



Soggetto promotore: **Gruppo Marseglia**

Soggetto proponente: **Masserie Salentine S.r.l. Società Agricola** (componente agricola)

Soggetto proponente: **Energetica Salentina S.r.l.** (componente fotovoltaica)

IMPIANTO AGRIVOLTAICO

SITO NEI COMUNI DI NARDÒ, SALICE SALENTINO E VEGLIE
IN PROVINCIA DI LECCE

Valutazione di Impatto Ambientale

(artt. 23-24-25 del D.Lgs. 152/2006)

Commissione Tecnica PNRR-PNIEC

(art. 17 del D.L. 77/2021, convertito in L. 108/2021)

Idea progettuale e coordinamento generale: **AG Advisory S.r.l.**

Paesaggio e supervisione generale: **CRETA S.r.l.**

Programma di ricerca "Paesaggi del Futuro", Responsabili scientifici: **Prof. Arch. Paolo Mellano, Prof.ssa Arch. Elena Vigliocco** (Politecnico di Torino)

Programma di ricerca "Ottimizzazione dell'agrivoltaico con oliveti a siepe: analisi numerico matematica", Responsabili scientifici: **PhD Cristiano Tamborrino** (Università degli Studi di Bari), **PhD Elisa Gatto** (Biologa ambientale)

Postproduzione: **Galante – Menichini Architetti per AG Advisory S.r.l.**

Supporto grafico: **Heriscape Progetti S.r.l. STP per AG Advisory S.r.l.**

Progettisti:

Progetto agricolo: **Prof. Massimo Monteleone** (Università degli Studi di Foggia)
Dott. Agr. Barnaba Marinosci

Progetto impianto fotovoltaico: **Ing. Andrea D'Ovidio**

Progetto strutture: **Ing. Giovanni Errico**

Progetto opere di connessione: **Ing. Andrea D'Ovidio**

Contributi specialistici:

Acustica: **Ing. Massimo Rah**

Agronomia: **Dott. Agr. Barnaba Marinosci**

Approvvigionamento idrico: **Geol. Massimilian Brandi**

Archeologia: **Dott.ssa Caterina Polito**

Clima e PMA: **Dott.ssa Elisa Gatto**

Fauna: **Dott. Giacomo Marzano**

Geologia: **Geol. Pietro Pepe**

Idraulica: **Ing. Luigi Fanelli**

Rilievi: **Studio Tafuro**

Risparmio idrico: **Netafim Italia S.r.l.**

Vegetazione e microclima: **Dott. Leonardo Beccaris**

Cartella
VIA_2/

Identificatore:
4_PAGRVLTELAB12_A

Scheda tecnica moduli fotovoltaici

Descrizione Scheda tecnica dei moduli fotovoltaici

Nome del file:
4_PAGRVLTELAB12_A.pdf

Tipologia
Relazione

Scala
-

Autori elaborato: Ing. Andrea D'Ovidio

Rev.	Data	Descrizione
00	19/03/24	Prima emissione
01		
02		

Spazio riservato agli Enti:

Hi-MO 7

LR7-72HGD 585~620M

- High-performance PV modules for utility power plants
- Advanced HPDC cell technology delivers superior module efficiency and power
- High bifaciality and excellent power temperature coefficient achieves high energy yield
- LONGi lifecycle quality ensures long-term performance

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



23.0%
MAX MODULE
EFFICIENCY

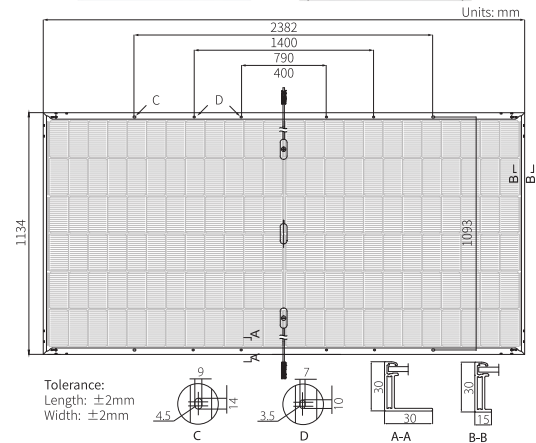
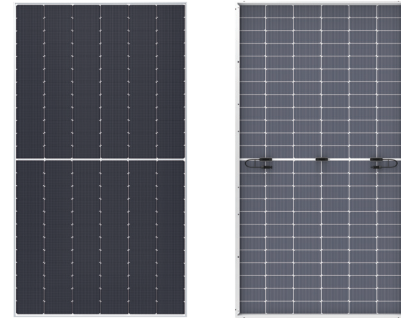
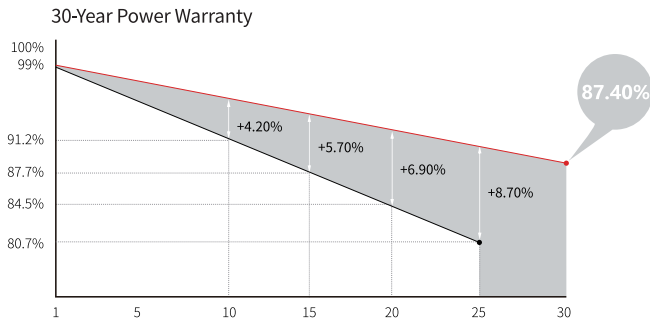
0~3%
POWER
TOLERANCE

<1%
FIRST YEAR
POWER DEGRADATION

0.4%
YEAR 2-30
POWER DEGRADATION

HALF-CELL
Lower operating temperature

Additional Value



Mechanical Parameters

Cell Orientation	144 (6×24)
Junction Box	IP68, three diodes
Output Cable	4mm ² , +400, -200mm/±1400mm length can be customized
Glass	Dual glass, 2.0+2.0mm semi-tempered 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: $\pm 3\%$

Module Type	LR7-72HGD-585M		LR7-72HGD-590M		LR7-72HGD-595M		LR7-72HGD-600M		LR7-72HGD-605M		LR7-72HGD-610M		LR7-72HGD-615M		LR7-72HGD-620M	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	585	445.3	590	449.1	595	452.9	600	456.7	605	460.6	610	464.4	615	468.2	620	472.0
Open Circuit Voltage (Voc/V)	52.01	49.43	52.12	49.53	52.23	49.64	52.34	49.74	52.44	49.84	52.55	49.94	52.66	50.04	52.77	50.15
Short Circuit Current (Isc/A)	14.29	11.48	14.37	11.54	14.45	11.61	14.53	11.67	14.61	11.74	14.69	11.80	14.77	11.86	14.85	11.92
Voltage at Maximum Power (Vmp/V)	43.57	41.41	43.68	41.51	43.79	41.63	43.90	41.72	44.00	41.82	44.11	41.92	44.22	42.03	44.33	42.13
Current at Maximum Power (Imp/A)	13.43	10.76	13.51	10.82	13.59	10.88	13.67	10.95	13.75	11.02	13.83	11.08	13.91	11.14	13.99	11.21
Module Efficiency(%)	21.7		21.8		22.0		22.2		22.4		22.6		22.8		23.0	

Electrical characteristics with different rear side power gain (reference to 605W front)

Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
635	52.44	15.35	44.00	14.44	5%
666	52.44	16.08	44.00	15.13	10%
696	52.54	16.81	44.10	15.81	15%
726	52.54	17.54	44.10	16.50	20%
756	52.54	18.27	44.10	17.19	25%

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	80±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	+0.045%/°C
Temperature Coefficient of Voc	-0.230%/°C
Temperature Coefficient of Pmax	-0.280%/°C