Calculations for the number of solar panels in a string and number of strings:

Inverter Size is 2 MW

$$Inverter\ Size = 2\ MW$$

Total power plant output is

$$Number\ of\ Inverter = \frac{50\ MW}{2\ MW}$$

So, the number of inverters is

$$Number\ of\ Inverters = 25$$

From the datasheet of inverter

$$Input\ Voltage = 850\ V$$

From the datasheet of solar panel

$$Solar\ Panel\ Voltage = 43.13\ V$$

$$Solar\ Panel\ Current = 10.32\ A$$

In series the voltage adds up

$$Number\ of\ panels\ in\ series = \frac{850}{43.13}$$

$$Number\ of\ panels\ in\ series = 19.7079$$

As the partial numbers cannot use for number of solar panels, hence rounding the above figures gives the number of solar panels in series as

$$Number\ of\ Panels\ in\ series = 19$$

The above can round to 20 as well but as we have to be in the range of 600 to 850 Volts, therefore when using the number of panels in series = 19, it will generate the total voltage of

$$Total\ Voltage\ by\ 1\ String = 19 * 43.13$$

$$Total\ Voltage\ by\ 1\ String = 819.47\ V$$

In parallel connection current adds up and the current can calculate as

$$P = VI$$

$$I = \frac{P}{V}$$

$$I = \frac{2 * 10^6}{819}$$

$$I = 2442\ A$$

Now

$$Number\ of\ string\ in\ parallel = \frac{2442}{10.32}$$

$$Number\ of\ string\ in\ parallel = \ 236.6\ A$$

The partial numbers cannot use for number of solar panels, hence rounding the above figures gives the number of strings in parallel as

$$Number\ of\ string\ in\ Parallel = 236$$

The reason for rounding it to 236 is that, when 236 strings will use it will produce the current of 2435.5 A that is quite close to the 2442 A.

Hence, total number of solar panels in string are 19 solar panels, and number of strings in parallel are 329 strings. Together one string will provide 819.47 volts, and 236 strings will provide the current of 2442 A. Both the currents and voltage are within the maximum range of inverter as provided in the datasheet of inverter.

References

[1]   http://de-group.in/upload/download/PVS800-IS_inverter_station_flyer_3AUA0000145189_RevF_EN_LowRes.pdf

[2]   https://www.jinkosolar.com/uploads/Cheetah%20Plus%20JKM425-445M-78H-D1.2-EN-F35.pdf