

PROGETTO DEFINITIVO PER LA REALIZZAZIONE DI UN IMPIANTO DI PRODUZIONE DI ENERGIA ELETTRICA DA FONTE SOLARE (IMPIANTO FOTOVOLTAICO), DELLA POTENZA DI PICCO TOTALE PARI A 24,99 MWp E POTENZA NOMINALE IN IMMISSIONE PARI A 24,0 MW E RELATIVE OPERE DI CONNESSIONE ALLA RETE ELETTRICA DI PROPRIETA' DI E-DISTRIBUZIONE SPA.

Sezione:

SEZIONE 7 - DOCUMENTAZIONE GENERALE

Titolo elaborato:

SCHEDA TECNICA PANNELLO FOTOVOLTAICO

n. Elaborato: 7.13
rev. 03

Scala: -----
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Committente:

NEOEN

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LUMI STUDIO

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Hi-MO 9

Preliminary

LR8-66HYD 635~660M

- Products for utility with optimal power generation through the entire lifecycle
- Performance improvement leads to a more than 6.5% power generation gain
- TaiRay wafer & BC technology enhances high product reliability
- Smart manufacturing & LONGi product lifecycle standards deliver exceptional product quality

12

12-year Warranty for
Materials and Processing

30

30-year Warranty for Extra
Linear Power Output

Complete System and Product Certifications

IEC 61215, IEC 61730, UL 61730

ISO9001:2015: ISO Quality Management System

ISO14001: 2015: ISO Environment Management System

ISO45001: 2018: Occupational Health and Safety

IEC62941: Guideline for module design qualification and type approval

LONGi



24.4%
MAX MODULE
EFFICIENCY

0~3%
POWER
TOLERANCE

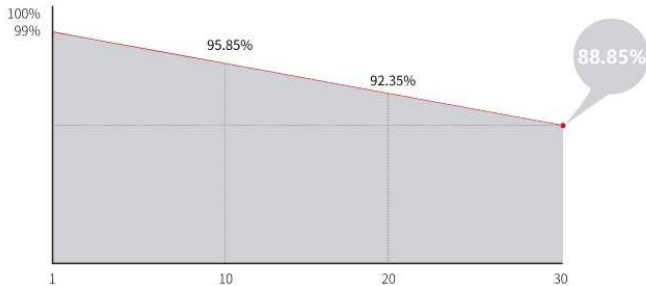
<1%
FIRST YEAR
POWER DEGRADATION

0.35%
YEAR 2-30
POWER DEGRADATION

BC-CELL
LOWER OPERATING
TEMPERATURE

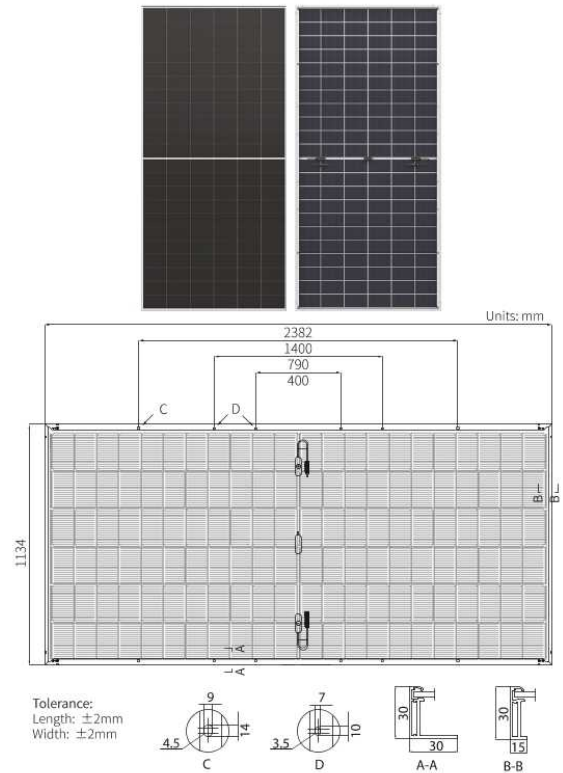
Additional Value

30-Year Power Warranty



Mechanical Parameters

Cell Orientation	132 (6×22)
Junction Box	IP68, three diodes
Output Cable	4mm ² , +400, -200mm/±1400mm length can be customized
Glass	Dual glass, 2.0+2.0mm heat strengthened glass
Frame	Anodized aluminum alloy frame
Weight	33.5kg
Dimension	2382×1134×30mm
Packaging	36pcs per pallet / 144pcs per 20' GP / 720pcs per 40' HC



Electrical Characteristics

STC : AM1.5 1000W/m² 25°C

NOCT : AM1.5 800W/m² 20°C 1m/s

Test uncertainty for Pmax: ±3%

Module Type	LR8-66HYD-635M		LR8-66HYD-640M		LR8-66HYD-645M		LR8-66HYD-650M		LR8-66HYD-655M		LR8-66HYD-660M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	635	483.4	640	487.2	645	491.0	650	494.8	655	498.6	660	502.4
Open Circuit Voltage (Voc/V)	49.21	46.77	49.31	46.86	49.41	46.96	49.51	47.05	49.61	47.15	49.71	47.24
Short Circuit Current (Isc/A)	16.40	13.17	16.48	13.24	16.56	13.30	16.64	13.37	16.72	13.43	16.80	13.49
Voltage at Maximum Power (Vmp/V)	40.50	38.49	40.60	38.58	40.70	38.68	40.80	38.77	40.90	38.87	41.00	38.97
Current at Maximum Power (Imp/A)	15.69	12.58	15.77	12.64	15.85	12.71	15.94	12.78	16.02	12.84	16.10	12.91
Module Efficiency(%)	23.5		23.7		23.9		24.1		24.2		24.4	

Electrical characteristics with different rear side power gain (reference to 645W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
677	49.41	17.39	40.70	16.64	5%
710	49.41	18.22	40.70	17.44	10%
744	49.51	19.04	40.80	18.23	15%
776	49.51	19.87	40.80	19.02	20%
808	49.51	20.70	40.80	19.81	25%

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	35A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	70±5%
Fire Rating	UL type 29 IEC Class C

Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.200%/°C
Temperature Coefficient of Pmax	-0.260%/°C