







**M210R16BTP10**

# **G12R Monocrystalline Bifacial TOPCon Solar Cell**

-  Low reflection of uniform fine texturing structure
-  Selective emitter
-  In situ doped ultra-thin poly-Si
-  Low decay



Efficiency of testing production

**25.7%~26.0%**

## Electrical Performance

Grade	Unit	25.00	24.90	24.80	24.70	24.60	24.50	24.40	24.30	24.20	24.10	24.00	23.90	23.80	23.70	23.60
Voc	V	0.7240	0.7230	0.7220	0.7210	0.7200	0.7190	0.7180	0.7170	0.7160	0.7150	0.7140	0.7130	0.7120	0.7110	0.7100
Isc	A	15.923	15.901	15.888	15.867	15.844	15.825	15.808	15.791	15.778	15.755	15.731	15.712	15.699	15.685	15.668
Vmpp	V	0.6220	0.6210	0.6200	0.6190	0.6180	0.6170	0.6160	0.6150	0.6140	0.6130	0.6120	0.6110	0.6100	0.6090	0.6080
Imp	A	15.347	15.310	15.274	15.237	15.199	15.162	15.125	15.087	15.050	15.012	14.974	14.936	14.898	14.860	14.821
Pmpp	W	9.5600	9.5200	9.4800	9.4400	9.4000	9.3700	9.3300	9.2900	9.2500	9.2100	9.1700	9.1400	9.1000	9.0600	9.0200

Standard Test Conditions: 1000W/m<sup>2</sup>, AM1.5, 25 °C

## Temperature Coefficient

TkPower  $-(0.33 \pm 0.02) \%/k$

TkVoltage  $-(0.27 \pm 0.03) \%/k$

TkCurrent  $+(0.045 \pm 0.015) \%/k$

## Physical Characteristics

Substrate material N-type mono-crystalline silicon wafer-TOPCon

Cell thickness  $130 \mu m \pm 13 \mu m$

Dimension  $182mm * 210mm \pm 0.5mm$

Diagonal  $272mm \pm 0.5mm$

Front 16 bus bars, 186 lines, Silicon oxide + blue silicon nitride compound anti reflection coating

Back 16 bus bars, 202 lines, Silicon oxide + blue silicon nitride compound anti reflection coating

## Light induced degradation test

Using Xenon lamp (Irradiance of 1000W/m<sup>2</sup>, with spectrum AM 1.5) to irradiate test cells, after a total irradiation of 5 kwh/m<sup>2</sup>, the degradation of maximum output power of cells is  $\leq 2\%$ .

## Anti-PID

Potential Induced Degradation(-1500V, 192h):  $\leq 5\%$

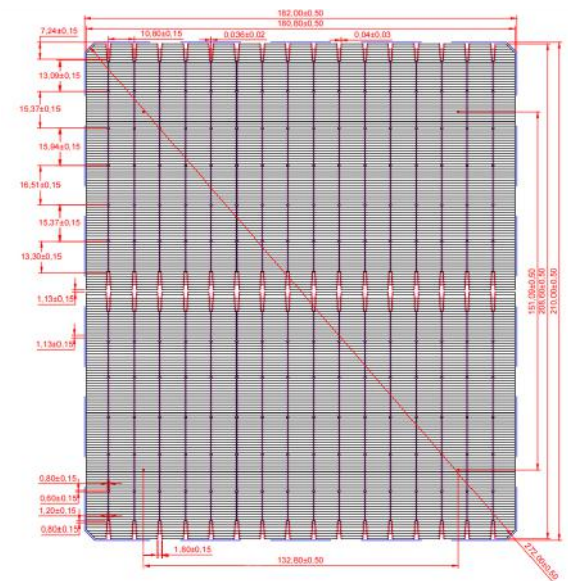
## Packaging, Storage

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 humidity below 60%, and temperature  $(20 \pm 10) ^\circ C$ . Cells should be sampling inspected again if the storage time over 90 days.

## Product Appearance

### Front



### Back

