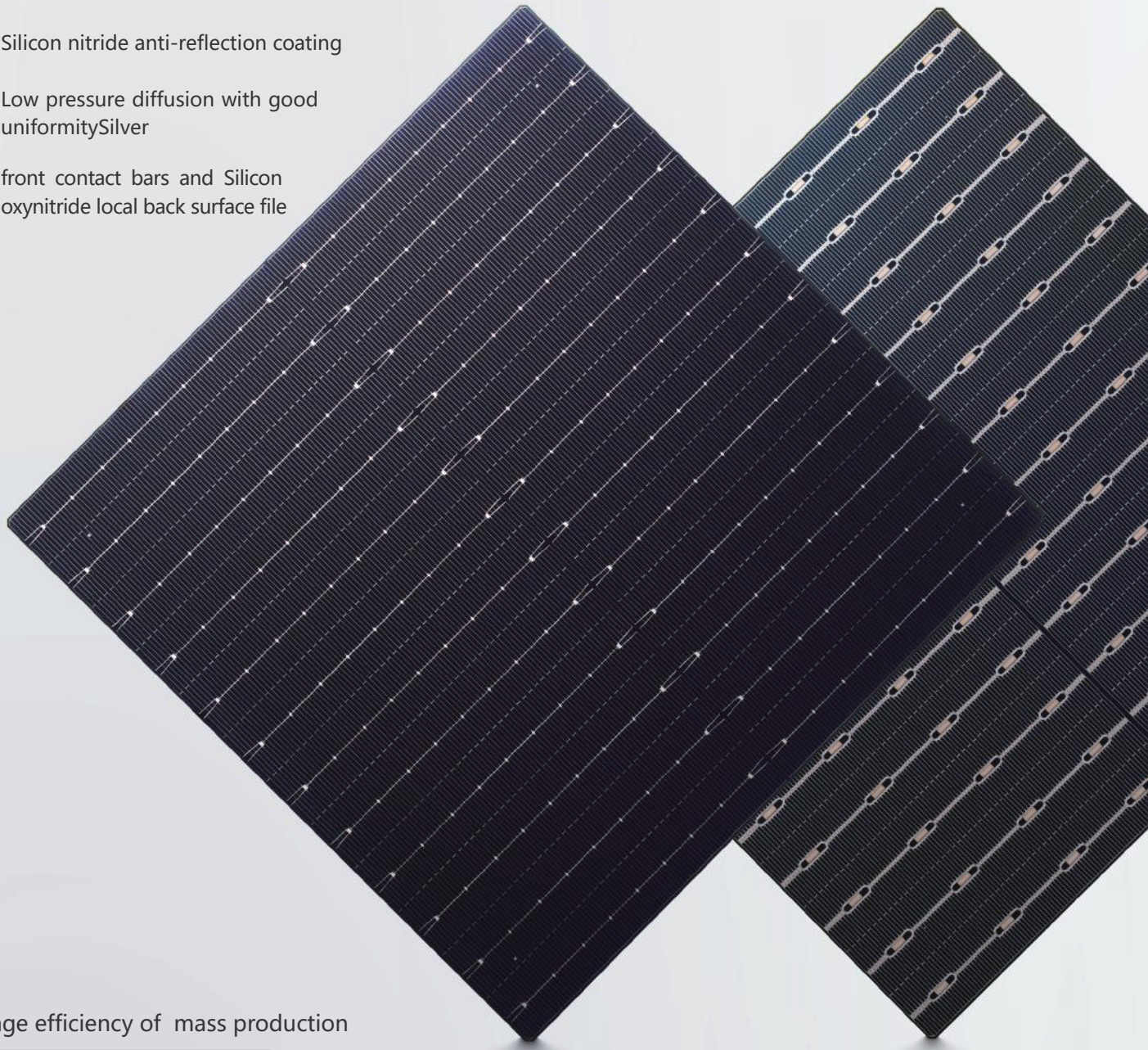
CQ SOLAR®

Y210MPE

210 Monocrystalline Bifacial Solar Cell

- Ultra-Efficient solar cells with an anisotropically etched surface
- Silicon nitride anti-reflection coating
- Low pressure diffusion with good uniformitySilver
- front contact bars and Silicon oxynitride local back surface file



Average efficiency of mass production

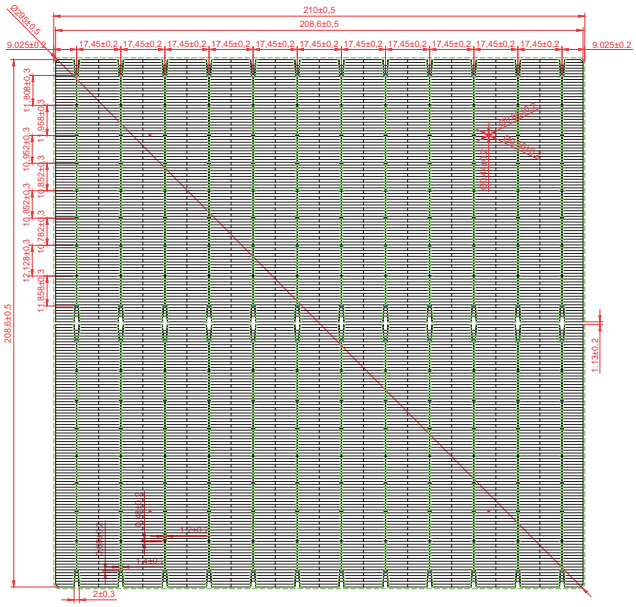
Electrical Performance

Grade	Unit	23.10	23.00	22.90	22.80	22.70	22.60	22.50	22.40	22.30	22.20	22.10
Voc	V	0.690	0.689	0.688	0.687	0.686	0.685	0.685	0.684	0.682	0.681	0.680
Isc	A	18.186	18.166	18.140	18.125	18.108	18.088	18.062	18.049	18.030	18.016	17.955
Vmpp	V	0.590	0.589	0.587	0.586	0.584	0.583	0.581	0.579	0.577	0.575	0.574
Impp	A	17.261	17.216	17.206	17.151	17.140	17.101	17.074	17.064	17.036	17.026	16.986
Pmpp	W	10.18	10.14	10.10	10.05	10.01	9.97	9.92	9.88	9.83	9.79	9.75

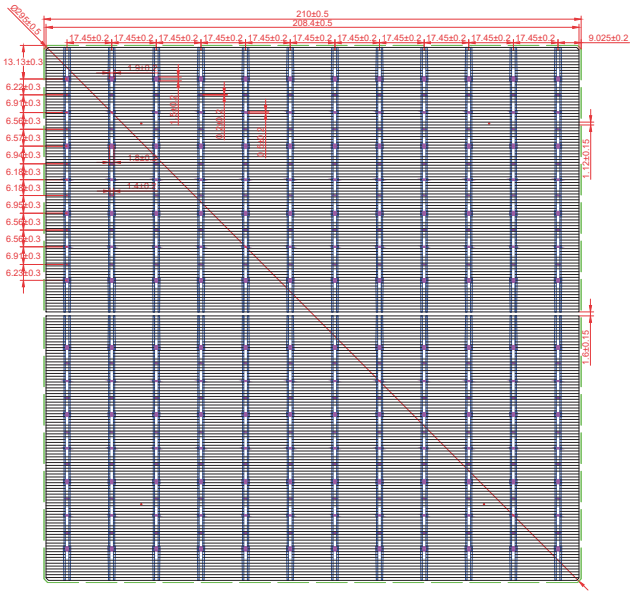
Standard Test Conditions: 1000W/m2, AM1.5,25 °C

Product Appearance

Front



Back



Temperature Coefficient

TkPower	-(0.38±0.02) %/k
TkVoltage	-(0.36±0.03) %/k
TkCurrent	+(0.07±0.015) %/k

Physical Charaacteristics

Substrate material	P-type mono-crystalline silicon wafer-PERC
Cell thickness	160μm±16μm
Dimension	210mm*210mm±0.5mm
Diagonal	295mm±0.5mm
Front(-)	12*0.05mm±0.03mm bus bars(silver)186 lines, Silicon oxide + bule silicon nitride compound anti reflection coating(PID Free)
Back(+)	1.4±0.3mm wide soldering pads(silver), Silicon oxynitride and Aluminum lines back-surface field, Laser design of vertical bus bars

Light induced degradation test

Using Xenon lamp (Irradiance of 1000W/m2,with spectrum AM 1.5)to irradiate test cells, after a total irradiation of 5 kwh/m2 ,the degradation of maximum output power of cells is ≤1.5%

CTM

Lower cell to module(CTM) power loss:≤3%

Anti-PID

Potential Induced Degradation(-1500V,192h):≤5%

Packaging, Storage

Solar cells are closely packed with soft sponge around and heat shrink is used around the box unit. Outer packing box must have shock buffer, to be suitable for long-distance delivery.
After packaging, cells should be stored indoors in the conditions of good ventilation, dry, humidity below 60%, and temperature ≤40 °C . Cells should be sampling inspected again if the storage time over 45 days