



Certificate of Factory Production Control

This certificate has been issued to

Phono Solar Technology Co., Ltd.

of

No. 1 Xinghuo Rd., Nanjing Hi-tech Zone, Nanjing, 210032 P.R.China

whose production management system has been assessed and found to comply with the Factory Production Control Requirements of the MCS Product Certification Scheme in respect of:

Production of Photovoltaic Solar Panels

at the above address and includes the following products:

PSxxxM-24/T (xxx=280-380W); PSxxxM-22/W (xxx=255-350W); PSxxxM-20/U (xxx=215-315W); PSxxxM-18/V (xxx=195-285W); PSxxxM-12/G (xxx=130-190W); PSxxxM-24/F (xxx=170-210W); PSxxxM-12/D (xxx=85-105W); PSxxxM-12/H (xxx=90-105W); PSxxxP-24/T (xxx=275-355W);

Ranges of Photovoltaic Solar Panels as detailed on the attached annex to this certificate

Signed:

Nafhr Cure
on behalf of TUV SUD BABT

Certificate Number:

BABT 8758 R1

Valid from:

2019-05-10

This Certificate expires on:

2020-08-02

APPROVED PRODUCT

The holder of this certificate is authorised to use the MCS Approved Product Mark. This certificate has been issued in accordance with the Certification Regulations of TÜV SÜD BABT. Conditions of validity of this certificate, if any, are listed in the Annex.

This certificate constitutes page 1 of the combined Certificate and Annex.

For further details related to this certification please contact Customer.Services@babt.com



Factory Production Control Certificate Number BABT 8758 R1

Manufacturing Locations:

Phono Solar Technology Co., Ltd No. 1 Xinghuo Rd. Nanjing Hi-tech Zone Nanjing 210032 P.R. China

Phone Solar Technology Co., Ltd Sumec Technology Industrial Park in Dongtai Coastal Dongtai 224200 P. R. China

Vina Solar Technology Co., Ltd E12 factory Lot CN-03 Van Trung Industrial Park 21000 Bac Giang Province 220000 Vietnam

Standards used to establish conformity

MCS005 Issue 2.5, MCS005 Issue 3.0 and MCS010 Issue 1.5 on the basis of Assessment Report BABT8758 R1 dated 2019-05-07 and subsequent information and test data supplied and accepted by TÜV SÜD BABT.

Product Categories within the Scope of this Certification

Product Category	Conditions
Photovoltaic Panels	See below

Products within the Scope of this Certification

This certificate covers two families of Photovoltaic Solar Panels which may use either Monocrystalline or Polycrystalline cells. The products are manufactured using the same processes and materials.



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Product Category (MCS005 Issue 2.5)
6" Monocrystalline modules:
BABT8758-01: PSxxxM-24/T (xxx=280-380W, in 5W steps; (72 Cells);
BABT8758-02: PSxxxM-22/W (xxx=255-350W in 5W steps: (66 Cells):
BABT8758-03: PSxxxM-20/U (xxx=215-315W in 5W steps; (60 Cells);
BABT8758-04: PSxxxM-18/V (xxx=195-285W in 5W steps; (54 Cells);
BABT8758-05: PSxxxM-12/G (xxx=130-190W in 5W steps; (36 Cells);
5" Monocrystalline modules:
BABT8758-06: PSxxxM-24/F (xxx=170-210W in 5W steps; (72 Cells);
BABT8758-07: PSxxxM-12/D (xxx=85-105W in 5W steps; (36 Cells);
BABT8758-08: PSxxxM-12/H (xxx=90-105W in 5W steps; (36 Cells);
6" Polycrystalline modules:
BABT8758-09: PSxxxP-24/T (xxx=275-355W in 5W steps; (72 Cells);
BABT8758-10: PSxxxP-22/W (xxx=250-315W in 5W steps: (66 Cells):
BABT8758-11: PSxxxP-20/U (xxx=215-295W in 5W steps; (60 Cells);
BABT8758-12: PSxxxP-18/V (xxx=195-255W in 5W steps; (54 Cells);
BABT8758-13: PSxxxP-12/G (xxx=130-170W in 5W steps: (36 Cells):
6" Monocrystalline dual-glass modules:
BABT8758-14: PSxxxMG-20/U (xxx=260-310W in 5W steps; (60 Cells); (frameless);
BABT8758-15: PSxxxMGF-20/U (xxx=260-310W in 5W steps; (60 Cells); (normal frame);
BABT8758-16: PSxxxMGC-20/U (xxx=260-310W in 5W steps; (60 Cells); (special frame);
6" Polycrystalline dual-glass modules:
BABT8758-17: PSxxxPG-20/U (xxx=225-295W in 5W steps; (60 Cells); (frameless);
BABT8758-18: PSxxxPGF-20/U (xxx=235-295W in 5W steps; (60 Cells); (normal frame);
BABT8758-19: PSxxxPGC-20/U (xxx=235-295W in 5W steps; (60 Cells); (special frame);
BABT8758-20: PSxxxPG-18/V (xxx=210-240W in 5W steps; (54 Cells); (frameless);
BABT8758-21: PSxxxPG-16/I (xxx=180-210W in 5W steps; (48 Cells); (frameless);
BABT8758-22: PSxxxPG-14/J (xxx=155-185W in 5W steps; (42 Cells); (frameless);
BABT8758-23: PSxxxPG-12/K (xxx=145-175W in 5W steps; (40 Cells); (frameless);
BABT8758-24: PSxxxPG-12/G (xxx=135-155W in 5W steps; (36 Cells); (frameless);
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Product Category (MCS005 Issue 3.0)
1000 V system voltage Mono-Crystalline single glass modules with 6" mono cells:
BABT8758-25: PSXXXM-24/T (XXX=325-385)
BABT8758-26: PSXXXM-22/W (XXX=320-330)
BABT8758-27: PSXXXM-20/U (XXX=275-320)
BABT8758-28: PSXXXM-18/V (XXX=265-270)
BABT8758-29: PSXXXM-12/G (XXX=175-180)
BABT8758-30: PSXXXM-24/TH (XXX=360-390)
BABT8758-31: PSXXXM-20/UH (XXX=300-325)
1500 V system voltage Mono-Crystalline single glass modules with 6" mono cells:
BABT8758-32: PSXXXMH-24/T (XXX=325-385)
BABT8758-33: PSXXXMH-22/W (XXX=320-330)
BABT8758-34: PSXXXMH-20/U (XXX=275-320)
BABT8758-35: PSXXXMH-18/V (XXX=265-270)
BABT8758-36: PSXXXMH-12/G (XXX=175-180)
BABT8758-37: PSXXXMH-24/TH (XXX=360-390)
BABT8758-38: PSXXXMH-20/UH (XXX=300-325)
1500 V system voltage Mono-Crystalline double glass modules with 6" mono cells:
BABT8758-39: PSXXXMGFH-20/U (XXX=280-310)
BABT8758-40: PSXXXMGFH-24/TH (XXX=365-390)
BABT8758-41: PSXXXMGH-24/TH (XXX=365-390)
BABT8758-42: PSXXXMGFH-20/UH (XXX=305-325)
BABT8758-43: PSXXXMGH-20/UH (XXX=305-325)
1000 V system voltage Mono-Crystalline double glass modules with 6" mono cells:
BABT8758-44: PSXXXMGF-20/U (XXX=280-310)
BABT8758-45: PSXXXMGF-24/TH (XXX=365-390)
BABT8758-46: PSXXXMG-24/TH (XXX=365-390)
BABT8758-47: PSXXXMGF-20/UH (XXX=305-325)
BABT8758-48: PSXXXMG-20/UH (XXX=305-325)
1500 V system voltage Poly-Crystalline single glass modules with 6" poly cells:
BABT8758-49: PSxxxPH-24/T (xxx=315-335)
BABT8758-50: PSxxxPH-22/W (xxx=285-305)
BABT8758-51: PSxxxPH-20/U (xxx=260-280)
BABT8758-52: PSxxxPH-18/V (xxx=235-250)
BABT8758-53: PSxxxPH-12/G (xxx=155-170)
BABT8758-54: PSxxxPH-24/TH (xxx=325-340)
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BABT8758-55: PSxxxPH-20/UH (xxx=270-280)



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Product Category (MCS005 Issue 3.0)

1000 V system voltage Poly-Crystalline single glass modules with 6" poly cells:

BABT8758-56: PSxxxP-24/T (xxx=315-335) BABT8758-57: PSxxxP-22/W (xxx=285-305) BABT8758-58: PSxxxP-20/U (xxx=260-280) BABT8758-59: PSxxxP-18/V (xxx=235-250) BABT8758-60: PSxxxP-12/G (xxx=155-170) BABT8758-61: PSxxxP-24/TH (xxx=325-340) BABT8758-62: PSxxxP-20/UH (xxx=270-280)

1000 V system voltage Poly-Crystalline double glass modules with 6" poly cells:

BABT8758-63: PSxxxPGF-20/U (xxx=260-270)

1500 V system voltage Poly-Crystalline double glass modules with 6" poly cells:

BABT8758-64: PSxxxPGFH-20/U (xxx=260-270)

Conditions:

This certificate authorizes the manufacturer or their authorized representative to apply the MCS Approved Product Mark to the range of products listed above in accordance with the MCS sub-licence agreement dated 25th November 2015

This certificate loses its validity if the manufacturer makes any changes or modifications to the product or the approved quality system, which have not been notified to, and agreed with TÜV SÜD BABT.

The manufacturer must immediately cease affixing the MCS Approved Product Mark on any product subject to expiry, withdrawal or revocation of this certificate.

Signed: Nashun and

Valid From: 2019-05-10

on behalf of TUV SUD BABT