








## MSPxxxAS-36

# 320W-345W

### KEY FEATURES

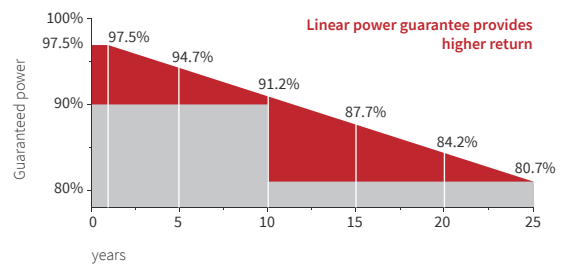
-  **Class A fire resistant (industry standard class C)**
-  **Outstanding performance in low-light conditions**
-  **Low temperature coefficient (Pmax): -0.39 % / °C**
- +5W** 0~+5W positive tolerance - to assure high output
-  **Lower internal current, lower hot spot temperature**
-  **Cell crack risk limited in small region, enhance the module reliability**
- PID FREE** Excellent anti-PID module design, TÜV SÜD certified
-  **Certified to withstand high wind loads (3600pa) and snow loads (8000pa)**
-  **Salt mist and ammonia corrosion resistant**

### PRODUCT CERTIFICATES



### WARRANTY

- Our linear power guarantee
- Standard linear power guarantee



**15 years** Enhanced product guarantee on product and workmanship

**25 years** Linear power output warranty

# MSPxxxAS-36

## ELECTRICAL PERFORMANCE

### Electrical parameters at Standard Test Conditions (STC)

Module Type											
Power output	Pmax	w	305	310	315	320	325	330	335	340	345
Power outputtolerances	ΔPmax	w	+3								
Module efficiency	ηm	%	17.24	17.52	17.81	18.09	18.37	18.65	18.94	19.22	19.50
Voltage at Pmax	Vmpp	V	36.36	36.85	37.58	37.62	37.69	37.71	37.77	37.82	37.96
Current at Pmax	Impp	A	8.39	8.41	8.38	8.51	8.62	8.83	8.91	8.99	9.09
Open circuit voltage	Voc	V	43.9	44.19	44.3	44.47	44.65	44.71	44.88	45.08	45.17
Short circuit current	Isc	A	8.96	8.99	9.05	9.08	9.15	9.26	9.43	9.52	9.66

STC: Irradiance 1000 W/m<sup>2</sup> module temperature 25°C AM 1.5 g spectrum according to EN 60904-3. Average relative efficiency reduction of 5% at 200W/m<sup>2</sup> according to EN 60904-1.

## THERMAL CHARACTERISTICS

Nominal operating cell temperature	NOCT	°C	45 +/-2
Temperature coefficient of Pmax	γ	% / °C	-0.39
Temperature coefficient of Voc	βVoc	% / °C	-0.29
Temperature coefficient of Isc	Isc	% / °C	+0.05

NOCT: open-circuit module operation temperature at 800W/m<sup>2</sup> irradiance, 20°C ambient temperature, 1 m/s wind.

## OPERATING CONDITIONS

Max. System Voltage	1500VDC
Max. series fuse rating	15A
Limiting reverse current	15A
Operating temperature range	-40°C to 85°C
Max. static load, front (e.g., snow and wind)	5400Pa
Max. static load, back (e.g., wind)	2400Pa
Max. hailstone impact (diameter/velocity)	25 mm / 23 m/s

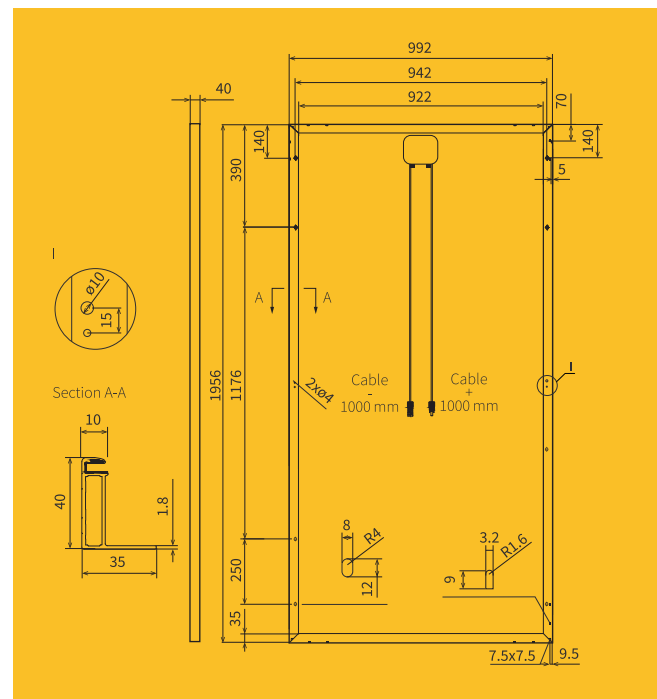
## MECHANICAL CHARACTERISTICS

Front Cover (material / thickness)	low-iron tempered glass / 3.2 mm
Cell (quantity)	72
Encapsulant (material)	EVA
Frame material	anodized aluminum alloy
Junction box (protection degree)	≥ IP67 with bypass-diode
Cable (length / cross sectional area)	1000 mm / 4 mm <sup>2</sup>
Plug connector (type / protection degree)	MC4 / IP67
Fire Safety Classification (IEC 61730)	Class C

Specifications are subject to change without notice.

## GENERAL CHARACTERISTIC

Dimensions	1956 mm x 992 mm x 40 mm
Weight	22.5 kg



## I-V Curves

