

MS

150 W

	50.12 MS	100.12 MS	150.12 MS
	Ref 1320	Ref 0552	Ref 0569
Electrical performance			-
Electrical periormance			

Max. power (Pm)* 50 W 100 W

	Power tolerance*	0/+3%	0/+3%	0/+3%
	Operating voltage	12 V	12 V	12 V
	Technology	mono/slim	mono/slim	mono/slim
	Voltage at max. power (Vmp)*	20 V	20 V	20 V

recrimology	1110110/511111	1110110/511111	1110110/511111
Voltage at max. power (Vmp)*	20 V	20 V	20 V
Intensity at max. power (Imp)*	2,5 A	5 A	7,5 A
Voltage in open circuit (Voc)*	23,6 V	23,6 V	23,6 V
Intensity in short circuit (Icc/ ISC)*	2,75 A	5,5 A	8,25 A
Cell efficiency	21%	21%	21%
Module efficiency*	13,23%	14,49%	14,02%

Maximum battery charging power***

12V Battery	with PWM controller	2 A	4 A	6 A
	with MPPT controller	3,26 A	6,25 A	9,78 A

Temperature characteristics

Operating temp	perature	-40/+85°C	-40/+85°C	-40/+85°C
NOCT / TUC**		45 ±2°C	45 ±2°C	45 ±2°C
Temperature Pm coefficient Voc	Pm	-0,48%/°C	-0,48%/°C	-0,48%/°C
	Voc	-0,34%/°C	-0,34%/°C	-0,34%/°C
	Icc	0,037%/°C	0,037%/°C	0,037%/°C

Mechanical characteristics

Mechanical characteristics			
Front structure	ETFE	ETFE	ETFE
Black backsheet design	yes	yes	yes
Back structure	fiberglass	fiberglass	fiberglass
Possible bending	< 5°	< 5°	< 5°
Cable length (with connectors)	900 mm	900 mm	900 mm
Fixing eyelet (marine bronze)	×4	×4	×8
Module dimensions	712×560×20	1110×695×20	1580×695×20
Module weight	2,5 kg	5,2 kg	7,5 kg

1 year

- *According to standard test conditions (STC): irradiance 1000 W/m2, AM= 1,5, cell temperature 25°C.

 ** Nominal Operating Cell Temperature: Irradiance 800 W/m2, wind speed 1 m/s, ambient temperature 25°C.

 ***According NMOT standard- Nominal Module Operating Temperature (=test condition in real situation): irradiance 800W/m², ambiante temperature 20°C, wind speed 1 m/s



Product warranty

Period

Deck-pass/ bulkhead pass resistant to UV with quick solar connectors

Ref. 1481



1 year

Caps for solar connectors kit 1 male + 1 female

1 year

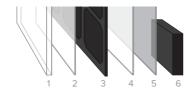
HIGH QUALITY COATING

Entry-level price range	UNISUN MS		
PET	ETFE		
Light tran	smission		
90-93%	95%		
Antireflexion	Antireflexion properties		
+	+++		
Self-cleaning	g properties		
+	+++		
Corrosion	resistant		
+	+++		
Resistant to a sal	ine environment		
+	+++		

HIGH QUALITY **JUNCTION BOX**

Entry-level price range	UNISUN MS	
TÜV Certification		
rare	✓	
Cell protection from surges (hot-spots)		
no	✓	
Mechanical	resistance	
+	+++	
Waterproof		
+	+++	
Sha	pe	
not streamlined	streamlined	

HIGH QUALITY STRUCTURE



- 1. High quality ETFE plastic
- 2. EVA Resin
- 3. Highly efficient cells
- 4. EVA resin
- 5. PET + fiberglass
- 6. TÜV certified junction box

UNITECK

High efficiency cells



High resistance plastic, anti-corrosion, high transmissibility of light



TÜV certified waterproof junction box with hot-spot protection, reverse current



even under weak light

UNISUN MS slim solar panels

LIGHT **AND MOBILE**



PROTECTION For a safe use, Unisun MS is equipped with a solar connector

QUICK CONNECTORS +

(waterproof + electrical transfer quality), and with an anti-reverse diode integrated in the junction box (protection for reverse current battery ->panel)







UNISUN MS is the high performance monocrystalline slim panel range (possible bending up to 5° max.) ideal for leisure (boating, campervan), off-grid or nomad activities.

Their highly efficient monocrystalline cells guarantee exceptional output even under weak light or extreme heat.

Their multi-layer structure with a high-quality coating on the front (ETFE), and fiberglass on the back, provides the best performance on the market regard to electrical performance (high transmissibility plastic with self-cleaning properties), mechanical resistance and corrosion resistance (ideal for boating).

With a TÜV certified junction box, UNISUN MS is protected against all cell overvoltage or hot spots (anti-spot protection) due to grey areas or cells getting masked, very common in boating (sailing ropes etc...). Its streamlined shape minimises wind resistance and avoids ropes from getting stuck making it ideal for boating use.

Light and space-saving UNISUN MS can be placed or fixed with rigging or bungee ropes thanks to their integrated eyelets (diam.10).

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