

POWER ENERGY PANEL

PA_EA 2019-30

**STEEL SHAFT FOR VERTICAL
TRANSPORT
EQUIPPED WITH DOUBLE-FACE
PHOTOVOLTAIC SYSTEM**



High efficiency

The photovoltaic cells we use combine the advantages of crystalline silica solar cells and thin film solar cells, and can achieve levels of efficiency higher than 23%.



High resistance

The panel has a life expectancy of 25 years and a guarantee of efficiency of 80% at its 25th year of use.



Double-face technology

Using not only the front but also the posterior face of the photovoltaic unit integrated into the shaft, the double-faced panel produces on average 10-20% more power than a traditional single-faced panel.



Custom solutions

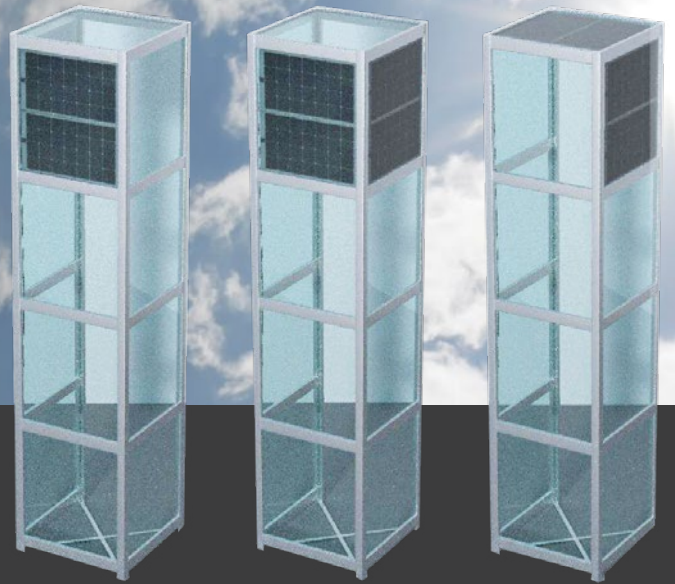
We can design and develop custom solutions to meet the different needs of our client.



POWER ENERGY PANEL

PA_EA 2019-30

STEEL SHAFT FOR VERTICAL TRANSPORT EQUIPPED WITH FLEXIBLE MODULAR PHOTOVOLTAIC SYSTEM



The active glazing is designed to maximize the photovoltaic area, using not only the front but also the posterior face of the photovoltaic unit integrated into the shaft. The double faces of the solar cell enables it to generate more power with levels of efficiency higher than 23%.

POWER ENERGY PANEL PA_EA 2019-30

With this modular kit we intend to provides an active shaft with double-sided integrated photovoltaic system. The photos on the back of this sheet show some examples of active lift shafts where the PA_EA2019-30 installed generates renewable energy with yields in proportion to the number of units present. Connection to either an accumulator or a network will be easy to achieve.



Type A

ACTIVE GLAZING WITH TOTAL POWER OF 282 WP ON THE FRONT-FACING SIDE +30% ON THE BACK.

CONSISTING OF:

- 2 double-faced units in monocrystalline silica measuring 1060x680x2.5 mm (6x4 cells) with power of 141 Wp on the front-facing side of each unit
- Stratified glass, certified transparent, 11 mm, up to 3 sq.mt (>3 sq.mt. the thickness of the glass changes)
- Special frame containing Power Energy Panel
- Connecting box with MC4 connector inside the structure
- MC4 connectors and 5 lin.mt. cable per floor
- A separate quotation will be made for the cable raceway
- A separate quotation will be made for glass thicker than 11 mm



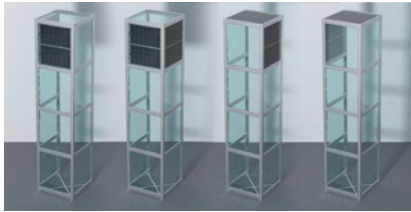
Type B

ACTIVE GLAZING WITH TOTAL POWER OF 376 WP ON THE FRONT-FACING SIDE +30% ON THE BACK.

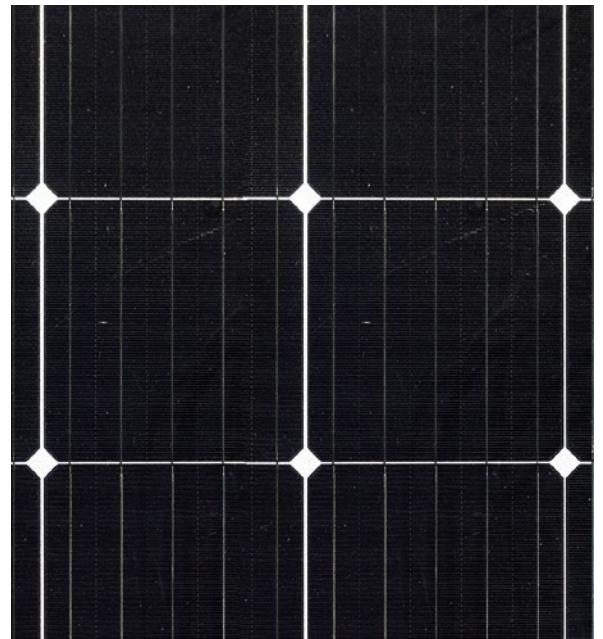
CONSISTING OF:

- 2 double-faced units in monocrystalline silica measuring 1385x680x2.5 mm (8x4 cells) with power of 188 Wp on the front-facing side of each unit
- Stratified glass, certified transparent, 11 mm, up to 3 sq.mt (>3 sq.mt. the thickness of the glass changes)
- Special frame containing Power Energy Panel
- Connecting box with MC4 connector inside the structure
- MC4 connectors and 5 lin.mt. cable per floor
- A separate quotation will be made for the cable raceway
- A separate quotation will be made for glass thicker than 11 mm

Active glazing of the shaft



IN ADDITION TO THE EXAMPLES SHOW, WE CAN DESIGN AND DEVELOP CUSTOM SOLUTIONS TO MEET THE DIFFERENT NEEDS OF OUR CLIENT!



FLEXIBLE, DOUBLED-FACED MONOCRYSTALLINE MODULES INTEGRATED INTO THE GLASS CLADDING SHEET OF THE STEEL SHAFT FOR VERTICAL TRANSPORT

- Active glazing on both sides of the unit with yield up to 30% higher than standard single-faced units, thanks to the active posterior glazing cable of recovering diffused and reflected light
- Monocrystalline technology
- Flexible unit in polymeric material

ELECTRICAL PARAMETERS

	FGSE147L		FGSE130L		FGSE115	
	face	back	face	back	face	back
V Pmax (V)	17.17	16.67	15.26	14.82	13.36	12.97
I pmax (A)	8.67	8.42	8.58	8.33	8.62	8.37
Pmax (Watt)	148.92	144.58	131.04	127.22	115.13	111.77
V AC (V)	19.71	19.14	17.52	17.01	15.33	14.88
I DC (I)	9.25	8.98	9.15	8.89	9.19	8.92
Efficiency %	18.26	17.73	17.65	17.13	17.77	17.25



High efficiency

The photovoltaic cells we use combine the advantages of crystalline silica solar cells and thin film solar cells, and can achieve levels of efficiency higher than 23%. The values shown above refer to single photovoltaic module, and the presence of transparent glass in the glazing determines a negligible loss of the power yield.



Caution

The photovoltaic panel may reach a temperature of 60°C, depending on the angle of exposure and the intensity of the solar radiation. Maintenance experts or installers should take appropriate precautions to avoid direct contact with the photovoltaic surface exposed to the sun.



High resistance

The panel has a life expectancy of 25 years and a guarantee of efficiency of 80% at its 25th year of use. Thanks to the European PV-Cycle agreements, there is no cost to the end client for the disposal of photovoltaic panels. These costs are, instead, paid in advance by the European producers. Power Energy Panel require no maintenance.

Double-face technology

The double-faced panel produces on average 10-20% more power than a traditional single-faced panel thanks to the recovery of up to 30% of the diffused and reflected light in the surrounding environment.

