

DL5.0C

DL5.0C is designed for residential and small commercial applications, with up to 50 units in parallel and an energy range from 5.12 kWh to 256 kWh. It supports 1C discharge rate. With high cycle times and a long lifespan, it ensures worry-free electricity consumption.



Flexible Expansion

Up to 50 units in parallel, 5.12kWh--256kWh capacity



1C Discharge

Simultaneously supplying power to multiple loads, no need to worry about power outages



Automatic Self-heating

-20°C to 55°C operating temperature (optional)



Easy Installation

Support wall-mounted, floor-mounted, stacked and rack-mounted installations, high space utilization



Long-term Reliability

LFP cells, 6000+ cycles, 10 years warranty



All-round Safety

Short-circuit lockout, surge-resistant, safe and reliable

Model	DL5.0C
Battery Type	LiFePO ₄
Nominal Battery Energy	5.12 kWh
Nomina Capacity	100Ah
Nominal Voltage	51.2V
Operating Voltage	44.8~57.6V
Recomended Charge & Discharge C Rate	0.5C
Maximum Discharge Crate	1C
Recommended Charge/Discharge Current	50A
Max. Charge/Discharge Current	Charge 75A Discharge 100A
Peak Discharge Current	110A(15s)
Depth of Discharge (DOD)	90%
Net Weight	54kg
Dimension[W/D/H](mm)	558/545/150
Charging Temp. Range	0~55°C/-20~55°C (with heating function)
Discharging Temp. Range	-20~55°C
Communication	CAN/RS485/RS232
Cycle Life *	≥6000 Cycles
Protection Level	IP20
WIFI Module	Optional
Expansion	Up to 50 units in parallel
Certification & Safety Standard	UN38.3/CE-EMC/IEC62619/CEI-021/GOST-R
Compatible Inverterst	SMA/Schneider/Victron energy/Ingeteam/Solis/GoodWe/Growatt/Soplanet/Luxpower/DEYE etc.

* Test conditions: 0.2C Charging & Discharging. @25°C, 90% DOD





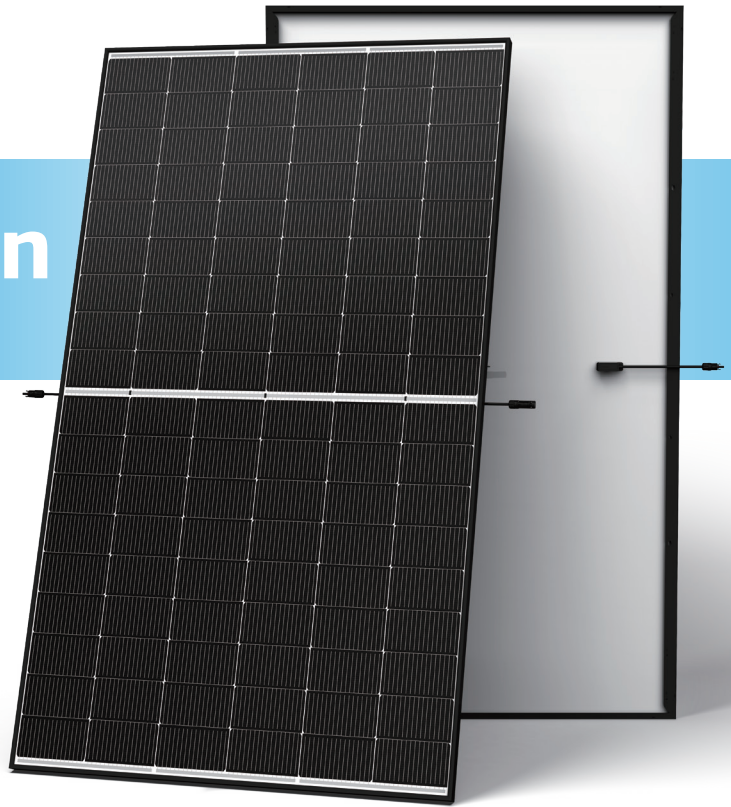
N-type i-TOPCon

MONOFACIAL DUAL GLASS MODULE

TSM-NEG18R.28 485-510W

510_W / MAXIMUM POWER OUTPUT

22.9% / MAXIMUM EFFICIENCY



High customer value

- Lower LCOE (levelized cost of energy), reduced BOS (balance of system) cost, shorter payback time
- Designed for compatibility with existing mainstream system components
- High module power, high string power and low voltage design
- Easy to handle and install on roofs with excellent size and light weight



High power up to 510W

- Up to 22.9% module efficiency, on T10 innovation platform
- Patented i-TOPCon technology with continuous efficiency improvement, including contact resistance reduction, rear reflection enhancement and edge quality repairment



Dual-glass design, high reliability

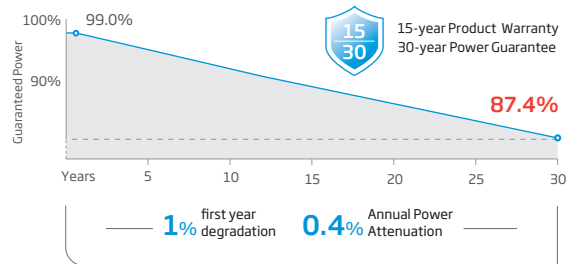
- Less prone to micro-cracks and scratches on the back during installation
- Applicable in harsh environments such as salt, ammonia, sand, high temperature and high humidity areas with excellent fire rating, weather resistance, salt spray, sand dust, ammonia performance
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load



High energy yield

- Excellent low irradiation performance, validated by 3rd party
- Lower temperature coefficient (-0.29%/°C) and operating temperature

Performance Warranty



* Please refer to product warranty for details

Comprehensive Products and System Certificates

IEC61215/IEC61730/IEC61701/IEC62716

ISO 9001: Quality Management System

ISO 14001: Environmental Management System

ISO14064: Greenhouse Gases Emissions Verification

ISO45001: Occupational Health and Safety Management System



ELECTRICAL DATA (STC)

Peak Power Watts- $P_{MAX}(W_p)^*$	485	490	495	500	505	510
Power Selection (W)**	0 ~ +5					
Maximum Power Voltage- $V_{MPP}(V)$	32.7	32.9	33.1	33.3	33.5	33.7
Maximum Power Current- $I_{MPP}(A)$	14.84	14.91	14.97	15.03	15.09	15.14
Open Circuit Voltage- $V_{oc}(V)$	39.4	39.6	39.8	40.1	40.3	40.6
Short Circuit Current- $I_{sc}(A)$	15.76	15.80	15.83	15.86	15.89	15.93
Module Efficiency $\eta_m(\%)$	21.8	22.0	22.3	22.5	22.7	22.9

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: ±3%. **Power selection up to: +3%.

ELECTRICAL DATA (NOCT)

Peak Power Watts- $P_{MAX}(W_p)^*$	371	375	378	382	386	390
Maximum Power Voltage- $V_{MPP}(V)$	30.8	31.0	31.3	31.5	31.8	31.9
Maximum Power Current- $I_{MPP}(A)$	12.02	12.06	12.08	12.11	12.15	12.21
Open Circuit Voltage- $V_{oc}(V)$	37.4	37.6	37.7	38.0	38.3	38.5
Short Circuit Current- $I_{sc}(A)$	12.70	12.74	12.76	12.78	12.81	12.84

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

TEMPERATURE RATINGS

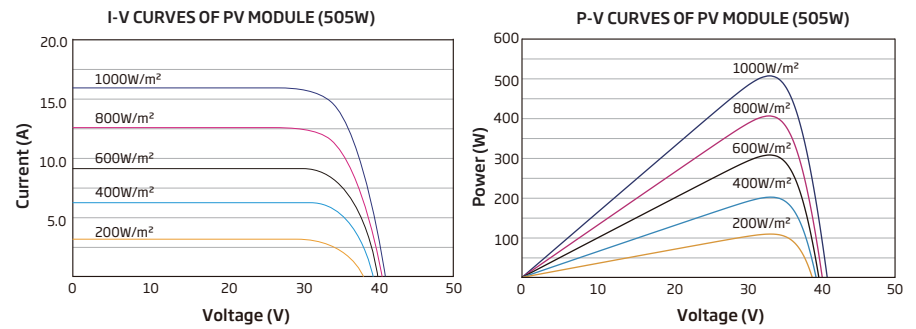
NOCT (Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P_{MAX}	-0.29% /°C
Temperature Coefficient of V_{oc}	-0.24% /°C
Temperature Coefficient of I_{sc}	0.04% /°C

Due to different testing methods, the actual performances might differ from the declared specifications.

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC)
Max Series Fuse Rating	30A

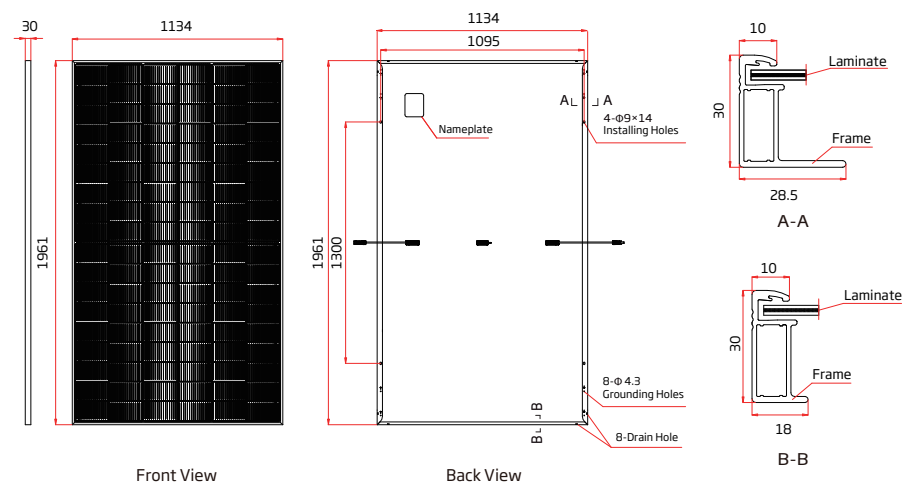
CURVES OF PV MODULE



MECHANICAL DATA

Solar Cells	N-type i-TOPCon Monocrystalline
No. of cells	108 cells
Module Dimensions	1961×1134×30 mm (77.20×44.65×1.18 inches)
Weight	23.5 kg (51.8 lb)
Front Glass	1.6mm (0.06inches), AR Coating Heat Strengthened Glass
Back Glass	1.6mm (0.06inches), Heat Strengthened Glass
Frame	30mm (1.18inches) Anodized Aluminium Alloy, Black
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006inches ²) Portrait: 350/280 mm (13.78/11.02 inches) Length can be customized
Connector	MC4 EV02 / TS4 Plus / TS4*
Packaging	Modules per box: 36 pieces Modules per 40' container: 864 pieces

*Please refer to regional datasheet for specified connector.



CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
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