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# Lightweight power, built for difficult roofs.

Ultra-thin, low-profile modules for weight-constrained solar applications.

MORE **HOTSPOT RESISTANCE**

Back-contact architecture and optimized current paths help reduce localized heating risk.

MORE **CONTACT RELIABILITY**

Ribbon-free cell interconnection reduces soldering stress and supports dependable performance.

MORE **MOISTURE BARRIER**

Multi-layer construction forms a strong vapour barrier for demanding outdoor conditions.

MORE **HIGH EFFICIENCY**

No front busbar shading, with effective module efficiency up to 22.46%.



**A lightweight, ultra-thin photovoltaic module developed for roofs and structures where conventional glass modules may impose too much weight. The module combines controlled flexibility, low structural load and high power density.**

| 425-435 W | 2.5 kg/m² | 2 mm | 0.3 m |
|---|---|---|---|
| POWER RANGE | AREA WEIGHT | THICKNESS | MIN. BEND RADIUS |

## LOW STRUCTURAL LOAD

Approximately 5.2 kg per module helps reduce dead load where conventional glass modules may be unsuitable.

## HIGH ENERGY DENSITY

Back-contact cell architecture eliminates front busbar shading and supports effective module efficiency up to 22.46%.

## INSTALLATION FLEXIBILITY

Thin construction and controlled flexibility support curved or lightweight surfaces, subject to engineering and approved installation methods.

## DURABLE CONSTRUCTION

Designed for moisture resistance, improved heat transfer, reduced soldering stress and enhanced hotspot resistance.

**15-YEAR PRODUCT WARRANTY** | **25-YEAR LINEAR PERFORMANCE WARRANTY**

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# Electrical performance

| Model | JTC-LW425 | JTC-LW430 | JTC-LW435 |
|---|---|---|---|
| Rated power Pmpp (W) | 425 | 430 | 435 |
| Rated current Impp (A) | 12.16 | 12.23 | 12.30 |
| Rated voltage Vmpp (V) | 34.96 | 35.18 | 35.40 |
| Short-circuit current Isc (A) | 13.03 | 13.11 | 13.19 |
| Open-circuit voltage Voc (V) | 41.61 | 41.83 | 42.04 |
| Effective module efficiency | 21.94% | 22.21% | 22.46% |

## NOCT performance

| Model | JTC-LW425 | JTC-LW430 | JTC-LW435 |
|---|---|---|---|
| Rated power Pmpp (W) | 320 | 325 | 328 |
| Rated current Impp (A) | 9.74 | 9.80 | 9.85 |
| Rated voltage Vmpp (V) | 32.91 | 33.21 | 33.42 |
| Short-circuit current Isc (A) | 10.66 | 10.74 | 10.80 |
| Open-circuit voltage Voc (V) | 39.59 | 39.86 | 40.06 |

## Mechanical characteristics

| | |
|---|---|
| Cell type | Monocrystalline back-contact |
| Cell layout | 114 half-cells, 6 x 19 |
| Module dimensions | 1850 x 1158 x 2 mm |
| Effective dimensions | 1763.6 x 1098.2 mm |
| Weight | 5.2 +/- 0.5 kg |
| Junction box | IP68, three bypass diodes |
| Cable | 4 mm², 450 mm or customized |
| Connector | Original MC4 |

**PACKING** 154 modules/pallet | 18 pallets/40 ft HQ | 2,772 modules/container

## Ratings and temperature

| | |
|---|---|
| Operating temperature | -40 C to +85 C |
| Maximum fuse rating | 25 A |
| Safety class | Class II |
| Fire rating | Class C, IEC 61730 |
| Maximum system voltage | 1500 V DC |
| Voltage coefficient | -0.220% / C |
| Current coefficient | +0.050% / C |
| Power coefficient | -0.240% / C |
| Power tolerance | 0 to +5 W |
| NOCT | 43 +/- 2 C |

STC: 1000 W/m2, AM1.5, cell temperature 25 C, tolerance +/-3%. NOCT: 800 W/m2, ambient 20 C, AM1.5, wind 1 m/s.

## TESTS AND CLASSIFICATIONS

### ENVIRONMENTAL AND COMPLIANCE

CE passed: Low Voltage Directive 2014/35/EU
Sand/dust: IEC 60068-2-68:1994, modified
Salt mist: IEC 61701:2020 / EN IEC 61701:2020
PID: IEC TS 62804-1:2015, modified
Ammonia: IEC 62716:2013 / EN 62716:2013

### DESIGN AND SAFETY

Design qualification:
IEC 61215-1:2021 / EN IEC 61215-1:2021
IEC 61215-1-1:2021 / EN IEC 61215-1-1:2021
IEC 61215-2:2021 / EN IEC 61215-2:2021
Safety: IEC 61730-1:2023; IEC 61730-2:2023

### FIRE AND OPTICAL

External fire classification:
Class E: DIN EN 13501-1:2019
Broof (t1), roof pitch below 20 degrees:
DIN EN 13501-5:2016
Anti-glare: ISO 2813:2014