

# New PHOTOVOLTAIC MODULES

## High Power IS4000P



72 cells



The new photovoltaic modules **IS4000P High Power series**, are composed of **72** high efficiency polycrystalline solar cells **156x156mm** produced with the most innovative technologies of isotropic texturization and antireflecting coating.

These modules can be produced with power from **270 to 285Wp**, with an **high power density up to "155Wp per square meter and an high efficiency of 15,5%"**.

**IS4000P High Power** are top quality modules by using only guaranteed and certified materials. These modules are in fact made of solar cells encapsulated between sheets of ethylene vinyl acetate (EVA), highly transparent, antishock, 4mm tempered glass which protects the module against mechanical and climatic effects, such as hail, ice etc. The particular texturization of the glass enables a maximum concentration and diffusion of the light on the solar cells. This enable us to guarantee very good module performances, power and working conditions even if in lower sunlight levels worldwide. The white tedlar back sheet contributes to a further protection of the module and the electrical contacts against the action of climatic agents like humidity.

Furthermore the **strong anodized aluminium frame** with corners and 8 pre-drilled mounting holes makes the module extremely easy to install.

The modules are equipped with a special waterproof **junction box Tyco (TÜV Certified)** with protection degree **IP55**, with 3 by-pass diodes which protect the module against "hot spot" effects.

These modules have been designed especially for grid connected systems and photovoltaic roofs. The modules are equipped with 2 Tyco cables 4mm<sup>2</sup> of 1 mt/each for quick modules connections.

Front side	Temperated, texturized glass thickness 4mm
Encapsulant	EVA (Ethylene vinil acetate)
Back side	White Tedlar
Frame	Anodized aluminium frame with drainage holes
Junction box	Tyco IP55 with 3 by pass diodes
Cable and connectors	Tyco 2 x 1 mt with +/- connectors

#### Certification:

C01 09C328003 - C01 07C328001 - C02 07C328001

TÜV 08 PPV 00001/02 TÜV 08 PPV 00001/03 TIC

Power modules warranty:

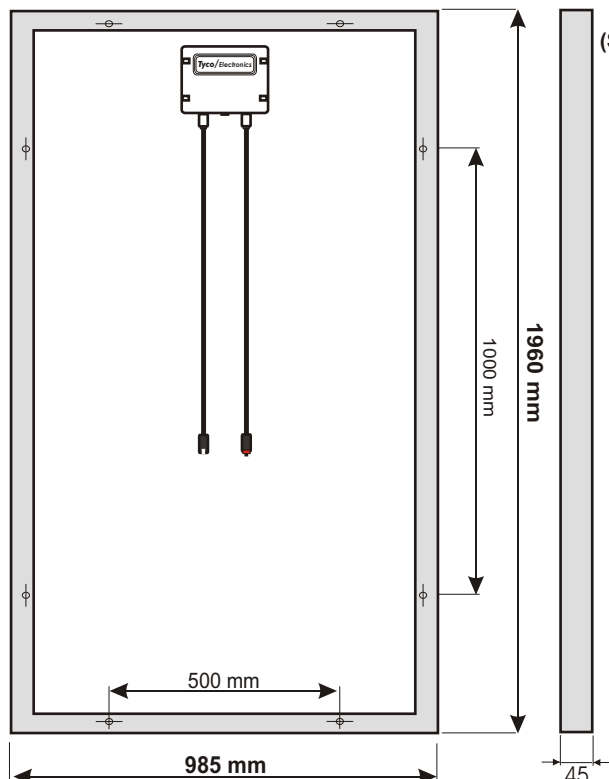
90% 12 years

80% 25 years

Product Warranty: 5 years

CEI/EN 61215 (2006) 2nd Ed.

CEI/EN 61730-1 61730-1 (2007)



#### Electrical and Technical Data (STC: 1000 W/sqm - 25°C - AM 1,5)

	IS4000P			
	270 Wp	275 Wp	280 Wp	285 Wp
<b>Pmax</b>	270 Wp	275 Wp	280 Wp	285 Wp
<b>Imp</b>	7,52 A	7,60 A	7,70 A	7,75 A
<b>Isc</b>	8,00 A	8,10A	8,25A	8,30A
<b>Voc</b>	43,5 V	43,5 V	43,9 V	44,1 V
<b>Vmp</b>	35,9 V	36,1 V	36,3 V	36,7 V
<b>Solar cells efficiency</b>	15,50%	15,70%	16,00%	16,30%
<b>Modules efficiency</b>	14,00%	14,25%	14,50%	14,76%
<b>NOCT</b>	45 °C			
<b>Maximum system voltage</b>	1000 V			
<b>Temperature range</b>	-40 to +85 °C			
<b>Hail resistance</b>	up to 25mm / 90 km/h			
<b>Relatives humidity</b>	up to 100%			
<b>Dimensions</b>	1960 x 985 x 45 mm (±2)			
<b>Dimensions of laminate</b>	1652 x 977 x 5 mm (±2)			
<b>Weight</b>	27 Kg framed - 24Kg laminate			
<b>Power tolerance</b>	± 3%			
<b>Temperature coefficient</b>	Isc(α)0.07%/°C - Voc(β) -0.34%/°C - Pmax(γ) -0.45%/°C			
<b>Surface load</b>	550 Kg/sqm			

Datasheet complies with the requirements EN 50380

®

# New PHOTOVOLTAIC MODULES

## High Power

### IS4000P

72 cells



The new photovoltaic modules **IS4000P High Power series**, are composed of **72** high efficiency polycrystalline solar cells **156x156mm** produced with the most innovative technologies of isotropic texturization and antireflecting coating.

These modules can be produced with power from **280 to 300Wp**, with an **high power density up to "155Wp per square meter and an high efficiency of 15,5%"**.

**IS4000P High Power** are top quality modules by using only guaranteed and certified materials. These modules are in fact made of solar cells encapsulated between sheets of ethylene vinyl acetate (EVA), highly transparent, antishock, 4mm tempered glass which protects the module against mechanical and climatic effects, such as hail, ice etc. The particular texturization of the glass enables a maximum concentration and diffusion of the light on the solar cells. This enable us to guarantee very good module performances, power and working conditions even if in lower sunlight levels worldwide. The white tedlar back sheet contributes to a further protection of the module and the electrical contacts against the action of climatic agents like humidity.

Furthermore the **strong anodized aluminium frame** with corners and 8 pre-drilled mounting holes makes the module extremely easy to install.

The modules are equipped with a special waterproof **junction box Tyco (TÜV Certified)** with protection degree **IP55**, with 3 by-pass diodes which protect the module against "hot spot" effects.

These modules have been designed especially for grid connected systems and photovoltaic roofs.

The modules are equipped with 2 Tyco cables 4mm<sup>2</sup> of 1 mt/each for quick modules connections.

Front side	Temperated, texturized glass thickness 4mm
Encapsulant	EVA (Ethylene vinyl acetate)
Back side	White Tedlar
Frame	Anodized aluminium frame with drainage holes
Junction box	Tyco IP55 with 3 by pass diodes
Cable and connectors	Tyco 2 x 1 mt with +/- connectors

#### Certification:

C01 09C328003 - C01 07C328001 - C02 07C328001

TÜV 08 PPV 00001/02 TÜV 08 PPV 00001/03 TIC

CEI/EN 61215 (2006) 2nd Ed.  
CEI/EN 61730-1 61730-1 (2007)

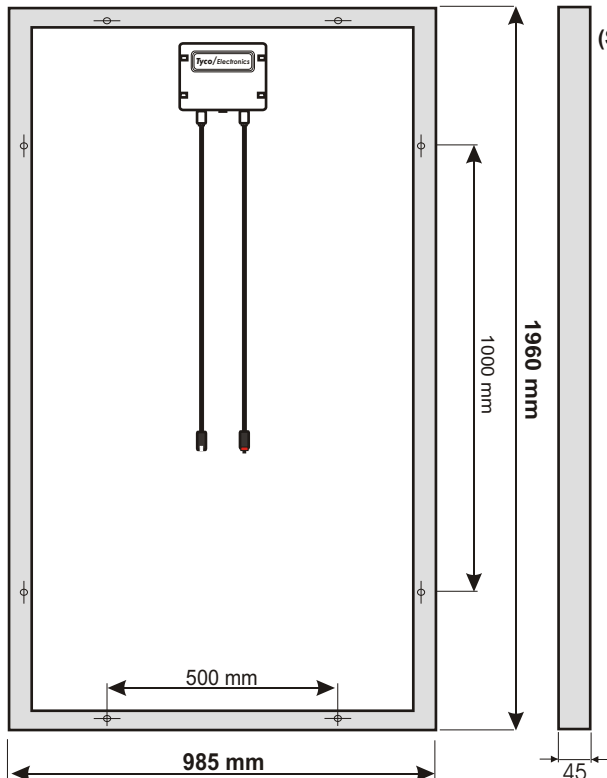


Power modules warranty:

90% 12 years

80% 25 years

Product Warranty: 5 years



#### Electrical and Technical Data (STC: 1000 W/sqm - 25°C - AM 1,5)

	IS4000P		
	290 Wp	295 Wp	300 Wp*
<b>Pmax</b>	290 Wp	295 Wp	300 Wp*
<b>Imp</b>	7,90 A	8,00 A	8,10 A
<b>Isc</b>	8,50A	8,70A	8,30A
<b>Voc</b>	44,1 V	45,1 V	45,3 V
<b>Vmp</b>	36,7 V	36,8 V	36,8 V
<b>Solar cells efficiency</b>	16,50%	16,80%	17,30%
<b>Modules efficiency</b>	15,00%	15,30%	15,50%
<b>NOCT</b>	45 °C		
<b>Maximum system voltage</b>	1000 V		
<b>Temperature range</b>	-40 to +85 °C		
<b>Hail resistance</b>	up to 25mm / 90 km/h		
<b>Relatives humidity</b>	up to 100%		
<b>Dimensions</b>	1960 x 985 x 45 mm (±2)		
<b>Dimensions of laminate</b>	1652 x 977 x 5 mm (±2)		
<b>Weight</b>	27 Kg framed - 24Kg laminate		
<b>Power tolerance</b>	± 3%		
<b>Temperature coefficient</b>	Isc(α)0.07%/°C - Voc(β) -0.34%/°C - Pmax(γ) -0.45%/°C		
<b>Surface load</b>	550 Kg/sqm		

Datasheet complies with the requirements EN 50380