

**For a Free Quote:**

**Web: [EnergyPal.com/solar](http://EnergyPal.com/solar)**

**Call: 1-800-990-3725**

**Email: [contact@energypal.com](mailto:contact@energypal.com)**

# **EnergyPal**

## **Solar Panel Guide Specification Data Sheet**

### **Giellenergy Thermoplastic Moulding GLE-M10W GLE10W**

Also available on the web at  
[EnergyPal.com/giellenergy-thermoplastic-moulding-solar-panels/gle10w](http://EnergyPal.com/giellenergy-thermoplastic-moulding-solar-panels/gle10w)

# GIELLENERGY-TILE® 10,0 Wp

MADE IN ITALY

## Caratteristiche Tecniche – Technical data sheet

<u>Celle / Cells:</u> 156 x 156 mm:	2 Monocristalline (3/4 B.B.) 2 Pseudo-square Si-monocristalline (3/4 B.B.)
<u>Vetro / Glass - 3,2 mm</u>	Temprato ad elevata Trasmissanza - <u>High transmittance and Tempered</u>
<u>Incapsulante / Encapsulant:</u>	Eva (Ethylene-Vinil-Acetate) / <u>Eva (Ethylene-Vinil-Acetate)</u>
<u>Backsheet:</u>	Tedlar-Pet-Tedlar
<u>Conessioni / Connections:</u>	MC4 e Cavi solari a doppio isolamento da 4 mm <sup>2</sup> <u>MC4 connectors and double insulation PV cables 4 mm<sup>2</sup></u>
<u>Scat. di conness. / Junction Box:</u>	Integrata con diodo di Bypass - <u>Integrated wit diode for Bypass</u>
<u>Peso - Weight:</u>	1,5 Kg +/- 5% - 1,5 Kg +/- 5%
<u>Dimensioni - Dimensions:</u>	415 x 240 x 45 mm ( Installata sul tetto: 365 x 205 x 35mm ) <u>415 x 240 x 45 mm ( Installed on the roof: 365 x 205 x 35mm )</u>
<u>Carico di Neve - Snow Load:</u>	Testata per carico = > 540 Kg/m <sup>2</sup> - <u>Tested for heavy snow load = 540 Kg/m<sup>2</sup></u>
<u>Materiale cornice Tegola:</u> <u>Tile's frame Material:</u>	PA rinforzata con microsfer e fibre di vetro "VO" e stabilizzata "UV" <u>VO and UV Stabilized PA, reinforced by glass spheres &amp; Fibres</u>
<u>Colore / Colour:</u>	Cotto (RAL 8004), altri colori su richieste > di 10 kWp <u>Terracotta brown (RAL 8004), several col. available by orders &gt;10kWp</u>
<u>Supporto / Support on the roof:</u>	Listellatura Doppia per tetti "Ventilati" - <u>Classic battens for "Vented" roof</u>
<u>M<sup>2</sup> per 1 kWp / M<sup>2</sup> for 1 kWp:</u>	7,50 M <sup>2</sup> di Tegole Fotovoltaiche - <u>7,50 M<sup>2</sup> of Photovoltaic Tiles</u>
<u>PZ per 1 kWp / Pieces for 1 kWp:</u>	100 Pz. (1,00 kWp) - <u>100 Pcs. ( 1.00 kWp )</u>
<u>Potenza al m<sup>2</sup> / Power at m<sup>2</sup>:</u>	>135 Wp/m <sup>2</sup> - <u>&gt;135Wp/m<sup>2</sup> ( 13,5 "Pz/Pcs" Giellenergy-Tile x 1 M<sup>2</sup> )</u>
<u>Resist. impatto grandine:</u> <u>Hail impact resistance:</u>	Testata con sfere di acciaio da Ø 25 mm scagliate a 83 Km/h <u>Tested with Ø 25 mm steel balls hurled at 83 Km/h</u>

## Thermal Characteristics

(Condizioni di prova standard: 1.000W/m<sup>2</sup>; 25°C; AM 1,5)

<u>Temperatura di Esercizio</u> <u>Opertating Temperatur</u>	<u>Da -40°C a + 85°C</u>
<u>Coefficiente di Temperatura Pmp</u> <u>Temperature Coefficient Pmp</u>	<u>-0,038 (W/°C) (+0,1 W/°C)</u>
<u>Coefficiente Di Temperatura Voc</u> <u>Temperature Coefficient Voc</u>	<u>-0,0028(V/°C) (+ 2 mV/°C)</u>
<u>Coefficiente Di Temperatura Isc</u> <u>Temperature Coefficient Isc</u>	<u>+ 3,037(mA/°C) (+ 2mA/°C)</u>
<u>Fill Factor - NOCT:</u>	<u>77,0 % - 44,8 (+ 2,5 °C)</u>
<u>Massima Tensione di sistema</u> <u>Maximum system voltage</u>	<u>1.000 V-DC</u>
<u>N.ro di tegole consigliate in una serie</u> <u>N° tiles recommended in a series</u>	<u>200 Pz/Pcs</u>

## Electrical Characteristics

(Condizioni di prova standard: 1.000W/m<sup>2</sup>; 25°C; AM1,5)

<u>Massima Potenza</u> <u>Maximum Power</u>	<u>10,0Wp (+/- 3%)</u>
<u>Corrente alla massima potenza</u> <u>Current at maximum power</u>	<u>8,80A</u>
<u>Tensione alla massima potenza</u> <u>Voltage at maximum power</u>	<u>1,14 V</u>
<u>Corrente di Corto circuito</u> <u>Short circuit current</u>	<u>9,35 A</u>
<u>Tensione di Corto circuito</u> <u>Short circuit Voltage</u>	<u>1,37 V</u>
<u>Efficienza della Tegola</u> <u>Tile's Efficiency</u>	<u>13,50 %</u>
<u>Efficienza celle fotovoltaiche</u> <u>Solar cells Efficiency</u>	<u>&gt;21,0%</u>
<u>Efficienza pannello fotovoltaico</u> <u>Photovoltaic panel efficiency</u>	<u>16,75%</u>

## Certificazioni e Garanzie - Certifications And Warranties

Le Giellenergy-Tile® Sono certificate/they are certified: IEC: 61215-2 & IEC: 61730/2

Le Giellenergy-Tile® Sono Garantite 10 anni sul 90% e 20 anni sull'80% della Potenza

Minima e per 10 anni sui Difetti di Fabbricazione - Are Guaranteed for 10 Years on 90% & 20 Years on 80% of the Minimum Power - 10 Years on Manufact. Defects

*Gielleplast si riserva il diritto di apportare modifiche ai dati tecnici del Prodotto - Gielleplast reserves the right to make changes to the technical data of the Product*

**GIELLEPLAST**



V. L. Einaudi, 7 - Pancalieri (TO) ITALY - ☎ +39 0119734524 ☎ +39 0112767167  
[www.gielleplast.it](http://www.gielleplast.it) - [www.giellenergy-tile.eu](http://www.giellenergy-tile.eu) - [info@giellenergy-tile.eu](mailto:info@giellenergy-tile.eu)

Revisione: 01/2017