

# 435-455w Draco Module Series

N-TOPCON HIGH EFFICIENCY 96-16BB-W-TG

**Bloomberg**  
NEW ENERGY FINANCE

**Tier1**



Transparent

Deutsches  
Institut  
für  
Bautechnik

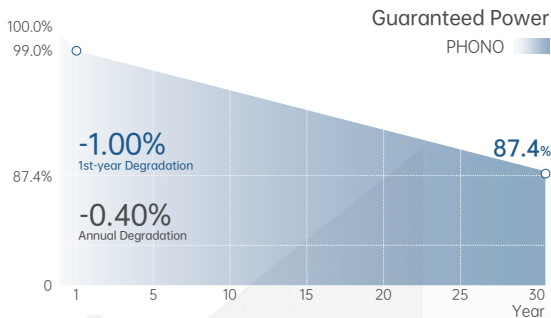
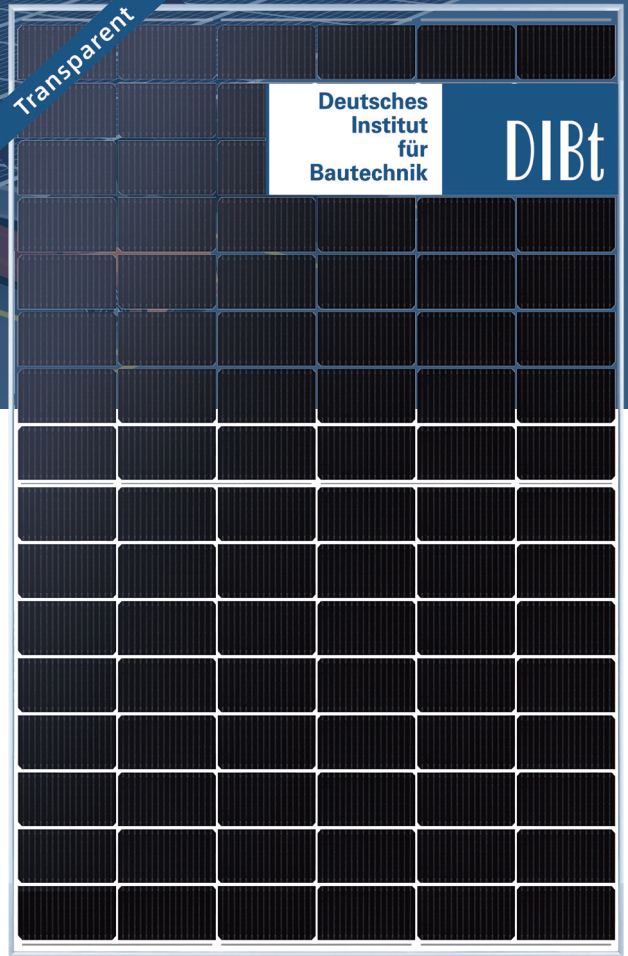
**DIBt**

## High Quality Reliability

- Resistant to impact, reliable under harsh weather
- Strong structural integrity, secure under extreme loads
- Long-term UV protection, sustained power generation efficiency
- Durable bonding strength, proven long-term stability
- Certified by German authority for premium carport & BIPV markets

## Extraordinary Product Performance

- N-type with lower LID and LeTID
- Up to 30% additional power yield benefited from bifacial technology and over 80% cell bifaciality
- Better weak illumination response, higher power generation with N-TOPCon technology



**15-year**

Product Warranty

**30-year**

Linear Performance Warranty

## MANAGEMENT SYSTEM CERTIFICATES

IEC 61215, IEC 61730

ISO 9001

2015 /Quality management system

ISO 14001

2015/Standards for environmental management system

ISO 45001

2018 /International standards for occupational health & safety

**DIN EN 12600:**

Resistance to impact under harsh weather conditions

**DIN EN 18008:**

Ensures structural integrity under extreme loads

**DIN ISO 12543-4:**

Maintains stable power generation efficiency under prolonged UV exposure

**DIN 4102-1:**

Validates flame-retardant and fire-resistant properties

**DIN EN ISO 8510-2:**

Tests bonding strength and long-term aging resistance

**DIBt Certified:**

Germany's top construction authority, ensuring compliance for high-end carport and BIPV markets



## Electrical Typical Values

| Model                                    | 1000V | PS435L8GF-16/QNH  |       | PS440L8GF-16/QNH  |       | PS445L8GF-16/QNH  |       | PS450L8GF-16/QNH  |       | PS455L8GF-16/QNH  |       |
|------------------------------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
|                                          | 1500V | PS435L8GFH-16/QNH |       | PS440L8GFH-16/QNH |       | PS445L8GFH-16/QNH |       | PS450L8GFH-16/QNH |       | PS455L8GFH-16/QNH |       |
| Testing Condition                        |       | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  |
| Rated Power (P <sub>mp</sub> )           |       | 435               | 333   | 440               | 337   | 445               | 341   | 450               | 345   | 455               | 348   |
| Rated Current (I <sub>mp</sub> )         |       | 14.84             | 11.95 | 14.87             | 11.98 | 14.90             | 12.00 | 14.93             | 12.02 | 14.96             | 12.05 |
| Rated Voltage (V <sub>mp</sub> )         |       | 29.32             | 27.87 | 29.59             | 28.13 | 29.87             | 28.39 | 30.15             | 28.65 | 30.42             | 28.92 |
| Short Circuit Current (I <sub>sc</sub> ) |       | 15.50             | 12.48 | 15.54             | 12.52 | 15.58             | 12.55 | 15.62             | 12.58 | 15.66             | 12.61 |
| Open Circuit Voltage (V <sub>oc</sub> )  |       | 34.87             | 33.39 | 35.17             | 33.68 | 35.48             | 33.97 | 35.79             | 34.27 | 36.09             | 34.56 |
| Module Efficiency (%)                    |       | 21.77             |       | 22.02             |       | 22.27             |       | 22.52             |       | 22.77             |       |

STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, AM 1.5, Cell Temperature 25°C

NOCT (Nominal Operation Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s

## BNPI

|                                              |       |       |       |       |       |
|----------------------------------------------|-------|-------|-------|-------|-------|
| Maximum Power (P <sub>max</sub> )            | 479   | 485   | 490   | 496   | 501   |
| Optimum Operating Current (I <sub>mp</sub> ) | 16.34 | 16.38 | 16.41 | 16.44 | 16.48 |
| Optimum Operating Voltage (V <sub>mp</sub> ) | 29.32 | 29.59 | 29.87 | 30.15 | 30.42 |
| Short Circuit Current (I <sub>sc</sub> )     | 17.06 | 17.13 | 17.15 | 17.21 | 17.24 |
| Open Circuit Voltage (V <sub>oc</sub> )      | 34.87 | 35.17 | 35.48 | 35.79 | 36.09 |

BNPI: Front Side Irradiation 1000W/m<sup>2</sup>, Back Side Reflection Irradiation 135W/m<sup>2</sup>, AM 1.5, Ambient Temperature 25°C

## Mechanical Characteristics

|                             |                                                                                       |
|-----------------------------|---------------------------------------------------------------------------------------|
| Cell Type                   | N Type Monocrystalline                                                                |
| Cell Format                 | 182x210mm±0.5mm                                                                       |
| Cell Number                 | 96 Half Cell                                                                          |
| Dimension (L × W × H)       | Length: 1762mm (69.37 inch)<br>Width: 1134mm (44.65 inch)<br>Height: 30mm (1.18 inch) |
| Weight                      | 24.5kg (54.01 lbs)                                                                    |
| Front Glass                 | 2.0mm Heat Strengthened Glass With AR Coating                                         |
| Back Glass                  | 2.0mm Heat Strengthened Glass                                                         |
| Frame                       | Anodized Aluminium Alloy                                                              |
| Cable (Including Connector) | 4mm <sup>2</sup> (IEC),<br>(+): 350mm, (-): 250mm or Customized Length                |
| Junction Box                | IP 68 Rated                                                                           |

## Temperature Ratings

|                                 |           |
|---------------------------------|-----------|
| Voltage Temperature Coefficient | -0.25%/°C |
| Current Temperature Coefficient | +0.04%/°C |
| Power Temperature Coefficient   | -0.29%/°C |
| Power Tolerance                 | 0~+3%     |
| NOCT                            | 42±2°C    |
| Bifaciality                     | 80±5%     |

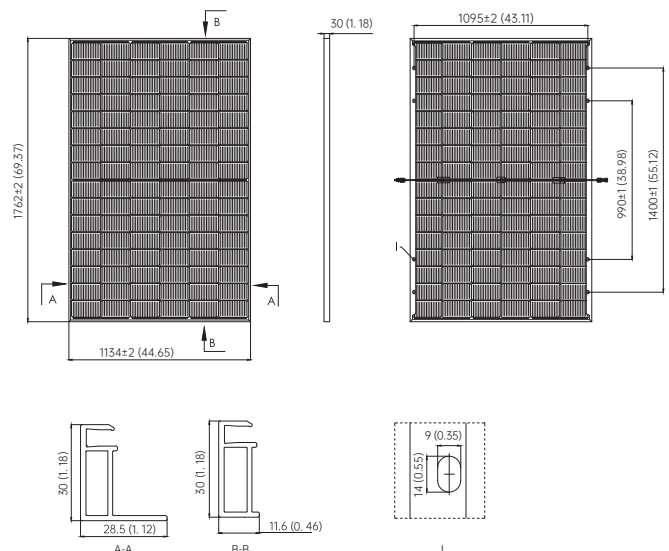
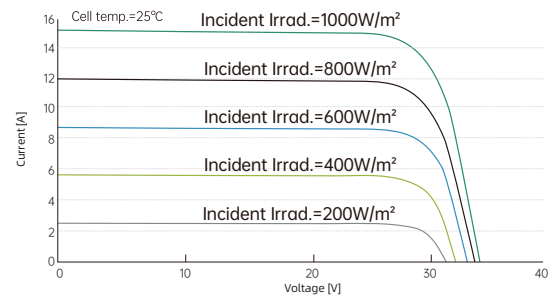
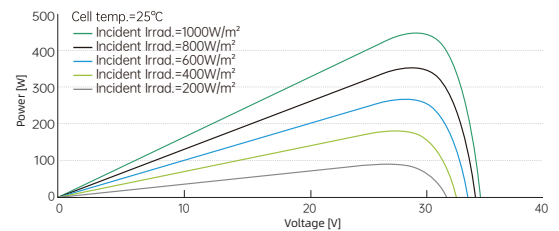
## Absolute Maximum Rating

|                                   |                    |
|-----------------------------------|--------------------|
| Operating Temperature             | From -40 to + 85°C |
| Hail Diameter @ 80km/h            | Up to 25mm         |
| Front Side Maximum Static Loading | 5400Pa             |
| Rear Side Maximum Static Loading  | 2400Pa             |
| Maximum Series Fuse Rating        | 30A                |
| PV Module Classification          | II                 |
| Fire Rating (IEC61730)            | C                  |
| Maximum System Voltage            | DC 1000V/1500V     |

## Packing Configuration

|                   |        |
|-------------------|--------|
| Container         | 40' HQ |
| Pcs/Container     | 936    |
| Pcs/Pallet        | 36     |
| Pallets/Container | 26     |

## Electrical Characteristics



Note: mm (inch)



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