

PCBxxx-A21



**Characteristics**

**Dimensions**

Length	1480 mm (tolerance +/-3 mm)
Width	985 mm (tolerance +/-3 mm)
Depth	46 mm
Weight	19 kg

**Standard operating conditions\***

Standard operating conditions*	Avoid excess exposure to smoke, dust, saltwater
Maximum system voltage	DC1000V

**Insulation performance**

Insulation resistance	50 MΩ at 500 VDC
Ability to withstand voltage	3000 V for 1 minute

**Temperature coefficient**

Voc(Open circuit voltage)	-0.32%
Isc(Short circuit current)	+0.08%
Pmax(Maximum power output)	-0.38%

\*maximum performance limits conform to IEC 61730 standards



**Design Features:**

**Maximized Power Output**

- Polycrystalline cells with 15.2 % efficiency give highest power output even in low light conditions
- Individual cell outputs matched for optimal module performance
- Antireflective coating and highly transparent glass maximize energy yield

**Robust, Reliable Construction**

- Extra thick 46 mm anodized aluminium frame
- Strengthened glass and protective back sheet prevent damage and water ingress
- Junction box filled with silicon gel
- Gasket provides extra protection against water ingress

**Highest Quality Standards**

- IEC 61730, electrical and mechanical performance standards for long-term outdoor operation
- Manufactured in Japan, certified according to ISO 9001:2000
- Every YOCASOL module is inspected visually and tested electrically before delivery
- IP protection: IP65

**Seamless System Integration**

- Fitted with standard MC3 connectors and a cable of about 1m
- 3 bypass diodes in junction box to minimize system power loss caused by shading of module

**Warranty**

In accordance with our limited warranty conditions (available on request):

- Materials & Workmanship - 2 years
- 90% of the specified min. output power - 10 years
- 80% of the specified min. output power - 25 years

**Eco -Friendly**

- Using Lead-Free solder

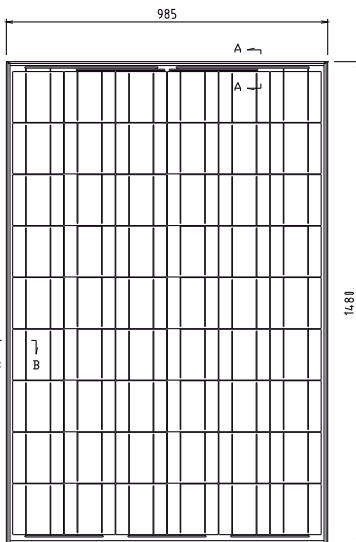
## PCBxxx-A21

### Electrical Characteristics

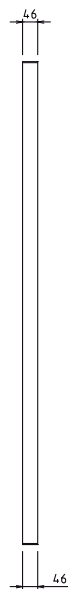
	PCB180	PCB185	PCB190	PCB195	PCB200	tolerance
Maximum output	180 W	185 W	190 W	195 W	200 W	+5 % -3 %
Maximum power voltage	25.6 V	25.7 V	25.8 V	26.0 V	26.2 V	-
Maximum power current	7.03 A	7.20 A	7.36 A	7.50 A	7.63 A	-
Open circuit voltage	32.0 V	32.1 V	32.3 V	32.5 V	32.7 V	±10%
Short circuit current	8.04 A	8.10 A	8.18 A	8.26 A	8.36 A	90% or over
Conversion efficiency	12.3%	12.7%	13.0%	13.4%	13.7%	-

\* measured at standard test conditions of 1000W/m<sup>2</sup> irradiance, AM1.5 spectrum, 25°C cell temperature

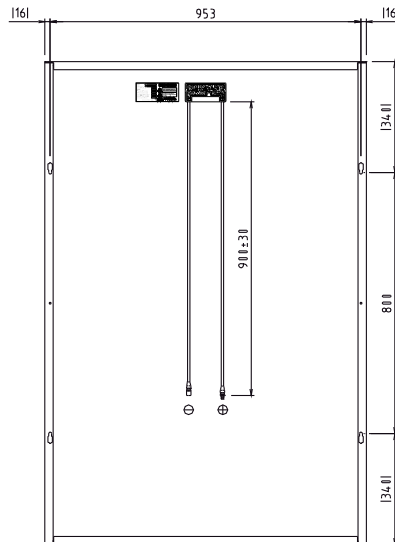
Front View



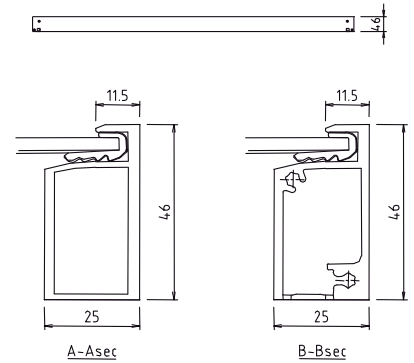
Side View



Back View



Profile View



### Construction

item	number	comment
cell	54	156 mm x 156 mm polycrystalline, Motech, Q-cells
front cover	1	strengthened patterned glass t3.2
back cover	1	white
filler		EVA resin
frame	1	46 mm clear anodized aluminium
edge filler		gasket
+ output wire	1	eco 4 sq, MC3 connector
- output wire	1	eco 4 sq, MC3 connector
junction box	1	
bypass diode	3	1000 V

### Tested Operating Conditions

temperature	-40°C - +85°C*
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\* This temperature range was applied during the Temperature Cycle Test



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