

Marseille, the 10 November 2022

**Object: Visual variations on batches of FLASH 375 Half-Cut Black and FLASH 500 Half-Cut Black**

Dear,

We had to work exceptionally with a new source of cells for our production of modules Half-Cut Black, mainly because of tensions around the M6 cartridges.

We therefore wish to warn you about visual variations on our range of Half-Cut Black panels of the following lots:

Reference DualSun	Designation DualSun	Batch number
211103481	FLASH 375 Half-Cut Black	FLA202206AGXX
210219424	FLASH 500 Half-Cut Black	FLA202206AEXX

These two batches of modules entered our stocks on October 10, 2022 and will be shipped until around 10th January 2023.

We statelet's below the description of the visual variations compared to the previous batches: **the durability as well as the product and performance warranties of the modules are in no way impacted by these changes.** In addition, we have since put in place an extension of the supply contract with our usual supplier which should allow us to no longer suffer from this type of concern in the future.

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## 1. Possible cell color variation



On the left hand side lot until 7/10/2022  
On the right hand side lot from 10/10/2022 until 10/01/2023

Despite compliance with the requirement level on the cell color criteria (recalled below), batches FLA202206AGXX and FLA202206AEXX may present a more bluish color than the previous batches.

*(Reminder of the selection criterion: "The colors of the cells must be homogeneous throughout the module according to the grade A quality level: Maximum 2 adjacent colors in a module are authorized and must be dark or dark blue. The blue and light blue are not allowed in DualSun modules FLASH Black.")*

## 2. Evolution of the length of cables and dimensions frame

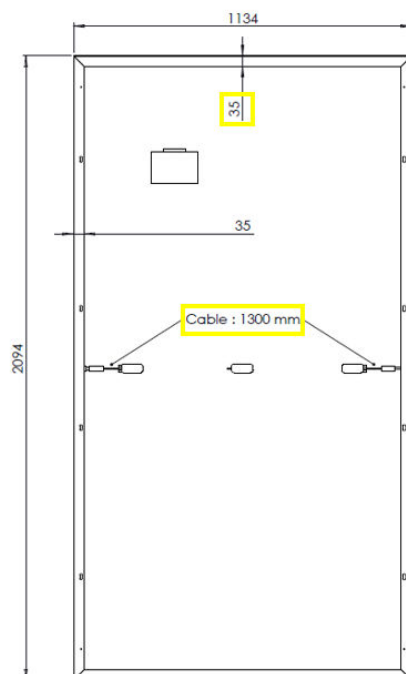
In order to facilitate the electrical connection on certain layouts (particularly in association with multi-modules micro-inverter), the module cables changes :

- from 1,100 to 1,200 mm on the FLASH 375 Half-Cut Black
- from 1,300 to 1,400 mm on the FLASH 500 Half-Cut Black

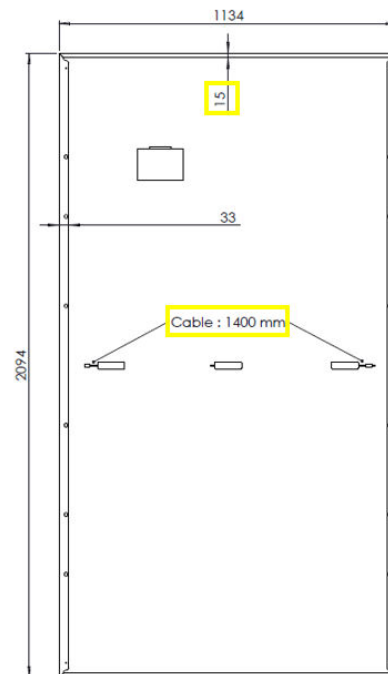
In addition, the frame return is reduced on the short sides while maintaining mechanical strength to guarantee pressure and depression resistance (2400 / 5,400 Pa).

Flash 500 Half-Cut Black :

Batch until 07/10/2022:

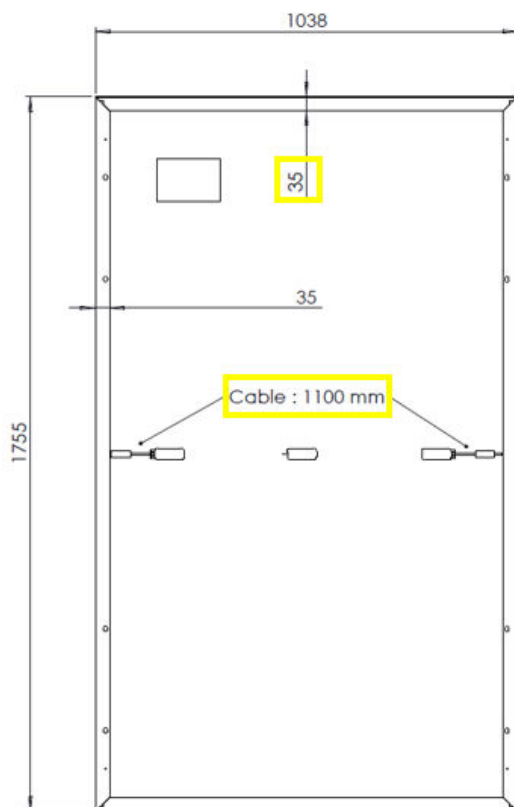


Batch from 10/10/2022 to 01/10/2023:

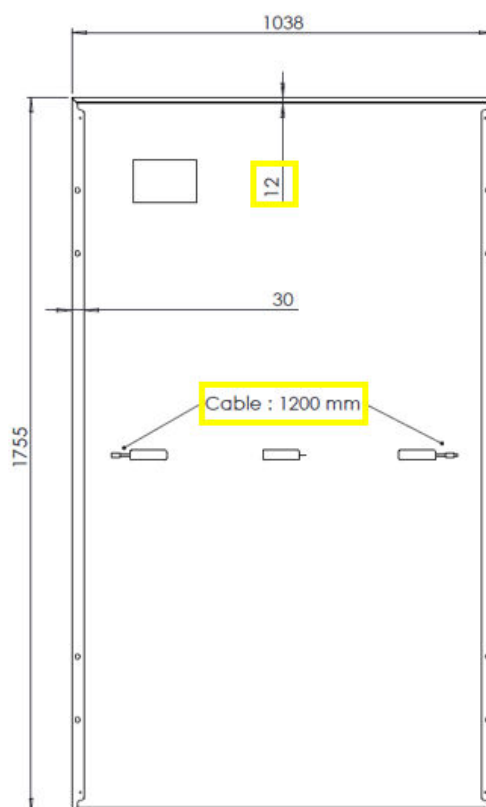


Flash 375 Half-Cut Black:

Batch until 07/10/2022



Batch from 10/10/2022 to 01/10/2023

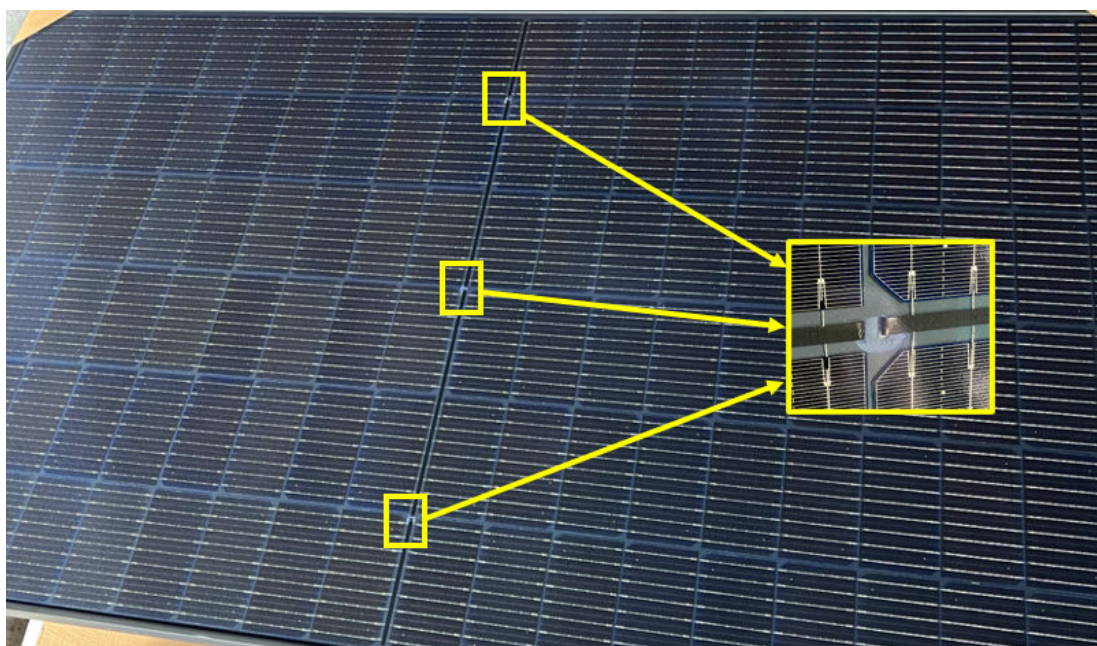


### 3. Visualization of the three interconnection zones and protection potting

On this batch the three areas allowing the connection of the ribbons to the junction boxes are visible on the front panel (usually these areas are covered by a strip of black tedlar).

Thus potting (silicone) bonding areas that encapsulate and protect the Junction box components (including the diode) may be visible as white lines.

This does not affect durability or product warranties..



#### 4. Evolution of electrical characteristics

Lot FLA202206AEXX:

Caractéristiques Photovoltaïques	
Puissance nominale	500 W
Tolérance de puissance en sortie	+/- 5%
Rendement module	21,06 %
Tension à puissance nominale ( $V_{mpp}$ )	40,62 V
Intensité à puissance nominale ( $I_{mpp}$ )	12,31 A
Tension en circuit ouvert ( $V_{co}$ )	48,83 V
Intensité de court-circuit ( $I_{cc}$ )	13,20 A

Previous batches and following batch:

Caractéristiques Photovoltaïques	
Puissance nominale	500 W
Tolérance de puissance en sortie	+/- 3%
Rendement minimum garanti du module	20,06 %
Tension à puissance nominale ( $V_{mpp}$ )	37,84 V
Intensité à puissance nominale ( $I_{mpp}$ )	13,22 A
Tension en circuit ouvert ( $V_{co}$ )	45,6 V
Intensité de court-circuit ( $I_{cc}$ )	14,07 A

In the case of installations with a centralized inverter, given the difference in intensity of the modules of the FLA202206AEXX lot, it is relevant to distinguish on the same string modules of this lot and modules of earlier or later lots.

Note: Following batch FLA202206AEXX, we have chosen to change the yield calculation on the technical sheet, highlighting the minimum guaranteed yield rather than the theoretical yield. See our FAQ article for more information: [Efficiency module vs Efficiency minimum guarantee du module](#)