

REGIONE BASILICATA
PROVINCIA DI MATERA
COMUNE DI TRICARICO



PROGETTO DEFINITIVO - Autorizzazione Unica ex d.lgs. 387/2003

Impianto agrivoltaico di potenza nominale pari a
12,64°MWp e relative opere di connessione proposti da
Solaria Promozione e Sviluppo Fotovoltaico srl in agro del
Comune di Tricarico denominato "Tricarico 1"

Titolo elaborato

Codice elaborato

A.12.b.3. Schemi funzionali dei singoli pannelli

COMMESSA	FASE	ELABORATO	REV.
007.22.01	A	T25	A

Riproduzione o consegna a terzi solo dietro specifica autorizzazione.

Scala

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DATA	DESCRIZIONE	REDATTO	VERIFICATO	APPROVATO
MAGGIO 2022	PRIMA EMISSIONE	3E Ingegneria	3E Ingegneria	Solaria

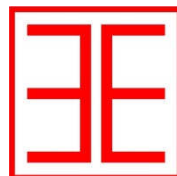
Proponente



**Solaria Promozione e Sviluppo
Fotovoltaico srl**

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Progettazione



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Consulenze specialistiche

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Monocrystalline Module | **GCL-M10/72H** | **525-560 W**

Electrical Specification (STC*)

	P _{max} (W)	525	530	535	540	545	550	555	560
Maximum Power	P _{max} (W)	525	530	535	540	545	550	555	560
Maximum Power Voltage	V _{mp} (V)	41.21	41.48	41.77	42.06	42.35	42.64	42.93	43.22
Maximum Power Current	I _{mp} (A)	12.74	12.78	12.81	12.84	12.87	12.90	12.93	12.96
Open Circuit Voltage	V _{oc} (V)	49.05	49.28	49.51	49.75	49.98	50.22	50.45	50.68
Short Circuit Current	I _{sc} (A)	13.53	13.57	13.60	13.63	13.66	13.70	13.73	13.76
Module Efficiency	(%)	20.5	20.7	20.9	21.1	21.3	21.5	21.7	21.9
Power Output Tolerance	(W)	0→+5							

* Irradiance 1000W/m², Cell Temperature 25°C, Air Mass 1.5

Electrical Specification (NMOT*)

	P _{max} (W)	397.2	401.1	404.8	408.6	412.4	416.2	420.0	423.8
Maximum Power	P _{max} (W)	397.2	401.1	404.8	408.6	412.4	416.2	420.0	423.8
Maximum Power Voltage	V _{mp} (V)	38.22	38.47	38.74	39.01	39.28	39.55	39.82	40.09
Maximum Power Current	I _{mp} (A)	10.39	10.43	10.45	10.47	10.50	10.52	10.55	10.57
Open Circuit Voltage	V _{oc} (V)	46.30	46.52	46.74	46.96	47.18	47.40	47.62	47.85
Short Circuit Current	I _{sc} (A)	10.84	10.86	10.89	10.92	10.94	10.97	10.99	11.02

* Irradiance 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s

Mechanical Data

Number of Cells	144 Cells (6x24)
Dimensions of Module L*W*H (mm)	2256x1133x35 mm [88.82x44.61x1.38 inches]
Weight [kg]	27.5 kg
Glass	High transparency solar glass 3.2mm [0.13 inches]
Backsheet	White
Frame	Silver, anodized aluminium alloy
J-Box	IP68 Rated
Cable	4.0mm ² [0.006 inches ²], Portrait: 280/280mm (11.02inches)
Number of diodes	3
Wind/ Snow Load	2400Pa/ 5400Pa*
Connector	MC Compatible

* For more details please check the installation manual of GCLSI

Temperature Ratings

Nominal Module Operating Temperature(NMOT)	43±2°C
Temperature Coefficient of I _{sc}	+0.05%/°C
Temperature Coefficient of V _{oc}	-0.28%/°C
Temperature Coefficient of P _{MAX}	-0.36%/°C

Maximum Ratings

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	25A

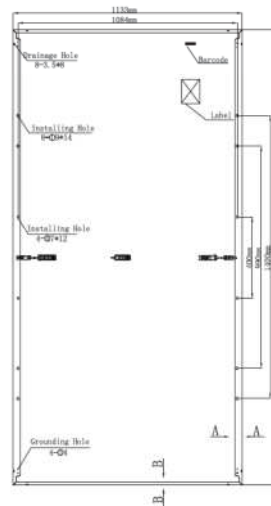
Optional

Connector: Original MC4

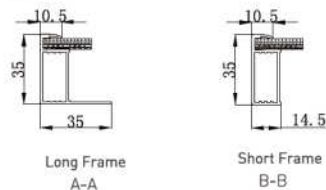
Packaging Configuration

Module per box	31 pieces
Module per 40' container	620 pieces

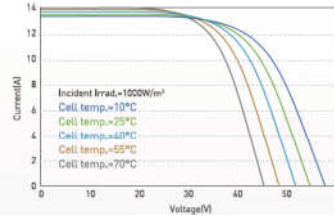
Module Dimension



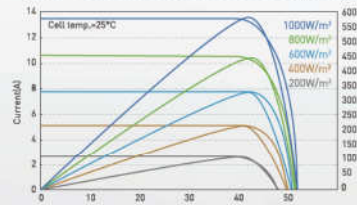
Back View



I-V Curve at Different Temperature (560W)



I-V/P-V Curve at Different Irradiation (560W)



CAUTION: READ INSTALLATION MANUAL BEFORE USING THE PRODUCT

Contact Us for More Information

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