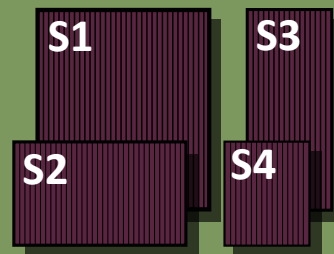


Thin film solar module Data sheet

S series



Description

- Single junction amorphous silicon (aSi:H) solar cell
- Long lasting glass-glass laminates
- Superior energy yield in low light and warm climates
- Cableless Multi Contact Junction box, MC4 terminals
- Back rails simplify construction
- Nontoxic silicon based material set and easy to recycle
- Optional: bypass diode
- IEC 61646|61730|1703 conformity certified by TÜV and UL

Electrical parameters at STC

STC: standard testing condition, IEC61646:
1000W/m², 25°C, AM1.5

Module type x: module version	Power W	Voc V	Isc A	Vmpp V	Impp A
SI S1-420.Ax	420	196.0	3.15	155.0	2.71
SI S1-400.Ax	400	195.0	3.10	153.0	2.61
SI S1-380.Ax	380	194.0	3.05	151.0	2.51
SI S1-360.Ax	360	193.0	3.00	149.0	2.41
SI S2-210.Ax	210	196.0	1.57	155.0	1.35
SI S2-200.Ax	200	195.0	1.55	153.0	1.30
SI S2-190.Ax	190	194.0	1.52	151.0	1.26
SI S2-180.Ax	180	193.0	1.50	149.0	1.21
SI S3-210.Ax	210	97.6	3.16	76.8	2.74
SI S3-200.Ax	200	97.1	3.11	75.8	2.64
SI S3-190.Ax	190	96.6	3.06	74.8	2.54
SI S3-180.Ax	180	96.1	3.01	73.8	2.44
SI S4-105.Ax	105	97.5	1.58	77.2	1.36
SI S4-100.Ax	100	97.0	1.55	76.2	1.31
SI S4 - 95.Ax	95	96.5	1.53	75.2	1.26
SI S4 - 90.Ax	90	96.0	1.50	74.2	1.21

Signet Solar warranty

Warranty on product workmanship

- **2 years**

Warranty on minimum performance

- **90% after 10 years**
- **80% after 25 years**

Module size

Module	Height mm	Width mm	Thick ness mm	Weight kg
SI S1	2600	2200	8	120
SI S2	1300	2200	8	60
SI S3	2600	1100	8	60
SI S4	1300	1100	8	30

Please refer to customer drawings for details

Tolerances/Ranges at STC

STC: standard testing condition, IEC61646:
1000W/m², 25°C, AM1.5

	Power	Voc	Isc	Vmpp	Impp
class binning %	-3...+3	-4...+3	-6...+4	-4...+3	-6...+4
uncertainty %	+10	+3	+10	+3	+10
initial %	+10...+15	+1...+2	+4...+8	+4...+8	+5...+12
temperature coefficient %/K	-0.24	-0.30	+0.08		

Maximum ratings

Parameter	Unit	Value
Static load	N/m ²	2400
System voltage	V	1000
Module temperature	°C	-40...+85
Reverse current	A	2 Isc

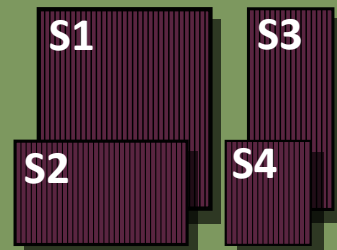
Low irradiance AM1.5

values expressed relative to STC (1000W/m², 25°C)

	Power %	Voc %	Isc %	Vmpp %	Impp %
800 W/m², NOCT NOCT = 41°C ±2K	-22.3	-5.20	-19	-4.3	-18.9
800 W/m², 25°C	-20.0	-1.16	-20	+0.0	-20.0
400 W/m², 25°C	-60.4	-4.46	-60	-1.7	-59.7
200 W/m², 25°C	-80.8	-8.16	-80	-4.0	-80.1

Certifications

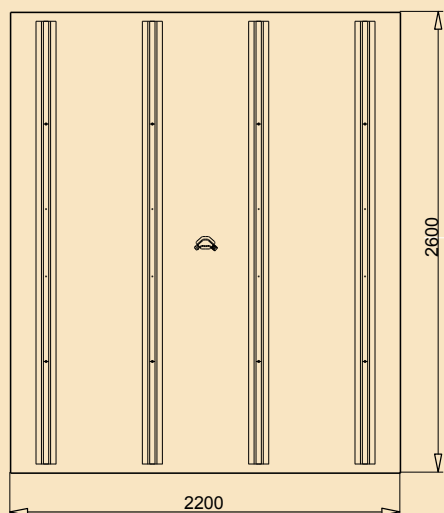




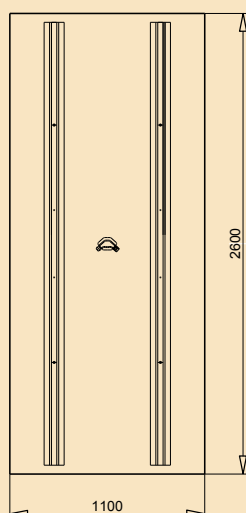
Module sizes and back rail positions

Please refer to customer drawings for details

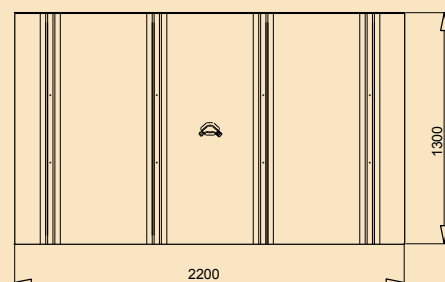
S1



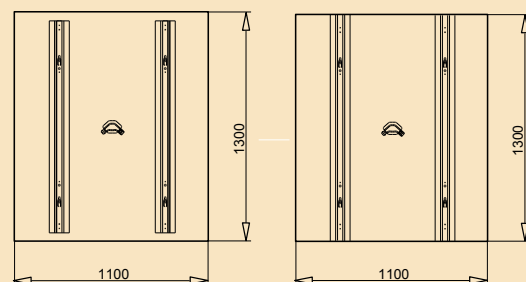
S3



S2

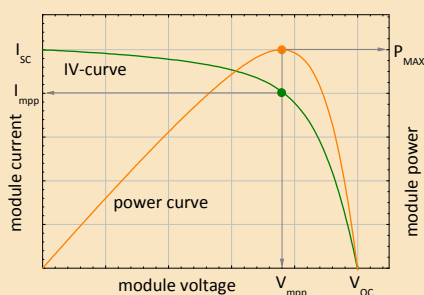


S4

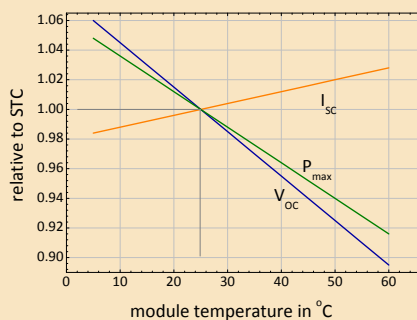


Electrical characteristics

Typical IV-characteristics



Temperature characteristics



Low irradiance behaviour

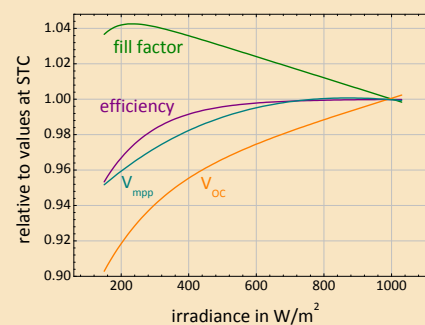
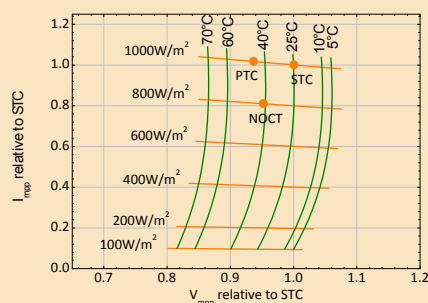


Chart of Maximum power point



Module temperature

