



Monocrystalline Silicon Solar PV Modules

XNM12-132HV

Product Feature

High Conversion Efficiency

With advanced manufacturing processes, the efficiency of our modules has exceeded 21.4%

Positive Tolerance

+5W positive tolerance at peak power output, which ensures their reliability

High Wind And Snow Resistance

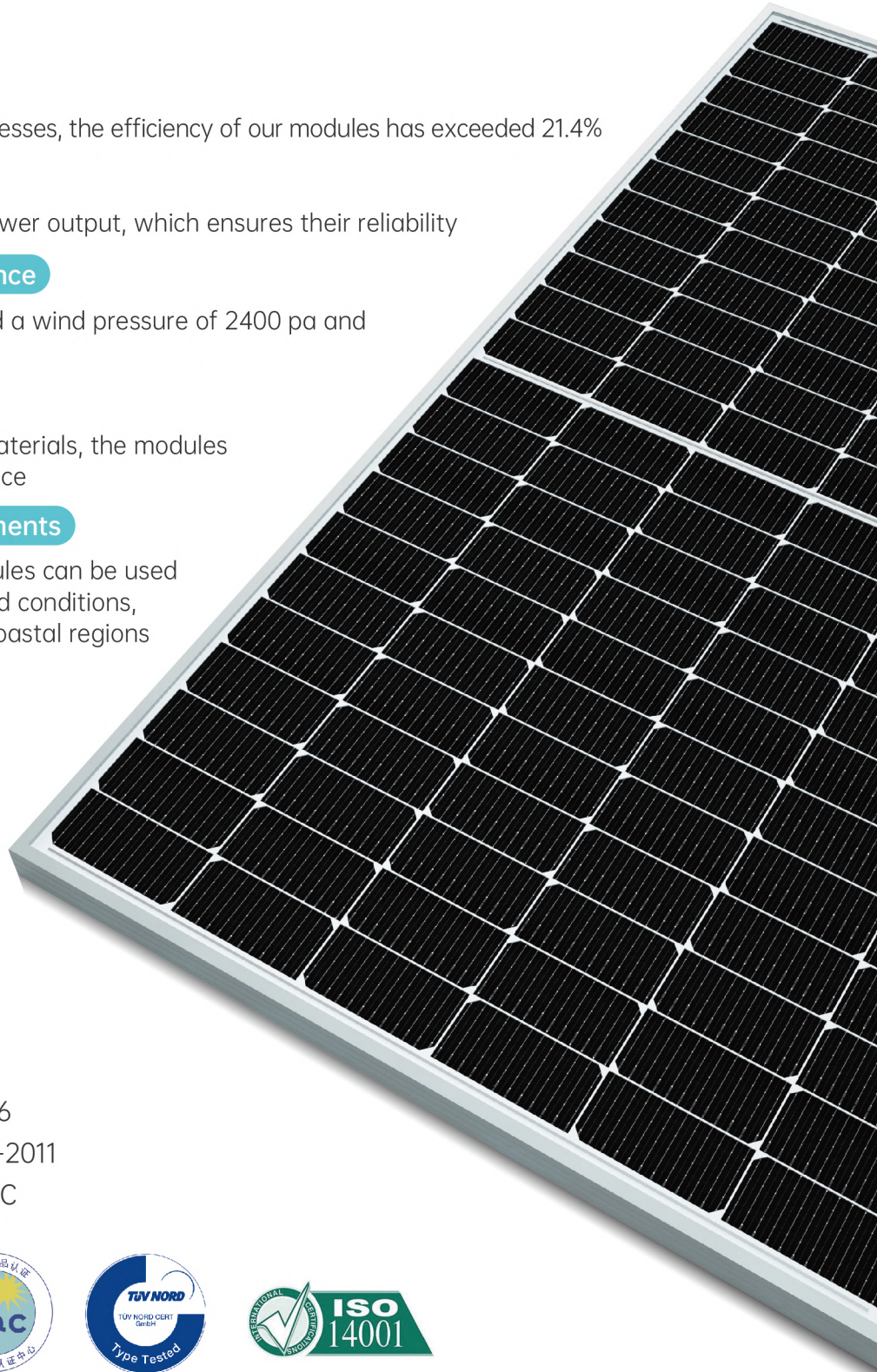
The modules are able to withstand a wind pressure of 2400 pa and snow pressure of 5400 pa

Excellent PID Resistance

With special cell and packaging materials, the modules have excellent anti- pid performance

Resistance To Harsh Environments

With excellent resilience, the modules can be used under high altitude and severe cold conditions, as well as in deserts, farms, and coastal regions



Systems & Product Certifications

ISO9001:2015 / GB/T19001-2016

ISO14001:2015 / GB/T24001-2016

OHSAS18001:2007 / GB/T28001-2011

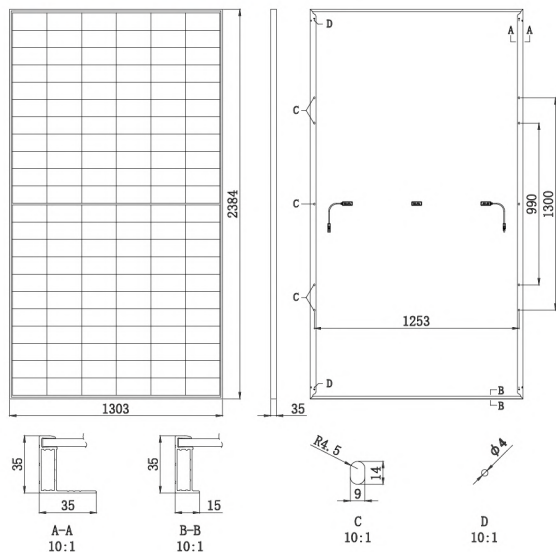
IEC61215、IEC61730、TUV、CQC



SUNOREN SUNOREN SOLAR TECHNOLOGY

Focusing On Development Of Clean Solar Power, Kindling The Fire Of Hope Via Energy

Component Size



Mechanical Parameters

| | |
|------------------|--|
| Component Size | 2384*1303*35mm |
| Cell Type | Monocrystalline silicon 210mm |
| Number Of Cells | 132H(11×12)PCS |
| Component Weight | 34.5kg |
| Glass | 3.2mm High transmittance anti-reflection coated tempered glass |
| Package | High transparency EVA |
| Backplane | White fluorine backsheet |
| Aluminum Frame | Anodized aluminum alloy frame |
| Junction Box | Protection class IP68 |
| Cable | 4.0mm ² ,300mm Photovoltaic special cable |
| Connector | MC4 Compatible |

Packaging Information

| | |
|---|---------|
| Standard Packaging | 31 PCS |
| Quantity of components per container (40ft container) | 558 PCS |

Working Parameters

| | |
|--|----------------|
| Insulation Withstand Voltage | 4000VDC(Max) |
| Operating Temperature | -40°C to +85°C |
| Maximum Static Load, Frontal (Eg Snow, Wind) | 5400Pa |
| Hail Impact | 25mm at 23m/s |

Electrical Performance Parameters (Standard Test Conditions)

| | | | | | |
|---|--|-------|-------|-------|-------|
| Component Model | XNM12-132HV | | | | |
| Max Power-pmax(W) | 645 | 650 | 655 | 660 | 665 |
| Power Tolerance | 0 ~ +5W | | | | |
| Operating Voltage At The Max Power Point - Vmp(V) | 37.71 | 37.9 | 38.09 | 38.28 | 38.47 |
| Operating Current At The Max Power Point - Imp(A) | 17.11 | 17.15 | 17.2 | 17.24 | 17.29 |
| Open Circuit Voltage-voc(V) | 44.82 | 45.02 | 45.22 | 45.42 | 45.62 |
| Short Circuit Current -isc(A) | 18.34 | 18.38 | 18.42 | 18.46 | 18.50 |
| Max System Voltage | 1500VDC(IEC) | | | | |
| Component Efficiency (%) | 20.8% | 20.9% | 21.1% | 21.2% | 21.4% |
| Max Fuse Rated Current | 30A | | | | |
| Max Power (Pmax) Temp. Coefficient | -0.3907%/K | | | | |
| Open Circuit Voltage (Voc) Temp. Coefficient | -0.2902%/K | | | | |
| Short-circuit Current (Isc) Temp. Coefficient | 0.0485%/K | | | | |
| Rated Battery Operating Temp. (Noct) | 41.5±2°C | | | | |
| Stc | Radioactivity 1000w/m ² , Battery Temp. 25°C, Air Quality Am1.5 | | | | |



单晶硅太阳能光伏组件

XNM12-132HV

产品特性

高转换效率

采用先进的制造工艺，组件效率最高达 21.4%；

正公差

5W 的正公差峰值功率输出，确保组件的可靠性；

风、雪压承受能力

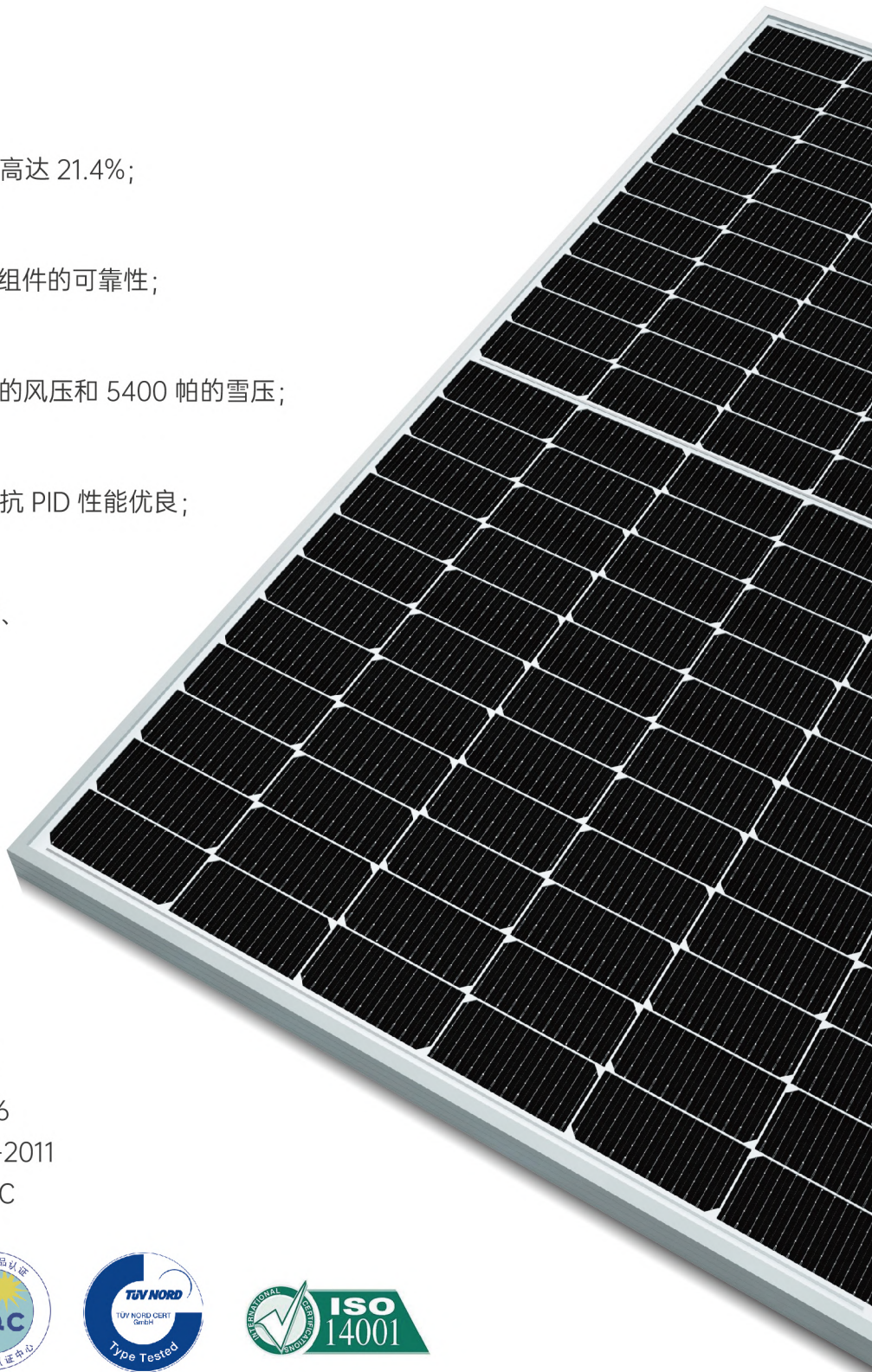
组件抗压能力强，能承受 2400 帕的风压和 5400 帕的雪压；

良好的PID抗性

采用精选电池片和封装材料，组件抗 PID 性能优良；

可承受更严酷的环境

耐候性能优良，组件适用于高海拔、极寒、沙漠、农场、海岸等环境。



体系及产品认证

ISO9001:2015 / GB/T19001-2016

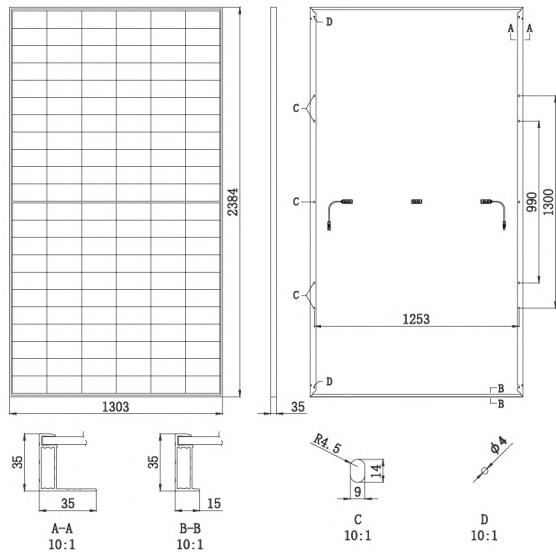
ISO14001:2015 / GB/T24001-2016

OHSAS18001:2007 / GB/T28001-2011

IEC61215、IEC61730、TUV、CQC



组件尺寸



机械参数

| | |
|-------|----------------------------------|
| 组件尺寸 | 2384*1303*35mm |
| 电池片类型 | 单晶硅 210mm |
| 电池片数量 | 132H(11×12) |
| 组件重量 | 34.5kg |
| 玻璃 | 3.2mm 高透 减反射镀膜钢化玻璃 |
| 封装 | 高透 EVA |
| 背板 | 白色含氟背板 |
| 铝边框 | 阳极氧化铝合金边框 |
| 接线盒 | 防护等级 IP68 |
| 线缆 | 4.0mm ² ,300mm 光伏专用缆线 |
| 连接器 | MC4 兼容 |

包装信息

| | |
|--------------------|-------|
| 标准包装 | 31 件 |
| 每个集装箱组件数量 (40 尺高柜) | 558 件 |

工作参数

| | |
|-------------------|---------------|
| 绝缘耐压 | 4000VDC(最大) |
| 工作温度 | -40°C 至 +85°C |
| 最大静态负载, 正面 (如雪、风) | 5400Pa |
| 冰雹冲击 | 25mm at 23m/s |

电性能参数(标准测试条件)

| | | | | | |
|-------------------|--|-------|-------|-------|-------|
| 组件型号 | XNM12-132HV | | | | |
| 最大功率 -Pmax(W) | 645 | 650 | 655 | 660 | 665 |
| 功率公差 | 0 ~ +5W | | | | |
| 最大功率点的工作电压-Vmp(V) | 37.71 | 37.9 | 38.09 | 38.28 | 38.47 |
| 最大功率点的工作电流-Imp(A) | 17.11 | 17.15 | 17.2 | 17.24 | 17.29 |
| 开路电压-Voc(V) | 44.82 | 45.02 | 45.22 | 45.42 | 45.62 |
| 短路电流-Isc(A) | 18.34 | 18.38 | 18.42 | 18.46 | 18.50 |
| 最大系统电压 | 1500VDC(IEC) | | | | |
| 组件效率 (%) | 20.8% | 20.9% | 21.1% | 21.2% | 21.4% |
| 最大保险丝额定电流 | 30A | | | | |
| 最大功率 (Pmax) 温度系数 | -0.3907%/K | | | | |
| 开路电压 (Voc) 温度系数 | -0.2902%/K | | | | |
| 短路电流 (Isc) 温度系数 | 0.0485%/K | | | | |
| 额定电池工作温度 (NOCT) | 41.5±2°C | | | | |
| STC | 辐照度 1000W/m ² , 电池温度 25°C, 大气质量 AM1.5 | | | | |