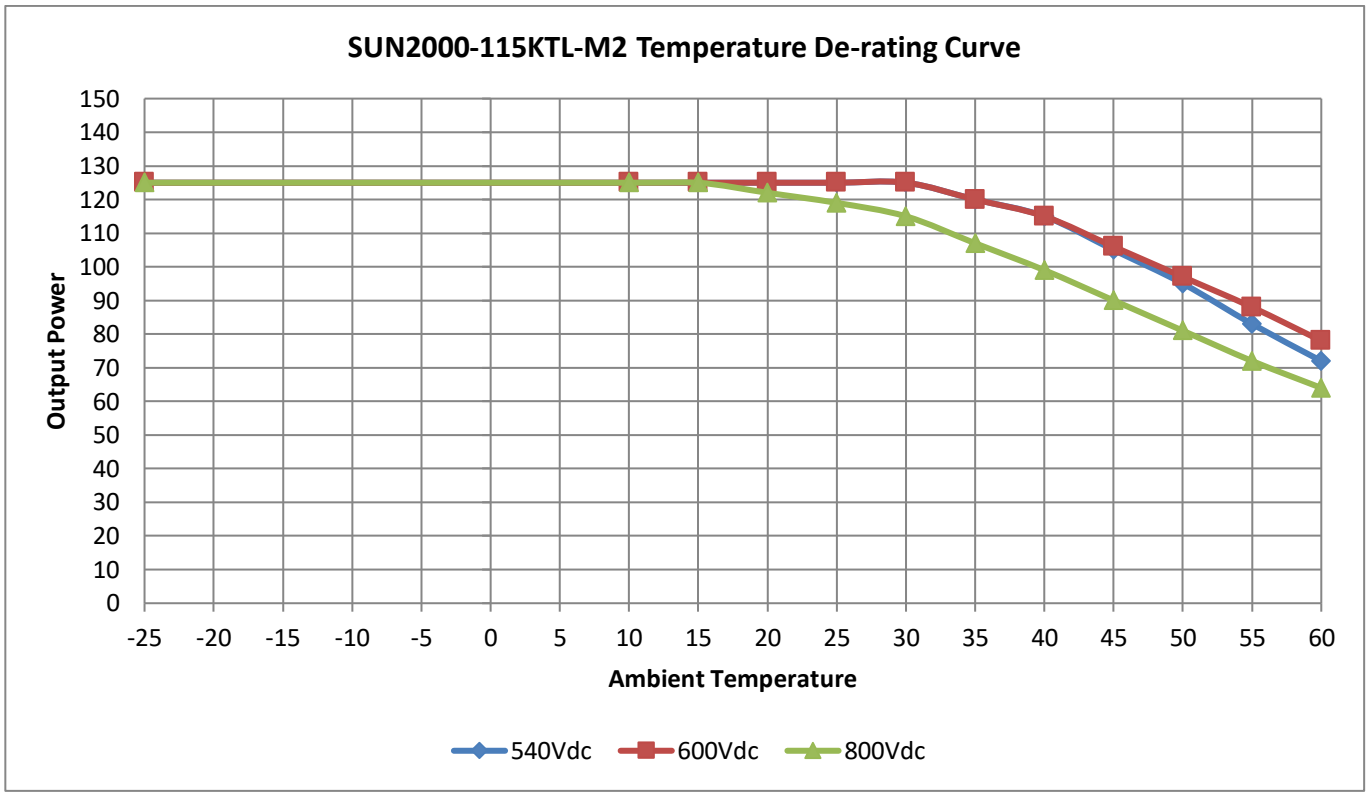
SUN2000-115KTL-M2
Output Characteristics Curve

Huawei Technologies Co., Ltd.

Version	Created by	Date	Remarks
01	Huawei	09/22/2022	

Power De-rating Curve VS. Ambient Temperature

Power De-rating Curve VS. Ambient Temperature of SUN2000-115KTL-M2:

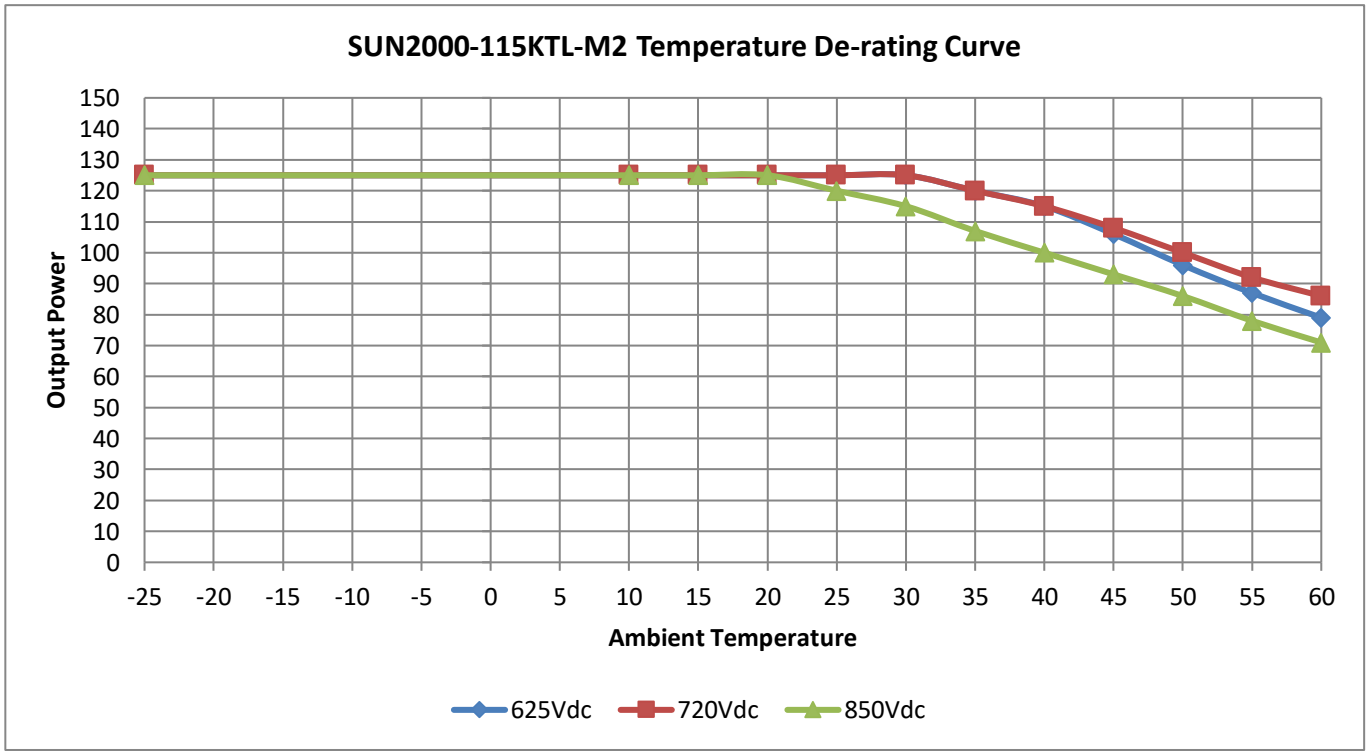


Grid Voltage：400Vac, PF=1, 600Vdc

Model	-25 ℃	30 ℃	35 ℃	40 ℃	45 ℃	50 ℃	55 ℃	60 ℃
SUN2000-115KTL-M2	125kVA	125kVA	120kVA	115kVA	106kVA	97kVA	88kVA	78kVA

Power De-rating Curve VS. Ambient Temperature

Power De-rating Curve VS. Ambient Temperature of SUN2000-115KTL-M2:

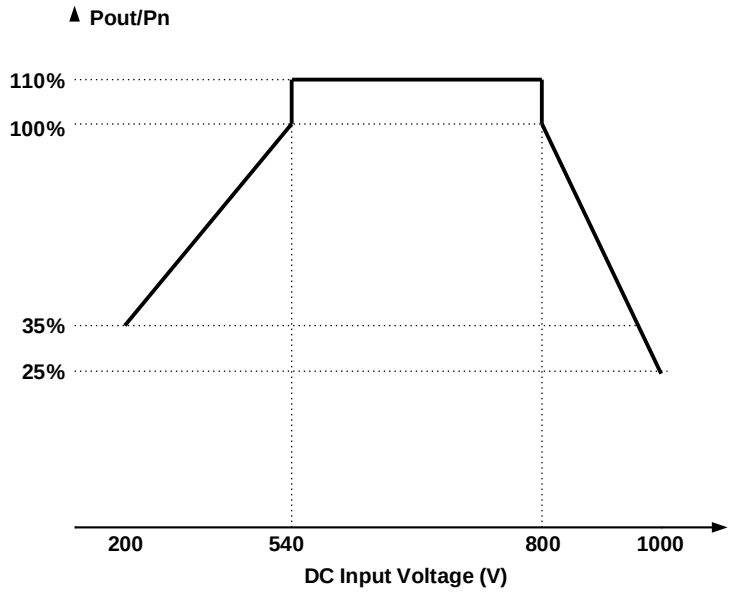


Grid Voltage：480Vac, PF=1, 720Vdc

Model	-25 ℃	30 ℃	35 ℃	40 ℃	45 ℃	50 ℃	55 ℃	60 ℃
SUN2000-115KTL-M2	125kVA	125kVA	120kVA	115kVA	108kVA	100kVA	92kVA	86kVA

Power- DC Input Voltage Curve

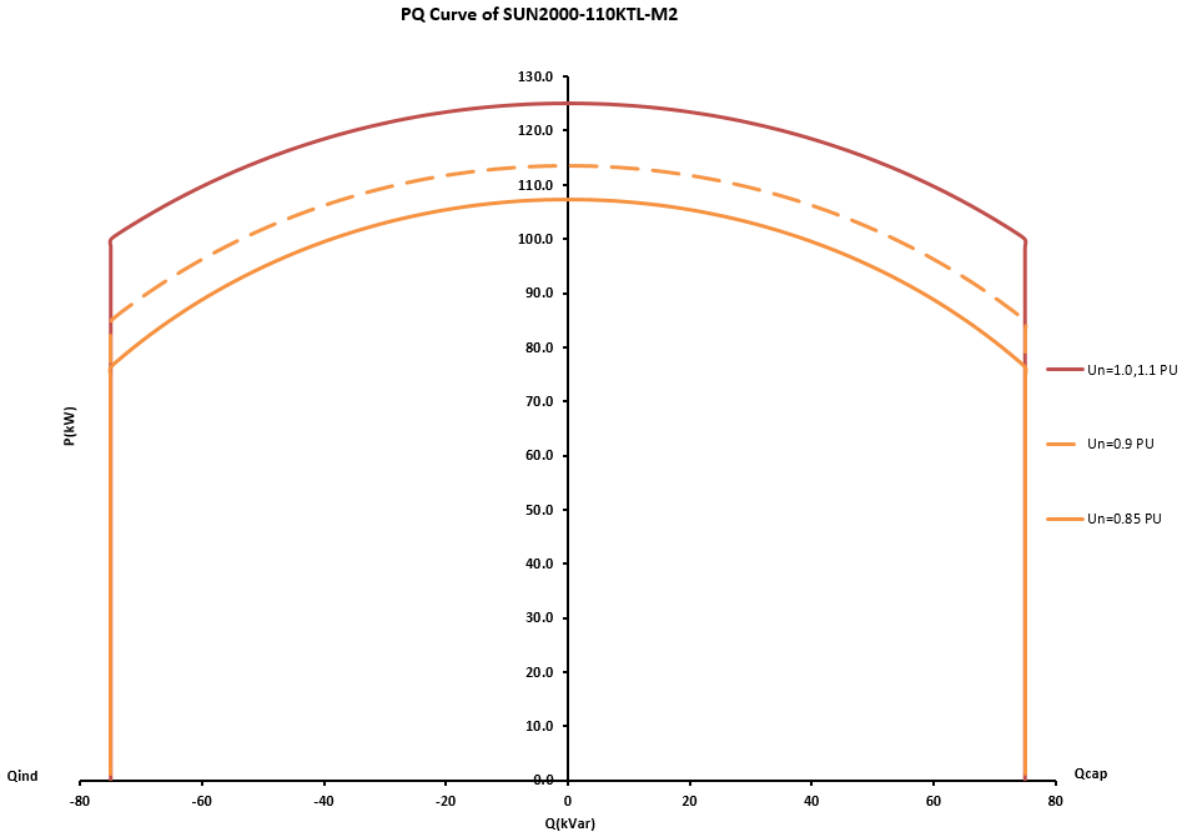
Power-DC Input Voltage Curve of SUN2000-115KTL-M2 (400/480Vac)



Note: The power-DC input voltage curve is shaped when PF equals 1.0.

PQ Curve

PQ Curve of SUN2000-115KTL-M2

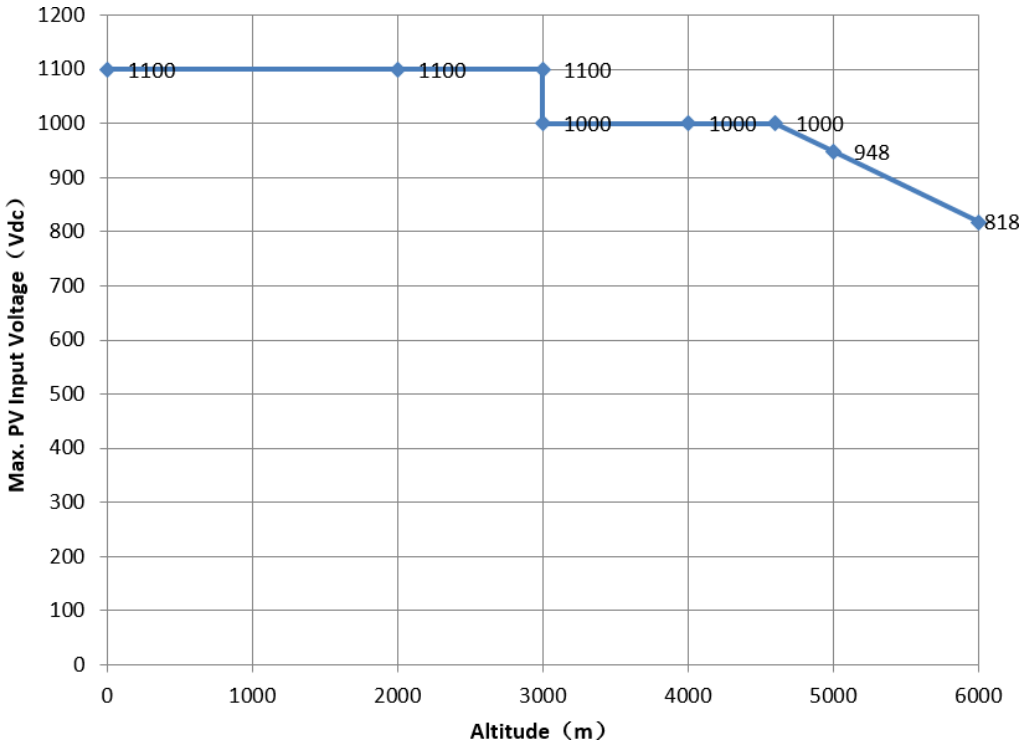


Note: When SUN2000-115KTL-M2 operates at grid voltage 1.0/1.1 p.u., the output power can reach 125kW (when PF=1) or 125kVA.

When SUN2000-115KTL-M2 operates at grid voltage 0.9 p.u., the output power can reach 113.6kW (when PF=1) or 113.6kVA.

When SUN2000-115KTL-M2 operates at grid voltage 0.85 p.u., the output power canreach 107.4kW (when PF=1) or 107.4kVA.

Max. PV Input Voltage vs. Altitude of SUN2000-115KTL-M2 (400Vac/480Vac)

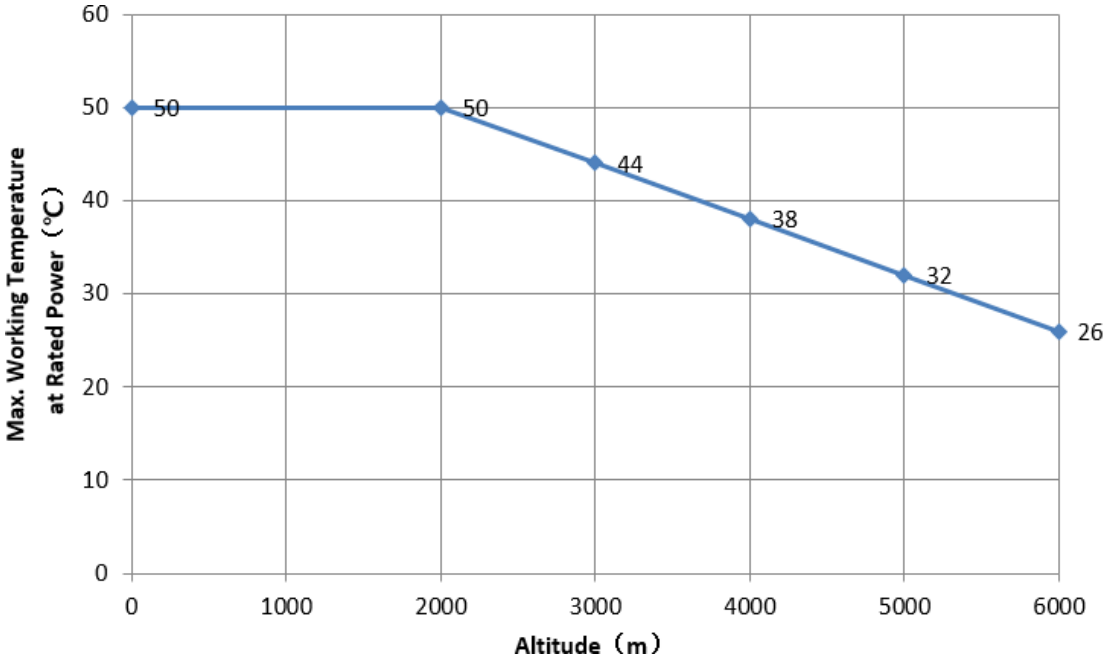


Note:

The safety distance of SUN2000 inverter is designed in accordance with running at the altitude of 4600m and below to avoid power de-rating. As altitude increases above 4600m, DC voltage de-rating of SUN2000 should be taken into consideration and DC voltage drop in accordance with 13V/100m.

For SUN2000 inverter, the rated AC voltage will not be affected by the altitude.

Maximum Working Temperature vs. Altitude of SUN2000-115KTL-M2 (400Vac/480Vac)



Note:

The maximum working temperature is the ambient temperature which SUN2000 can output rated power without de-rating.

When the altitude rises, the cooling capacity of the inverters de-rates. So the internal temperature of inverters in the high altitude area will be higher and severer than that in the low altitude area.

When altitude > 2000m, the maximum working temperature of SUN2000 should de-rate by altitude, and it de-rates in accordance with 6℃/1000m.