

Bosch Solar Energy AG Tel +49 3628-6644-0 Fax +49 3628-6644-1133 www.bosch-solarenergy.de

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Dear Ladies and Gentlemen,

As you know the Robert Bosch Group announced to discontinue its activities in crystalline photovoltaics until beginning of 2014. As far as possible the business or its parts shall be sold.

Currently all operations of the business unit Bosch Solar Energy are running almost unchanged, purchasing orders are processed and delivered just as new orders are accepted. In the same way we will also implement our innovations.

With this letter we would like to inform you about our upcoming product innovations and provide you with detailed information on our <u>c-Si M 48, M 48 S und M 60 S</u> <u>module series</u>. There are three essential alterations that raise the average module power by 10 to 15 Wp:

- highly transparent encapsulation foil
- innovative structured cell interconnectors with increased diameter
- heat strengthened glass with anti reflective coating

Depending on the order volume we are planning to start first shipments in July 2013.



For the respective module type the performance increases as follows:

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c- Si M 48 EU44123 in silver/white: 205-220 Wp, Ø 210 Wp with 15.8% efficiency

c- Si M 48 S EU44123 in black: 200-215 Wp, **Ø 205 Wp** with 15.4% efficiency

c- Si M 60 S EU44117/23 in black: 255-270 Wp, Ø 260 Wp with 15.8% efficiency

The currently available product variants c-Si M 48/M48 S EU40123 and c-Si M 60 S EU42117/23 will be replaced by the new products throughout this summer.

## Detailed information on the module series:

## This has changed

A highly transparent encapsulation foil increases the amount of light reaching the solar cells. Additionally, innovative structured cell interconnectors with increased diameter reduce the internal series resistance losses and contribute to a higher module power. That way you will be able to increase your yield per area by up to 5.5%. The highly transparent glass with anti-reflective coating reduces the amount of light reflected on the module surface.

Durability tests, exceeding the requirements of IEC 61215 and 61730, showed the long term stability of our solar modules. Beyond that our modules have been tested regarding resistance against salt mist and ammonia vapours by TÜV Rheinland. From now on mounting of the modules is also possible on the short site of the frame as an alternative to the common mounting on the long side. With the multiple mounting possibilities, Bosch enables an optimal utilization of your roof and project areas.

## This stays the same

We will continue to use our renowned and powerful solar cells "Made in Germany". These cells show high efficiencies and a very good temperature coefficient.

As their predecessors the new modules c- Si M 48 EU44123, M 48 S EU44123 and M 60 S EU44123/EU44117 convince with their superior weak light performance, original MC4-Connectors and rigid anodized aluminum frames with hollow chamber profile. Further product characteristics like geometry and packaging units remain unchanged.

Feel free to contact us for further questions.

Best regards,//

Björn Hopmann

Bosch Solar Energy AG