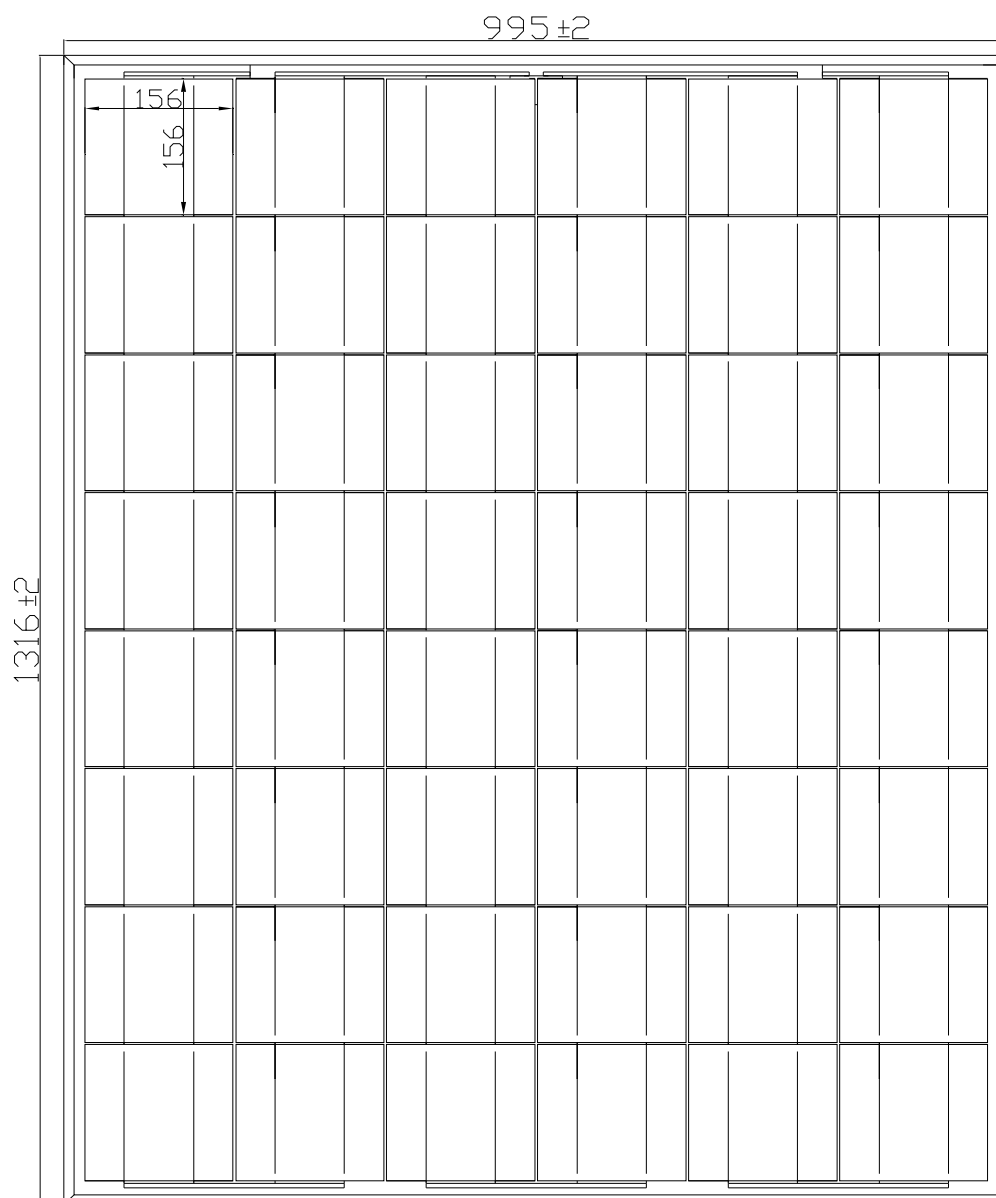


Ningbo Huasheng Solar Energy Sources Industry Co., Ltd
PV Module Performances
(Test condition: 1000W/m², AM1.5, 25°C)

Type		HS-180-48-156X156-P
Silicon		
Parameters		Poly-crystalline silicon
Maximum Power	Watt	180
Production Tolerance		±5%
Maximum Power Voltage	V	23.2
Maximum Power Current	A	7.76
Open circuit voltage	V	29.4
Short circuit current	A	8.62
Cell efficiency	%	15.50
Module efficiency	%	13.74
Size of module (wide and high)		1316mm x995mm
frame (type, material and thickness)		Anodized Aluminium frame, 50mm thickness
Number of cells		48pcs
Size of cells (wide and high)		156mmx156mm
Weight per piece		17.5Kg
Type of junction box		PV junction box with TUV certificate
Cable type and connector type		PV cable, and socket
Maximum system voltage		1000V
Temperature coefficient of Isc		+0.05%/°C
Temperature coefficient of Voc		-0.34%/°C
Temperature coefficient of power		-0.5%/°C
Temperature coefficient of Im		+0.05%/°C
Temperature coefficient of Vm		-0.34%/°C
NOCT (Nominal operating cell temperature)		47°C(±2°C)
Wind Bearing		60m/s(200kg/sq.m)
Impact Resistance Hail Impact Test		227g steel ball fall down from 1m height
Quality guarantee		3 years product warranty and 20 years 80% of power, 25 years lifetime
FF(%)		70%---72%
Packing		10pcs/carton, carton cube 0.73CBM
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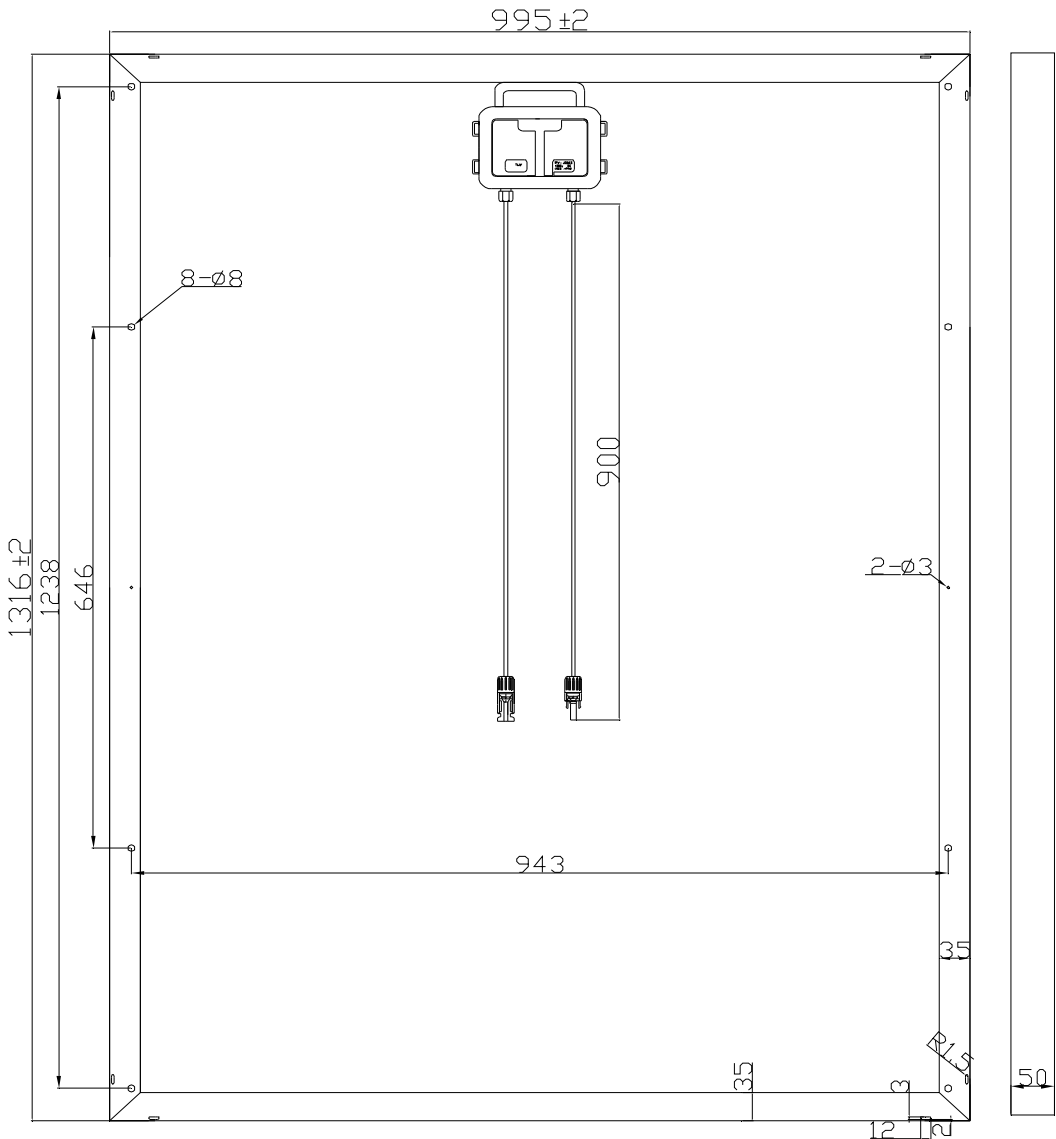
Product model	HS-180-48-156X156-P	PV Module	Contract number	
Production date			Delivery date	



注：
 玻璃尺寸： $1310\text{mm} \pm 1 \times 989\text{mm} \pm 1$
 外型尺寸： $1316\text{mm} \pm 2 \times 995\text{mm} \pm 2 \times 50\text{mm}$

Drawing	Wuyufei	2009-6-1	Audit	Lihaiyang	2009-6-1
Proofreading	Yanjinxue	2009-6-1			

Product model	HS-180-48-156X156-P	PV Module	Contract number	
Production date			Delivery date	



注：
 玻璃尺寸：1310mm ± 1X989mm ± 1
 外型尺寸：1316mm ± 2X995mm ± 2X50mm

Drawing	Wuyufei	2009-6-1	Audit	Lihaiyang	2009-6-1
Proofreading	Yanjinxue	2009-6-1			