

# ECLXXM10HC PHOTOVOLTAIC MODULES MONOCRYSTALLINE 108 HALF CUT CELLS

eclipse  
ITALIA

## PROPERTIES

Photovoltaic module manufactured with 108 high efficiency monocrystalline half cut cells for grid-connected or stand-alone plants.

## WARRANTY

90% rated power output for 10 years  
80% rated power output for 25 years  
10 year product warranty

## CERTIFICATES

Modules certified according to:

EC-EN 61215-1:2016 / IEC-EN 61215-1-1:2016  
IEC 61215-2:2016 – EN 61215-2:2017  
IEC 61730-1:2016 – EN IEC 61730-1:2018  
IEC 61730-2:2016 – EN IEC 61730-2:2018

## STRUCTURAL PROPERTIES

Size LxWxH	1722 mm x 1134 mm
Weight	21,5 kg
Cells type	108 monocrystalline silicon half cut cells with high efficiency - M10
Ribbon	Bus bars of copper, tin and silver
Front glass	Tempered glass, 3,2 mm thickness
Encapsulation	EVA (Ethilene-vinyl acetate), UV stabilised
Backsheet	Multilayer polyester-based
Frame	Alluminium alloy EN AW-6060T6 anodized 15 microns, thickness 35 mm
Junction box	IP 67 waterproof junction box fitted with 3 bypass diodes for effettive protection against "hot spots"
Connectors	2 cables with section 4 mm with MC4 or other connector

## CONDITION OF USE

Typical application	24 V DC
Maximum voltage	1500 V DC
Operating temperature	-40°C+85°C
Impact resistance to hail	Ø 28 mm at 86 km/h
Snow	551 kg/mq max
Application class	A, safety class II



# ECLXXM10HC PHOTOVOLTAIC MODULES MONOCRYSTALLINE 108 HALF CUT CELLS

**eclipse**  
ITALIA

## ELECTRICAL CHARACTERISTICS\*

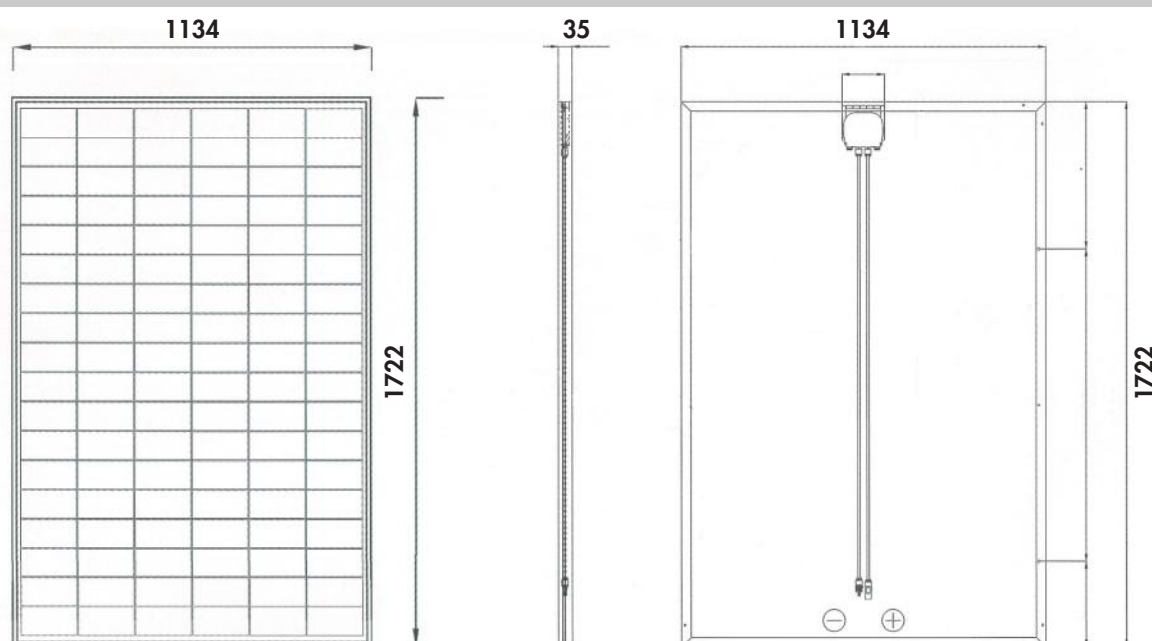
Model	ECL405M10HC	ECL410M10HC	ECL415M10HC
Module power (Pmax)	405 Wp	410 Wp	415 Wp
Power tolerance	-0/+5 W	-0/+5 W	-0/+5 W
Maximum power voltage (Vmp)	31,62 V	31,84 V	32,03 V
Maximum power current (Imp)	12,81 A	12,88 A	12,96 A
Short circuit current (Isc)	13,70 A	13,77 A	13,84 A
Open circuit voltage (Voc)	37,74 V	37,98 V	38,21 V
Module efficiency	20,74%	20,99%	21,25%
Maximum series fuse	20 A	20 A	20 A
Maximum system voltage	1500 V DC(IEC)/1500 V DC(UL)		

\*measurement conditions: the electrical specifications are measured under an irradiance level of 1000 W/mq, 1,5 Air mass Spectrum, cell temperature of 25°C.

## OPERATING CHARACTERISTICS

		U.M.
Voc temperature coefficient	-0,40%	°C
Pmp temperature coefficient	-0,32%	°C
Isc temperature coefficient	+0,05%	°C
Nominal Operating Cell Temperature (NOCT)	45±2	°C

## TECHNICAL DRAWING



Le dimensioni riportate nella scheda potranno essere variate senza preavviso a seguito di aggiornamento tecnico.

## ECLIPSE ITALIA srl

Registered office: 20121 Milano, Corso Venezia, 3 - Italy · Offices and production: 25078 Nozza di Vestone (BS) - Loc. Merlaro - Italy  
Tel. +39 0365 870843 · Fax. +39 0365 870851 · P.IVA 06212530965 · www.eclipseitalia.com · info@eclipseitalia.com

CE

