



Module selection			
Manufacturer	Q-Cells	Temp. coeff. Voltage Uoc	-126.390 mV/K
Designation	Q.Peak - 265 +	Mpp current for STC	8.66 A
Rated power	265.00 Wp	Short-circuit current bei STC	9.23 A
Technology	Monocrystalline	Temp. coeff. Current Impp	-3.692 mA/K
Mpp voltage for STC	30.88 V	Dimensions	1'000 x 38 x 1'670 mm
Uoc	38.30 V	Weight	0.00 kg
Maximum system voltage	1000 V	Web page	

Inverter selection			
Manufacturer	Sputnik Engineering AG	Min. MPP voltage	100.00 V
Designation	SM 4200S (PAC 4.05 kVA)	Max. MPP voltage	550.00 V
Max. DC power	5.00 kW	Max. DC voltage	600.00 V
Max. AC output	4.05 kW	Max. DC current	22.00 A
Active power	3.65 kW	Dimensions	290 x 185 x 545 mm
Apparent output power	4.05 kVA	Weight	15.00 kg
Power factor (cos φ)	0.80 - 1.00	Max. efficiency	97.00 %
Eur. efficiency	95.80 %	Web page	www.solarmax.com

Electrical layout			
Module quantity	20	Required surface area	33.40 m²
Modules in series	10	MPP voltage	308.80 V
Strings per inverter	2	Dynamic efficiency	94.95 %
Generator output	5.30 kWp	Dimensioning factor	1.31

Temperature range			
Min. temperature	-10°C	Max. temperature	70°C

Check electrical layout			
Layout OK			
Parameter	Limit value	Actual value	Result
Min. MPP voltage	100 V	251.92 V	Min. MPP voltage OK
Max. MPP voltage	550 V	353.04 V	Max. MPP voltage OK
Open-circuit voltage	600 V	427.24 V	Open-circuit voltage OK
Max. DC current	22 A	17.00 A	DC current OK
Min input power	3.04 kWp	5.30 kWp	Inverter size OK
Max. generator output power	5.00 kWp	5.30 kWp	DC power not OK

Inspection of the system			
Parameter	Limit value	Actual value	Result
Max. system voltage	1000 V	427.24 V	System voltage OK

Energy dimensioning layout			
Dimensioning factor	1.31	Recommended for	Dimensioning is too high

Please verify the module data!

MaxDesign supports you when designing your solar power plant with SolarMax inverters. Your entered plant wiring will be checked for compliance with the most important limits. Critical values will generate an error message.

IMPORTANT: The data and functions used by MaxDesign have been thoroughly checked. No liability is accepted for direct or indirect damage resulting from the use of this program.