

# Certificate



Registration No.: PV 50251061

Page 1

Report No.: 15058184.001

**License Holder:**

Shandong Linuo Photovoltaic Hi-Tech Co., Ltd.

No. 30766 East Jingshi Rd.,  
Jinan, Shandong 250103  
P.R. China

**Product:**

PV Modules

**Type:**

With 5" mono c-Si cells:

LN250(48)M-xxx (xxx=215-260, in steps of 5, 96 cells)

LN230(44)M-xxx (xxx=200-235, in steps of 5, 88 cells)

LN180(36)M-xxx (xxx=160-195, in steps of 5, 72 cells)

LN140(27)M-xxx (xxx=120-155, in steps of 5, 54 cells)

LN90(18)M-xxx (xxx=80-110, in steps of 5, 36 cells)

LN250(48)M-xxx/Black (xxx=215-260, in steps of 5, 96 cells)

LN230(44)M-xxx/Black (xxx=200-235, in steps of 5, 88 cells)

LN180(36)M-xxx/Black (xxx=160-195, in steps of 5, 72 cells)

LN140(27)M-xxx/Black (xxx=120-155, in steps of 5, 54 cells)

LN90(18)M-xxx/Black (xxx=80-110, in steps of 5, 36 cells)

LN250(48)M-xxx/Red (xxx=215-260, in steps of 5, 96 cells)

LN230(44)M-xxx/Red (xxx=200-235, in steps of 5, 88 cells)

LN180(36)M-xxx/Red (xxx=160-195, in steps of 5, 72 cells)

LN140(27)M-xxx/Red (xxx=120-155, in steps of 5, 54 cells)

LN90(18)M-xxx/Red (xxx=80-110, in steps of 5, 36 cells)

Continued on page 2

**Manufacturing Plant:**

Shandong Linuo Photovoltaic Hi-Tech Co., Ltd.

No. 30766 East Jingshi Rd.,  
Jinan, Shandong 250103  
P.R. China

**Basis:**



**IEC 61215:2005**

**EN 61215:2005**

"Crystalline silicon terrestrial photovoltaic (PV) modules - Design qualification and type approval"



**Factory Inspection**

To document the consistent quality of the product factory inspections are performed periodically.



www.tuv.com  
ID 0000024272

**Remarks:**

- Valid in conjunction with TÜV Rheinland certificate PV 50251062 Page 1- 4.

**Conditions:**

The product test is voluntarily according to technical regulations. Any change of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval.

**The certificate is valid until 16 March 2014.**

Certification body



Dipl.-Ing. (FH) Bernd Scheiner

07 May 2013



# Certificate



Registration No.: PV 50251061

Page 2

Report No.: 15058184.001

**License Holder:**

Shandong Linuo Photovoltaic Hi-Tech  
Co., Ltd.  
No. 30766 East Jingshi Rd.,  
Jinan, Shandong 250103  
P.R. China

**Product:**

PV Modules

**Type:**

Continuation of page 1

With 6" poly c-Si cells:

LN280(36)P-xxx (xxx=250-320, in steps of 5, 72 cells)

LN280(36)P-3-xxx (xxx=250-320, in steps of 5, 72 cells)

LN240(30)P-xxx (xxx=220-265, in steps of 5, 60 cells)

LN240(30)P-3-xxx (xxx=220-265, in steps of 5, 60 cells)

LN210(27)P-xxx (xxx=200-240, in steps of 5, 54 cells)

LN210(27)P-3-xxx (xxx=200-240, in steps of 5, 54 cells)

LN140(18)P-xxx (xxx=120-160, in steps of 5, 36 cells)

LN140(18)P-3-xxx (xxx=120-160, in steps of 5, 36 cells)

LN280(36)P-xxx/Black (xxx=250-320, in steps of 5, 72 cells)

LN280(36)P-3-xxx/Black (xxx=250-320, in steps of 5, 72 cells)

LN240(30)P-xxx/Black (xxx=220-265, in steps of 5, 60 cells)

LN240(30)P-3-xxx/Black (xxx=220-265, in steps of 5, 60 cells)

LN210(27)P-xxx/Black (xxx=200-240, in steps of 5, 54 cells)

LN210(27)P-3-xxx/Black (xxx=200-240, in steps of 5, 54 cells)

LN140(18)P-xxx/Black (xxx=120-160, in steps of 5, 36 cells)

LN140(18)P-3-xxx/Black (xxx=120-160, in steps of 5, 36 cells)

Continued on page 3

**Manufacturing Plant:**

Shandong Linuo Photovoltaic Hi-Tech  
Co., Ltd.  
No. 30766 East Jingshi Rd.,  
Jinan, Shandong 250103  
P.R. China

**Basis:**



**IEC 61215:2005**

**EN 61215:2005**

"Crystalline silicon terrestrial  
photovoltaic (PV) modules - Design  
qualification and type approval"



**Factory Inspection**

To document the consistent quality of  
the product factory inspections are  
performed periodically.



www.tuv.com  
ID 0000024272

**Remarks:**

- Valid in conjunction with TÜV Rheinland certificate PV 50251062 Page 1- 4.

**Conditions:**

The product test is voluntarily according to technical regulations. Any change of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval.

**The certificate is valid until 16 March 2014.**



**Certification body**

Dipl.-Ing. (FH) Bernd Scheirer

07 May 2013

TÜV Rheinland LGA Products GmbH, Tillystrasse 2, 90431 Nürnberg, Germany / Contact: + 49 221 806 2477 email: enertest@de.tuv.com



# Certificate



Registration No.: PV 50251061

Page 3

Report No.: 15058184.001

**License Holder:**

Shandong Linuo Photovoltaic Hi-Tech Co., Ltd.  
No. 30766 East Jingshi Rd.,  
Jinan, Shandong 250103  
P.R. China

**Product:**

PV Modules

**Type:**

Continuation of page 2

With 6" poly c-Si cells:

LN280(36)P-xxx/Red (xxx=250-320, in steps of 5, 72 cells)

LN280(36)P-3-xxx/Red (xxx=250-320, in steps of 5, 72 cells)

LN240(30)P-xxx/Red (xxx=220-265, in steps of 5, 60 cells)

LN240(30)P-3-xxx/Red (xxx=220-265, in steps of 5, 60 cells)

LN210(27)P-xxx/Red (xxx=200-240, in steps of 5, 54 cells)

LN210(27)P-3-xxx/Red (xxx=200-240, in steps of 5, 54 cells)

LN140(18)P-xxx/Red (xxx=120-160, in steps of 5, 36 cells)

LN140(18)P-3-xxx/Red (xxx=120-160, in steps of 5, 36 cells)

With 6" mono c-Si cells:

LN280(36)M-xxx (xxx=250-300, in steps of 5, 72 cells)

LN280(36)M-3-xxx (xxx=250-300, in steps of 5, 72 cells)

LN240(30)M-xxx (xxx=210-250, in steps of 5, 60 cells)

LN240(30)M-3-xxx (xxx=210-250, in steps of 5, 60 cells)

LN210(27)M-xxx (xxx=190-225, in steps of 5, 54 cells)

LN210(27)M-3-xxx (xxx=190-225, in steps of 5, 54 cells)

LN140(18)M-xxx (xxx=125-150, in steps of 5, 36 cells)

LN140(18)M-3-xxx (xxx=125-150, in steps of 5, 36 cells)

Continued on page 4

**Manufacturing Plant:**

Shandong Linuo Photovoltaic Hi-Tech Co., Ltd.  
No. 30766 East Jingshi Rd.,  
Jinan, Shandong 250103  
P.R. China

**Basis:**



**IEC 61215:2005**

**EN 61215:2005**

"Crystalline silicon terrestrial photovoltaic (PV) modules - Design qualification and type approval"



**Factory Inspection**

To document the consistent quality of the product factory inspections are performed periodically.



www.tuv.com  
ID 0000024272

**Remarks:**

- Valid in conjunction with TÜV Rheinland certificate PV 50251062 Page 1- 4.

**Conditions:**

The product test is voluntarily according to technical regulations. Any change of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval.

**The certificate is valid until 16 March 2014.**

Certification body



Dipl.-Ing. (FH) Bernd Scheirer

07 May 2013

TÜV Rheinland LGA Products GmbH, Tillystrasse 2, 90431 Nürnberg, Germany / Contact: + 49 221 806 2477 email: enerntest@de.tuv.com



# Certificate



Registration No.: PV 50251061

Page 4

Report No.: 15058184.001

**License Holder:**

Shandong Linuo Photovoltaic Hi-Tech Co., Ltd.  
No. 30766 East Jingshi Rd.,  
Jinan, Shandong 250103  
P.R. China

**Product:**

PV Modules

**Type:**

Continuation of page 3  
With 6" mono c-Si cells:  
LN280(36)M-xxx/Black (xxx=250-300, in steps of 5, 72 cells)  
LN280(36)M-3-xxx/Black (xxx=250-300, in steps of 5, 72 cells)  
LN240(30)M-xxx/Black (xxx=210-250, in steps of 5, 60 cells)  
LN240(30)M-3-xxx/Black (xxx=210-250, in steps of 5, 60 cells)  
LN210(27)M-xxx/Black (xxx=190-225, in steps of 5, 54 cells)  
LN210(27)M-3-xxx/Black (xxx=190-225, in steps of 5, 54 cells)  
LN140(18)M-xxx/Black (xxx=125-150, in steps of 5, 36 cells)  
LN140(18)M-3-xxx/Black (xxx=125-150, in steps of 5, 36 cells)  
LN280(36)M-xxx/Red (xxx=250-300, in steps of 5, 72 cells)  
LN280(36)M-3-xxx/Red (xxx=250-300, in steps of 5, 72 cells)  
LN240(30)M-xxx/Red (xxx=210-250, in steps of 5, 60 cells)  
LN240(30)M-3-xxx/Red (xxx=210-250, in steps of 5, 60 cells)  
LN210(27)M-xxx/Red (xxx=190-225, in steps of 5, 54 cells)  
LN210(27)M-3-xxx/Red (xxx=190-225, in steps of 5, 54 cells)  
LN140(18)M-xxx/Red (xxx=125-150, in steps of 5, 36 cells)  
LN140(18)M-3-xxx/Red (xxx=125-150, in steps of 5, 36 cells)

**Manufacturing Plant:**

Shandong Linuo Photovoltaic Hi-Tech Co., Ltd.  
No. 30766 East Jingshi Rd.,  
Jinan, Shandong 250103  
P.R. China

**Basis:**



**IEC 61215:2005**

**EN 61215:2005**

"Crystalline silicon terrestrial photovoltaic (PV) modules - Design qualification and type approval"



**Factory Inspection**

To document the consistent quality of the product factory inspections are performed periodically.



www.tuv.com  
ID 0000024272

**Remarks:**

- Valid in conjunction with TÜV Rheinland certificate PV 50251062 Page 1- 4.

**Conditions:**

The product test is voluntarily according to technical regulations. Any change of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval.

**The certificate is valid until 16 March 2014.**

Certification body



Dipl.-Ing. (FH) Bernd Scheifer

07 May 2013



# Certificate

**Registration No.: PV 50251061**
**Page 5**
**Report No.: 15058184.004**
**License Holder:**

Shandong Linuo Photovoltaic Hi-Tech  
Co., Ltd.

No. 30766 East Jingshi Rd.,  
Jinan, Shandong 250103  
P.R. China

**Product:**

PV Modules

**Type:**

Same as Page 1

**In addition:**

With 5" mono c-Si cells:

LN250(48)M-xxx (xxx=265-280, in steps of 5, 96 cells)

LN230(44)M-xxx (xxx=240-260, in steps of 5, 88 cells)

LN180(36)M-xxx (xxx=200-210, in steps of 5, 72 cells)

LN250(48)M-xxx/Black (xxx=265-280, in steps of 5, 96 cells)

LN230(44)M-xxx/Black (xxx=240-260, in steps of 5, 88 cells)

LN180(36)M-xxx/Black (xxx=200-210, in steps of 5, 72 cells)

LN250(48)M-xxx/Red (xxx=265-280, in steps of 5, 96 cells)

LN230(44)M-xxx/Red (xxx=240-260, in steps of 5, 88 cells)

LN180(36)M-xxx/Red (xxx=200-210, in steps of 5, 72 cells)

LNPV-125x125-FE1 (Power range from 155 to 185, in steps  
of 5, 72 cells)

LNPV-125x125-FE2 (Power range from 155 to 185, in steps  
of 5, 72 cells)

Continued on page 6

**Manufacturing Plant:**

Shandong Linuo Photovoltaic Hi-Tech  
Co., Ltd.

No. 30766 East Jingshi Rd.,  
Jinan, Shandong 250103  
P.R. China

**Basis:**


**IEC 61215:2005**

**EN 61215:2005**

"Crystalline silicon terrestrial  
photovoltaic (PV) modules - Design  
qualification and type approval"



**Factory Inspection**

To document the consistent quality of  
the product factory inspections are  
performed periodically.



www.tuv.com  
ID 0000024272

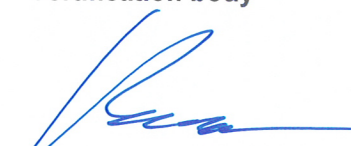
**Remarks:**

- Valid in conjunction with TÜV Rheinland certificate PV 50251062 Page 1- 7.

**Conditions:**

The product test is voluntarily according to technical regulations. Any change of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval.

**The certificate is valid until 16 March 2014.**


**Certification body**

  
 Dipl.-Ing. (TU) Gerd Reimann

22 July 2013



# Certificate

Registration No.: PV 50251061

Page 6

Report No.: 15058184.004

**License Holder:**Shandong Linuo Photovoltaic Hi-Tech  
Co., Ltd.No. 30766 East Jingshi Rd.,  
Jinan, Shandong 250103  
P.R. China**Product:**

PV Modules

**Type:**

Continuation of Page 5

With 6" mono c-Si cells:

LN280(36)M-xxx (xxx=305-325, in steps of 5, 72 cells)

LN280(36)M-3-xxx (xxx=305-325, in steps of 5, 72 cells)

LN240(30)M- xxx (xxx=255-270, in steps of 5, 60 cells)

LN240(30)M-3-xxx (xxx=255-270, in steps of 5, 60 cells)

LN210(27)M-xxx (xxx=230-245, in steps of 5, 54 cells)

LN210(27)M-3-xxx (xxx=230-245, in steps of 5, 54 cells)

LN140(18)M-xxx (xxx=155-160, in steps of 5, 36 cells)

LN140(18)M-3-xxx (xxx=155-160, in steps of 5, 36 cells)

LN280(36)M-xxx/Black (xxx=305-325, in steps of 5, 72 cells)

LN280(36)M-3-xxx/Black (xxx=305-325, in steps of 5, 72 cells)

LN240(30)M- xxx/Black (xxx=255-270, in steps of 5, 60 cells)

LN240(30)M-3-xxx/Black (xxx=255-270, in steps of 5, 60 cells)

Continued on page 7

**Manufacturing Plant:**Shandong Linuo Photovoltaic Hi-Tech  
Co., Ltd.No. 30766 East Jingshi Rd.,  
Jinan, Shandong 250103  
P.R. China**Basis:****IEC 61215:2005****EN 61215:2005**"Crystalline silicon terrestrial  
photovoltaic (PV) modules - Design  
qualification and type approval"**Factory Inspection**To document the consistent quality of  
the product factory inspections are  
performed periodically.www.tuv.com  
ID 0000024272**Remarks:**

- Valid in conjunction with TÜV Rheinland certificate PV 50251062 Page 1- 7.

**Conditions:**

The product test is voluntarily according to technical regulations. Any change of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval.

**The certificate is valid until 16 March 2014.****Certification body**  
Dipl.-Ing. (TU) Gerd Reimann

22 July 2013



# Certificate

**Registration No.: PV 50251061**

Page 7

**Report No.: 15058184.004**

**License Holder:**

Shandong Linuo Photovoltaic Hi-Tech Co., Ltd.

No. 30766 East Jingshi Rd.,  
Jinan, Shandong 250103  
P.R. China

**Product:**

PV Modules

**Type:**

Continuation of Page 6

With 6" mono c-Si cells:

LN210(27)M-xxx/Black (xxx=230-245, in steps of 5, 54 cells)

LN210(27)M-3-xxx/Black (xxx=230-245, in steps of 5, 54 cells)

LN140(18)M-xxx/Black (xxx=155-160, in steps of 5, 36 cells)

LN140(18)M-3-xxx/Black (xxx=155-160, in steps of 5, 36 cells)

LN280(36)M-xxx/Red (xxx=305-325, in steps of 5, 72 cells)

LN280(36)M-3-xxx/Red (xxx=305-325, in steps of 5, 72 cells)

LN240(30)M-xxx/Red (xxx=255-270, in steps of 5, 60 cells)

LN240(30)M-3-xxx/Red (xxx=255-270, in steps of 5, 60 cells)

LN210(27)M-xxx/Red (xxx=230-245, in steps of 5, 54 cells)

LN210(27)M-3-xxx/Red (xxx=230-245, in steps of 5, 54 cells)

LN140(18)M-xxx/Red (xxx=155-160, in steps of 5, 36 cells)

LN140(18)M-3-xxx/Red (xxx=155-160, in steps of 5, 36 cells)

**Manufacturing Plant:**

Shandong Linuo Photovoltaic Hi-Tech Co., Ltd.

No. 30766 East Jingshi Rd.,  
Jinan, Shandong 250103  
P.R. China

**Basis:**



**IEC 61215:2005**

**EN 61215:2005**

"Crystalline silicon terrestrial photovoltaic (PV) modules - Design qualification and type approval"



**Factory Inspection**

To document the consistent quality of the product factory inspections are performed periodically.



www.tuv.com  
ID 0000024272

**Remarks:**

- Valid in conjunction with TÜV Rheinland certificate PV 50251062 Page 1- 7.

**Conditions:**

The product test is voluntarily according to technical regulations. Any change of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval.

**The certificate is valid until 16 March 2014.**



**Certification body**

Dipl.-Ing. (TU) Gerd Reimann

22 July 2013