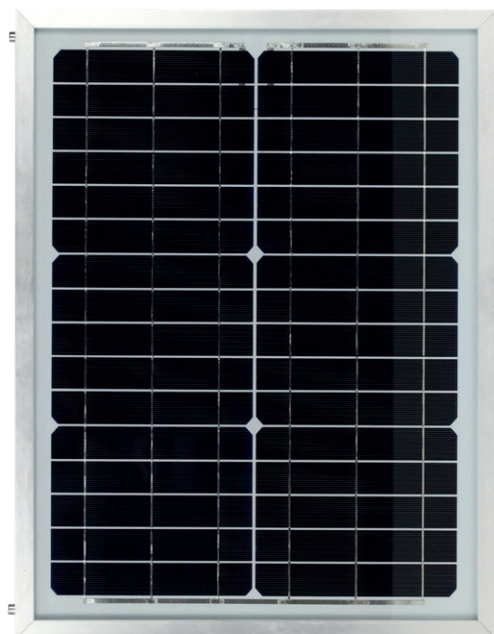




To be used in isolated systems

The MSP20Ex solar module is an ATEX classified photovoltaic module for use in isolated systems where no electrical power is available, typically on offshore oil and gas platforms classified as a gas explosion risk area.

FEATURES

- Classification:
GROUP II: Equipment on surface (no mining).
ZONE 1: Category 2.
ATMOSPHERE: GAS.
- Average operation lifetime over 10 years.
- 22,3W maximum power.
- 32 nos. monocrystalline cells in series connection.
- Cells encapsulated between tempered glass and L5057 aluminium mounting frame.
- High efficiency, even with low levels of sunlight.
- Maximum concentration and diffusion of light on cells.
- High resistance to the marine environment.
- Designed for maximum reliability and minimum maintenance.
- IP 66 watertightness degree.



MSM has designed this module under the strictest safety regulations, complying with all atex and IECEx standards, the panel cells are encapsulated between a tempered glass cover and an aluminium back sheet to provide maximum protection in the most extreme environmental conditions.

The MSP20-Ex can be supplied on its own or as a kit as part of a complete power system, together with the battery box and a solar charge controller.

II 2G Ex eb mb IIC T4 Gb

MSP20-Ex

Power systems

Solar Modules

! Specifications subject to change without previous notice.

Specifications

Maximum power:	22.3 Wp.
Nominal voltage:	12 V.
Maximum power current (Impp):	1.3 A.
Short circuit current (Isc):	1.34 A.
Open circuit voltage (Voc):	20.6 V.
Maximum power voltage (Vmpp):	17.22 V.
Maximum system voltage:	1,000 V.
Number of cells:	36 nos. monocristalline cells.
Power tolerance:	(+/-) 5%.

Materials and environment

Temperature range:	From -20° to +55°C.
Glass:	6 mm tempered glass.
Frame:	Aluminum L6063 colorless anodized.
Backplates:	Aluminum L5057 colorless anodized.
Dimensions (+/-2.5 mm) (L x W x H):	473 x 374 x 50 mm.
Weight:	5.4 kg.
Watertightness degree:	IP 66.

Standards and Certifications

Gas: II 2G Ex eb mb IIC T4 Gb

Group II: Equipment in surface (no mining).

Zone 1: Category 2.

General requirements: EN 60079-0 Standard.

Equipment protection by Increased Safety: "eb", EN 60079-7 Standard.

Equipment protection by Encapsulation: "mb", EN 60079-18 Standard.

Temperature Class: T4. 135°C.

Protection against Gas: (G).

Atex certificate n°: LOM 21ATEX1006

