



# Characteristics Curve of Smart PCS

LUNA2000-100KTL-M1



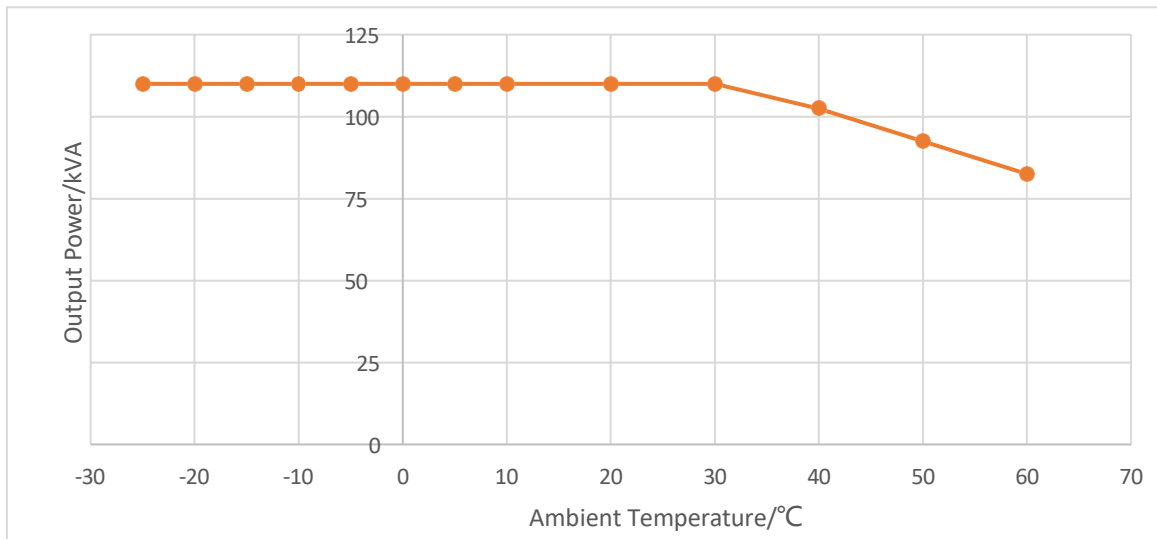
**Huawei Technologies Co., Ltd.**



## De-rating Curve VS. Ambient Temperature

### De-rating Curve VS. Ambient Temperature of LUNA2000-100KTL-M1

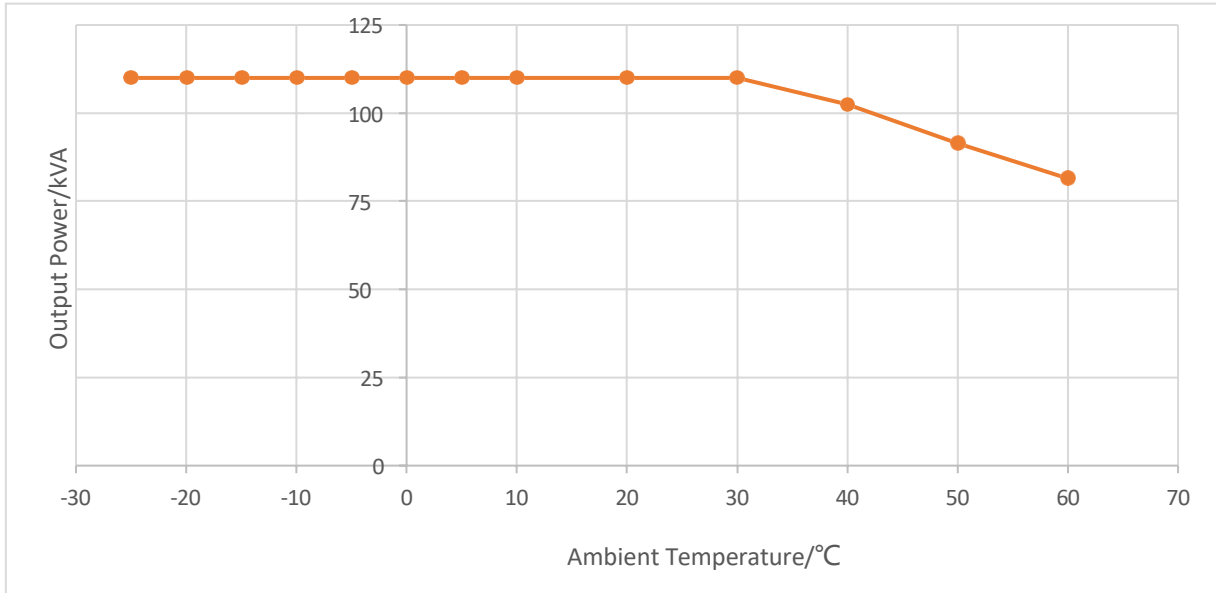
Discharging status, PF=1, Grid Voltage: 380Vac, Bus Voltage: 650Vdc



Model	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C
LUNA2000-100KTL-M1	110 kVA	110 kVA	110 kVA	110 kVA	110 kVA	110 kVA	110 kVA
	10°C	20°C	30°C	40°C	50°C	60°C	/
	110 kVA	110 kVA	110 kVA	100 kVA	90 kVA	80 kVA	/



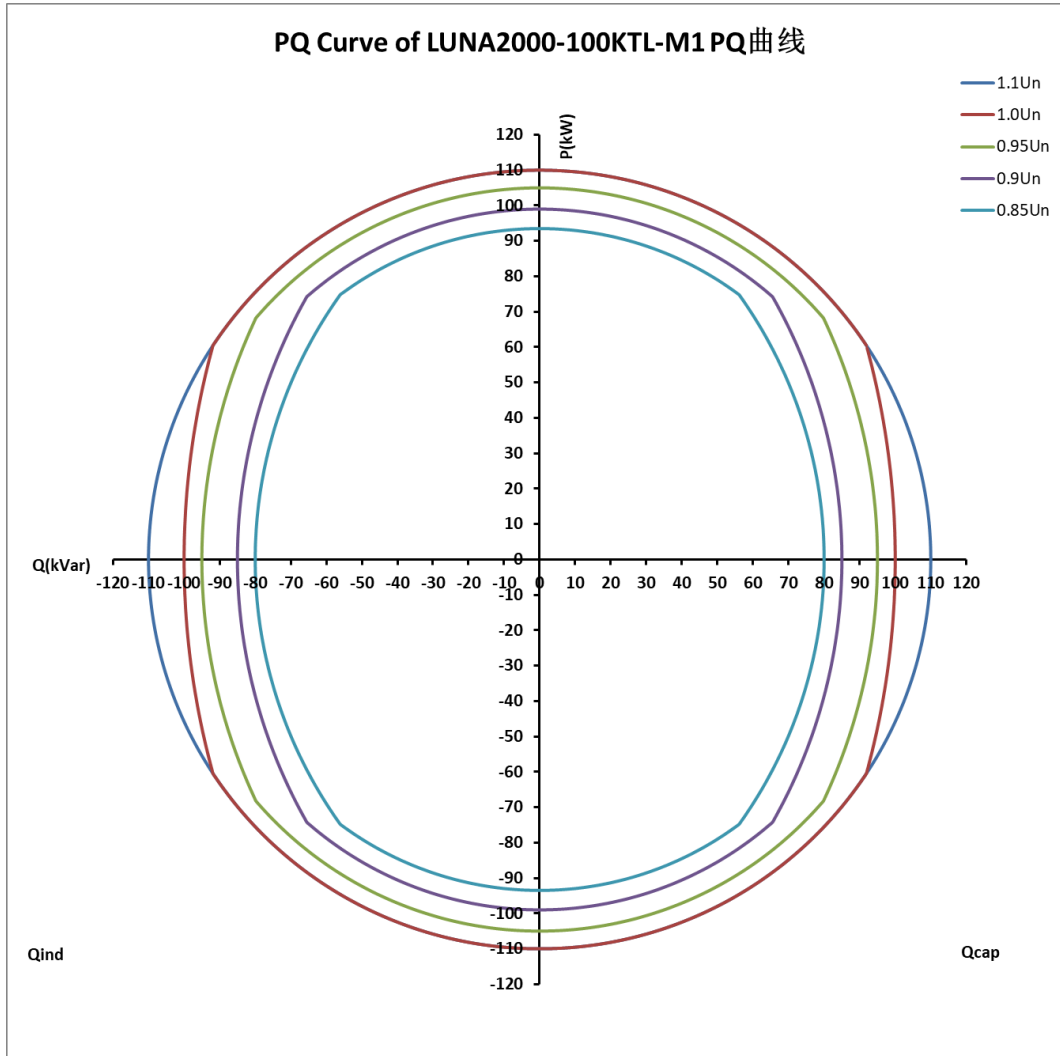
Charging status, PF=-1, Grid Voltage: 380Vac, Bus Voltage: 650Vdc



Model	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C
LUNA2000-100KTL-M1	110 kVA	110 kVA	110 kVA	110 kVA	110 kVA	110 kVA	110 kVA
	10°C	20°C	30°C	40°C	50°C	60°C	/
	110 kVA	110 kVA	110 kVA	100 kVA	90 kVA	80 kVA	/

## P-Q Curve

### P-Q Curve of LUNA2000-100KTL-M1

**Note:**

When LUNA2000-100KTL-M1 operates at grid voltage 1.0/1.1 p.u., the maximum output power is 110 kW(when  $PF=\pm 1$ ), or 110 kVA.

When LUNA2000-100KTL-M1 operates at grid voltage 0.95 p.u., the maximum output power is 105 kW(when  $PF=\pm 1$ ), or 105 kVA.

When LUNA2000-100KTL-M1 operates at grid voltage 0.9 p.u., the maximum output power is 99 kW(when  $PF=\pm 1$ ), or 99 kVA.

When LUNA2000-100KTL-M1 operates at grid voltage 0.85 p.u., the maximum output power is 93.5 kW(when  $PF=\pm 1$ ), or 93.5 kVA.

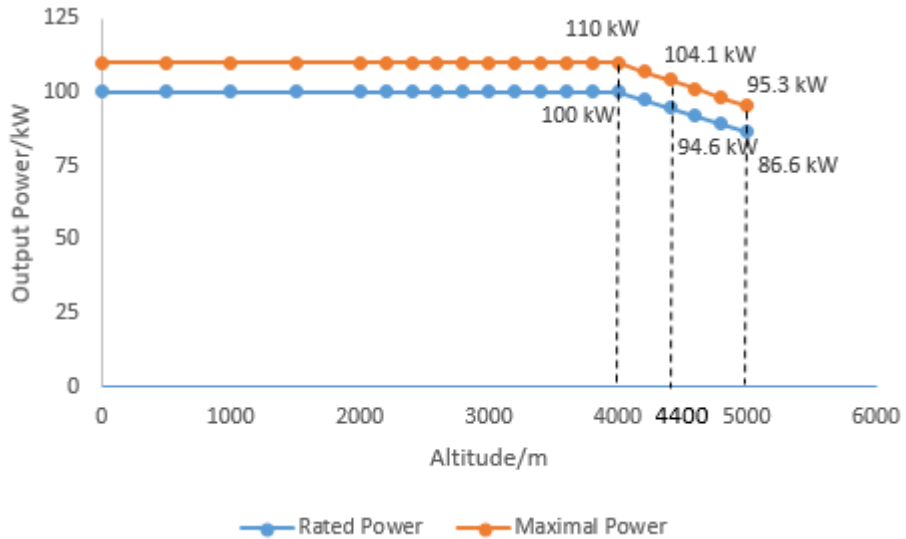


## Derating Curve VS. Altitude

Smart PV Controller	LUNA2000-100KTL-M1				
Operating Altitude without Derating (m)	4000				
Maximum Operating Altitude (m)	5000				
Operating Altitude (m)	Rated Continuous Output (kW)	Maximum Continuous Output (kW)	Maximum DC Operating Voltage (V)	Maximum DC Open Circuit Voltage (V)	Rated AC Voltage (V)
2000	100.0	110.0	1100	1100	380
2200	100.0	110.0	1100	1100	380
2400	100.0	110.0	1100	1100	380
2600	100.0	110.0	1100	1100	380
2800	100.0	110.0	1100	1100	380
3000	100.0	110.0	1100	1100	380
3200	100.0	110.0	1100	1100	380
3400	100.0	110.0	1100	1100	380
3600	100.0	110.0	1100	1100	380
3800	100.0	110.0	1100	1100	380
4000	100.0	110.0	1100	1100	380
4200	97.3	107.0	1070	1070	380
4400	94.6	104.1	1040	1040	380
4600	92	101.2	1010	1010	380
4800	89.3	98.2	980	980	380
5000	86.6	95.3	950	950	380



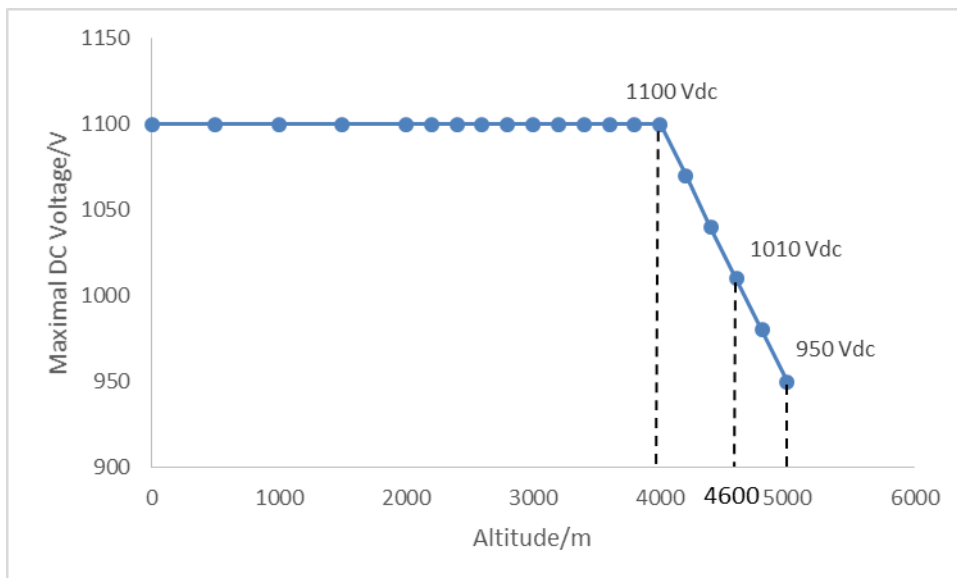
### Power Curve VS. Altitude of LUNA2000-100KTL-M1



**Note:**

The power of LUNA2000-100KTL-M1 Smart PCS doesn't derate when altitude  $\leq 4000$  m. When altitude  $> 4000$  m, the output power derating of LUNA2000-100KTL-M1 should be taken into consideration.

### DC Voltage Curve of LUNA2000-100KTL-M1





**Note:**

The Maximal DC Voltage of LUNA2000-100KTL-M1 doesn't derate when altitude  $\leq 4000$  m.

When altitude  $> 4000$  m, DC voltage derating of LUNA2000-100KTL-M1 should be taken into consideration and the maximal DC voltage derates in accordance with 15.0 V/100 m.