectral AM1.5, NOCT (nominal operating temperature of the module) irradiance800W/㎡, ambient temperature 20 ℃, spectral AM1.5, wind speed 1m/s;

Mechanical behavior

Specifications	N-TOPCON 182X182mm
Battery arrangement	N-TOPCON 144 [2X (6X12)]
Component dimensions	2279 X 1134 X 30mm
Component weight	31.5kg
Component panel	2mm-2mm semi tempered glass
Component Border	Anodic oxygen film aluminum alloy
Junction box	IP68, 3 Diodes
Wireway	4.0 square millimeters (IEC)
Wire length (including connectors)	300mm, wire length can be customized
Connector	KSW-CN01

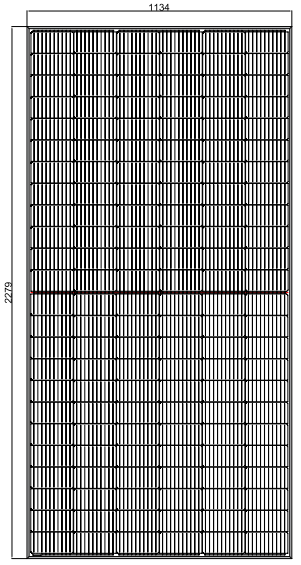
Working conditions

Maximum system voltage	1000V/1500V/DC(IEC)
Fusing current	30A
Static load	Snow load: 5400Pa/Wind load: 2400Pa
Grounding resistance	≤ 0.1Ω
Safety level	II
Insulation resistance	≥ 100M Ω

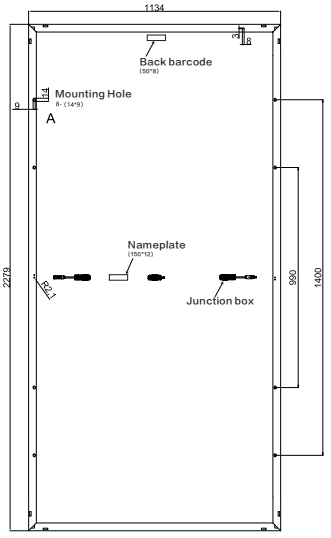
Packaging Information

Container size	40HQ
Sheet/Tray	36
Pallets/Containers	20
Pieces/Container	720
Package size	2300*1120*1235mm
Package weight	1190kg

Technical drawings



Front View



Rear View

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