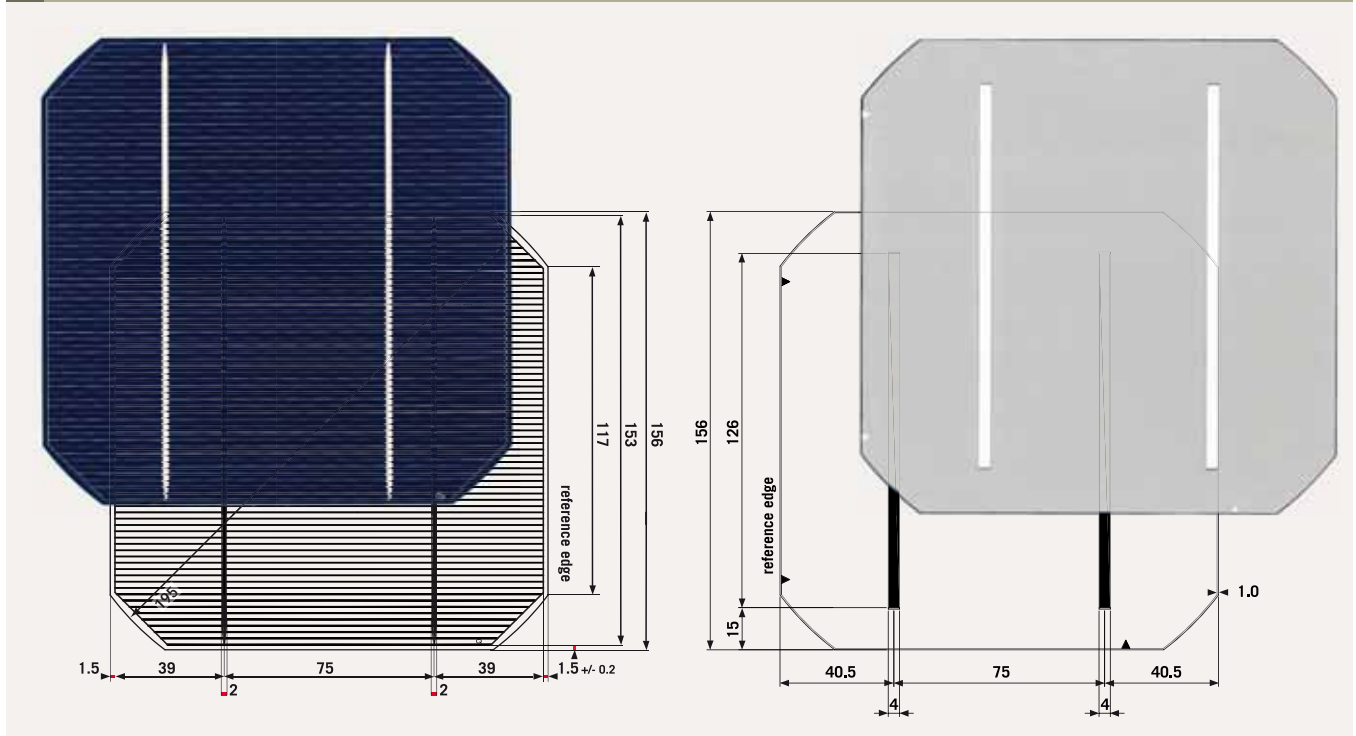


1	PRODUCT	PRODUCT CATEGORY	APPLICATION
	Q6LM (EFF. \geq 16.0%)	HIGH PERFORMANCE	HIGH EFFICIENCY MODULES

- High efficiencies up to 16.8% (corresponding to 3.97 Wp per cell)
- One of the most efficient mono cells on the market
- Premium appearance results in a highly uniform module
- Monocrystalline cells with the proven long term stability of silicon
- Manufactured from highly purified poly silicon
- Two bus bars for maximum stringer compatibility
- Blue anti-reflecting coating ensures improved light absorption and increased efficiency
- Alkaline texturization offers a uniform appearance
- Outstanding low light behaviour for improved energy yield
- All solar cells are classified electrically in accordance with IEC 60891 and IEC 60904
- Regular calibrations are traceable to PTB and verified by Fraunhofer ISE

2	OVERVIEW
Product	Monocrystalline cell based on poly silicon
Format	156 mm x 156 mm +/- 0.5 mm, diagonal: 195 mm
Average thickness (Si)	180 μ m \pm 30 μ m / 200 μ m \pm 40 μ m
Front contacts (-)	2 x 2 mm wide bus bars (silver) Alkaline texturized surface Blue anti-reflecting coating (silicon nitride)
Back contacts (+)	2 x 4 mm wide bus bars (silver/aluminum) Aluminum backside metallization

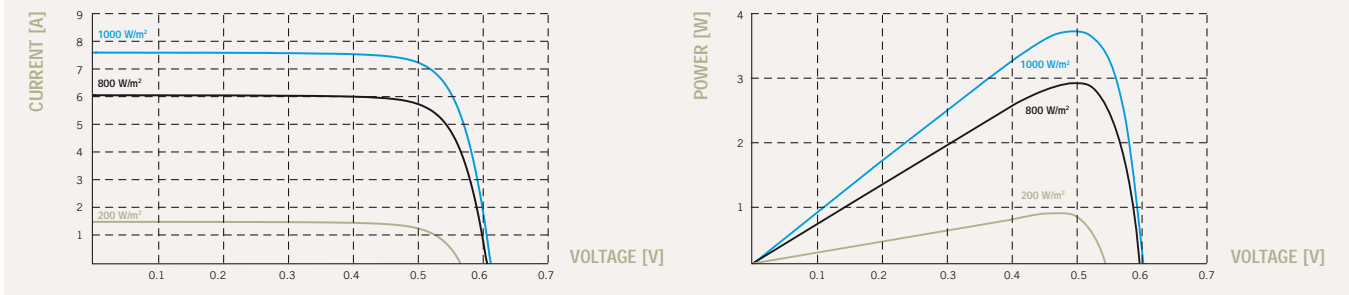
3 CELL LAYOUT



4 ELECTRICAL DATA						
Efficiency Class		1600	1620	1640	1660	1680
Current at 0.5V [A]		≥7.61	≥7.72	≥7.83	≥7.91	≥8.10
∅ I _{sc} [A]		8.34	8.40	8.43	8.45	8.48
∅ U _{oc} [mV]		605	607	608	609	610
∅ Efficiency [%]		16.00	16.20	16.40	16.60	16.80
∅ P _{max} [W]		3.78	3.83	3.88	3.92	3.97

All data at standard testing conditions, STC: 1000W/m², 25°C, AM1.5G (IEC 60904-3 ed.1) P_{MPP} +/-1.5% rel., Efficiency: +/-0.2% abs.

5 TYPICAL CURRENT VOLTAGE AND POWER VOLTAGE CURVES

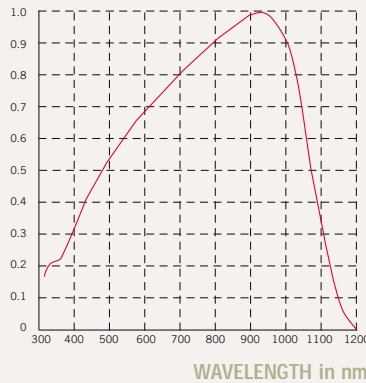


6 BEHAVIOUR OF ELECTRICAL PARAMETERS

TEMPERATURE COEFFICIENTS

Power	-0.47 %/K
Current	+0.05 %/K
Voltage	-0.37 %/K

SPECTRAL RESPONSE rel. SR



INTENSITY DEPENDANCE

Intensity W/m ²	U _{MPP} *	I _{MPP} *
1000	1.000	1.0
800	0.999	0.8
500	0.994	0.5
400	0.986	0.4
300	0.970	0.3
200	0.936	0.2
100	0.862	0.1

* Ratio of U_{MPP} (I_{MPP}) at reduced intensity to U_{MPP} (I_{MPP}) at 1000 W/m²

7 PROCESSING RECOMMENDATION

Solder joint	Copper ribbons coated with 10 –15 µm: 62% Sn / 36% Pb / 2% Ag
Cells per bypass diode	Max. 20 cells per bypass diode