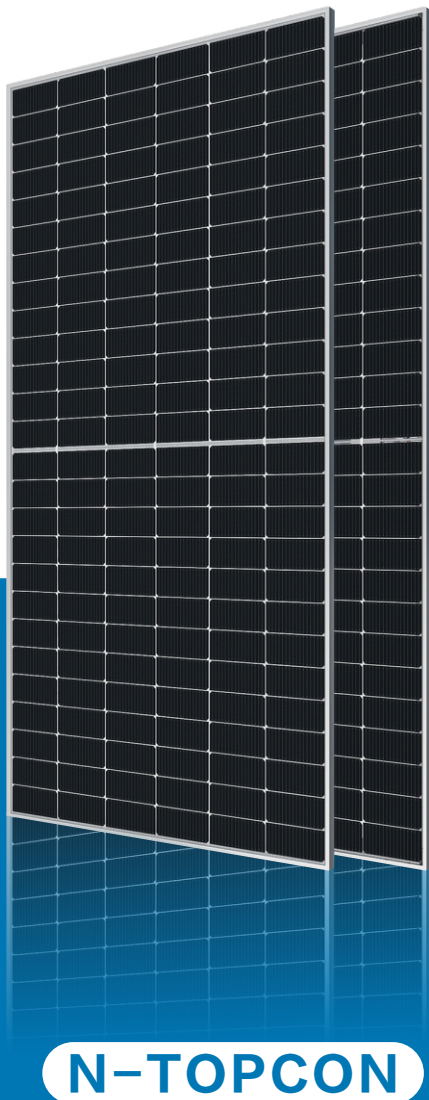


# 182-156 Monocrystalline Module



## 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  $\leq 0.4\%$



### 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



### Anti PID

### Excellent anti PID performance

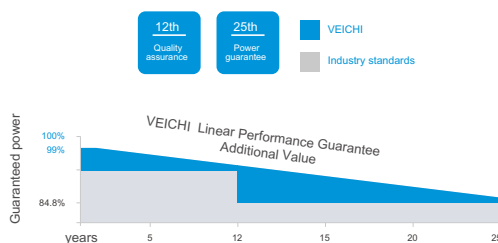
TUV SGS has twice the industry standard PID resistance(Potential induced attenuation) test (85°C/85% RH 192 hours)



### 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-156H-605-D

VCS-156H-610-D

VCS-156H-615-D

VCS-156H-620-D

VCS-156H-625-D

VCS-156H-630-D

#### Component performance under STC standard (tolerance: 0~+5W)

Maximum rated power (W)	605	610	615	620	625	630
Maximum power voltage (V)	44.66	44.78	44.90	45.02	45.14	45.26
Maximum power current (A)	13.55	13.62	13.70	13.77	13.85	13.92
Open circuit voltage (V)	53.86	53.98	54.10	54.22	54.34	54.46
Short circuit current (A)	14.19	14.26	14.33	14.40	14.47	14.54
Component efficiency (%)	21.64	21.82	22.00	22.18	22.36	22.54

#### Component performance under the NOCT standard

Maximum rated power (W)	461	464.5	468.4	471.7	475.9	479.5
Maximum power voltage (V)	42.30	42.50	42.60	42.70	42.90	43.00
Maximum power current (A)	10.89	10.93	10.99	11.04	11.10	11.15
Open circuit voltage (V)	51.00	51.20	51.40	51.50	51.60	51.70
Short circuit current (A)	11.44	11.50	11.56	11.61	11.67	11.72

#### Temperature Characteristic

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

STC (standard test environment): irradiance 1000W/ m<sup>2</sup> , battery temperature 25 °C ,spectral AM1.5, NOCT (nominal operating temperature of the module) irradiance800W/m<sup>2</sup>, ambient temperature 20 °C, spectral AM1.5, wind speed 1m/s;

#### Mechanical behavior

Specifications	N-TOPCON 182X182mm
Battery arrangement	N-TOPCON 156 [2X (6X13)]
Component dimensions	2465 X 1134 X 30mm
Component weight	34.6kg
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

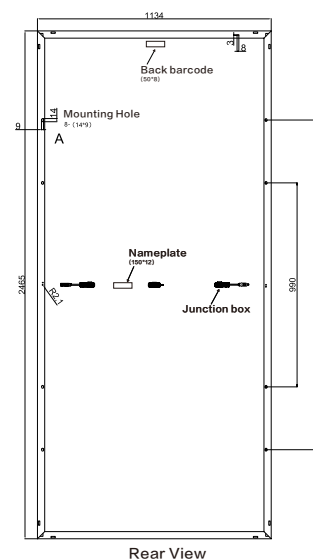
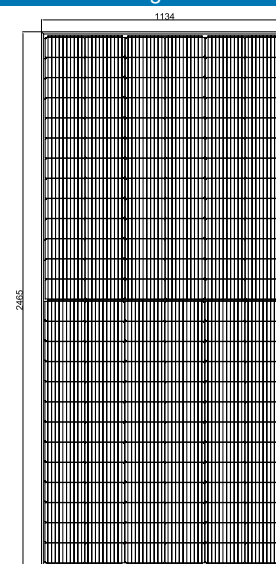
#### Working conditions

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	16
Pieces/Container	496
Package size	2497*1120*1235mm
Package weight	1300kg

#### Technical drawings



The technical parameters contained in this technical parameter document may deviate slightly, and VEICHI does not guarantee their complete accuracy. Due to continuous innovation, research and development, and product improvement, VEICHI has the right to, without prior notice, Adjust the information in the technical parameter file at any time. When signing a contract, the customer should obtain the latest version of technical parameters as part of a binding contract signed by both parties.