



TS-241



圆形太阳能庭院灯
Circular Solar Street
Lighting

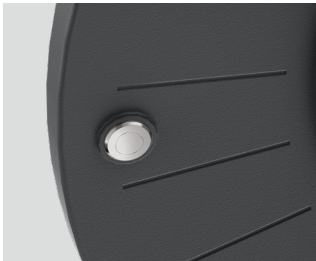


- 铝压铸灯体外壳，透明PC罩，能有效防止发黄老化
- 高透光PC扩散罩，具有高视觉舒适性和均匀配光
- 安装管径有Ø76mm / Ø60mm
- 高强度铝合金灯体外壳，防腐塑粉喷涂表面
- 无生物蓝光危害风险，符合EN62471：2008标准
- 采用通常用于电动客车的LiFePO₄电池
- 防紫外线聚氨酯塑粉喷涂表面，耐腐蚀可以达1000小时以上
- 一键开关，无需打开灯具内部接线，安装方便
- 所有外部螺钉均为304不锈钢材质

- Aluminum die-cast lamp body shell, transparent PC cover, can effectively prevent yellowing and aging.
- High light transmission PC diffusion cover for high visual comfort and uniform light distribution.
- The installation pipe diameter is Ø75mm / Ø60mm.
- High strength aluminum alloy profile lamp post, anti-corrosion plastic powder coating surface.
- No photo-biological risk,(no risk linked to infrared,blue light and UV radiation) in accordance with EN 62471:2008.
- With LiFePO₄ battery which usually apply for electric bus.
- Surface anti-ultraviolet pure polyester powder painting, Corrosion resistance can be more than 1000 hours.
- One-button switch, no need to open the internal wiring of the lamp, easy installation.
- All external screws are made of 304 stainless steel.



太阳能板 / Solar panel



开关按键 / on/off keying

远程控制系统和智能系统可选 Remote control system & Smart intelligent system available upon request



节能控制系统
Energy saving with
remote control system



遥控器
Remote control



人体感应
Motion sensor



TS-241



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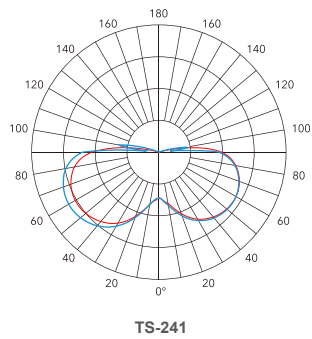
Technical Data

SOLAR-GENERAL

Autonomy Information : 2 days
Working mode : 1hrs - 100%, 2hrs - 50%, 8hrs - 20%

Model 灯具型号	Power 功率	Solar PV 太阳能板	LiFePO ₄ Battery 电池	Luminous 光通量	LED Chips LED灯珠
TS-241LED18	18W	18V/50W	154WH/12.8V 12AH	2250 lm	2835*216pcs

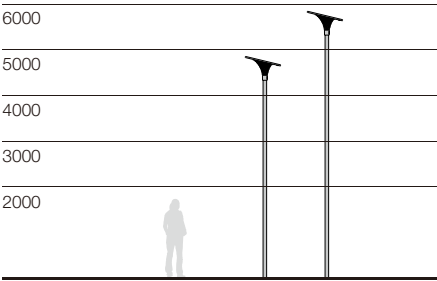
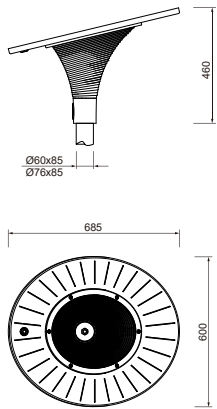
配光曲线 Photometric Data



颜色可选 Color optional



产品尺寸 Product dimensions

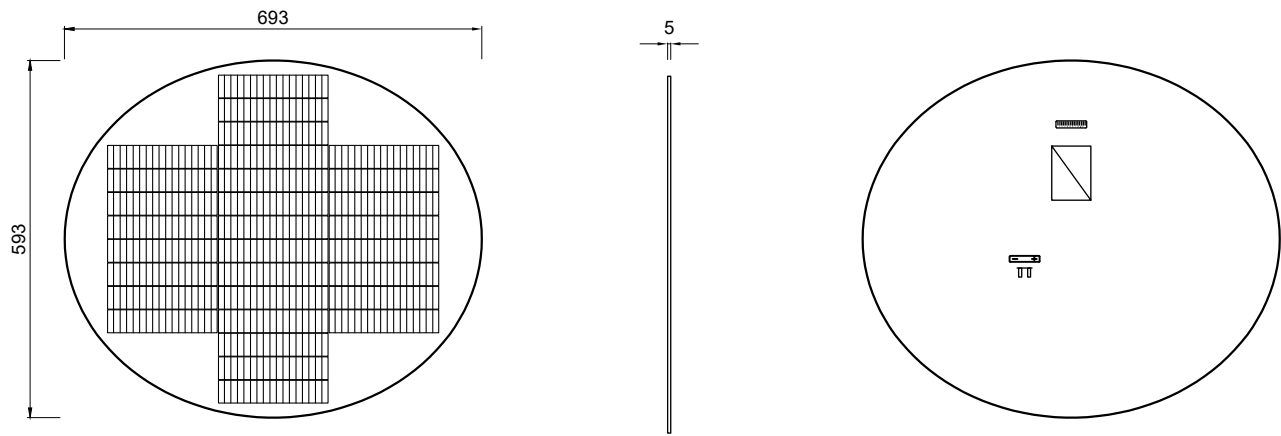


太阳能板参数 Solar panel parameters



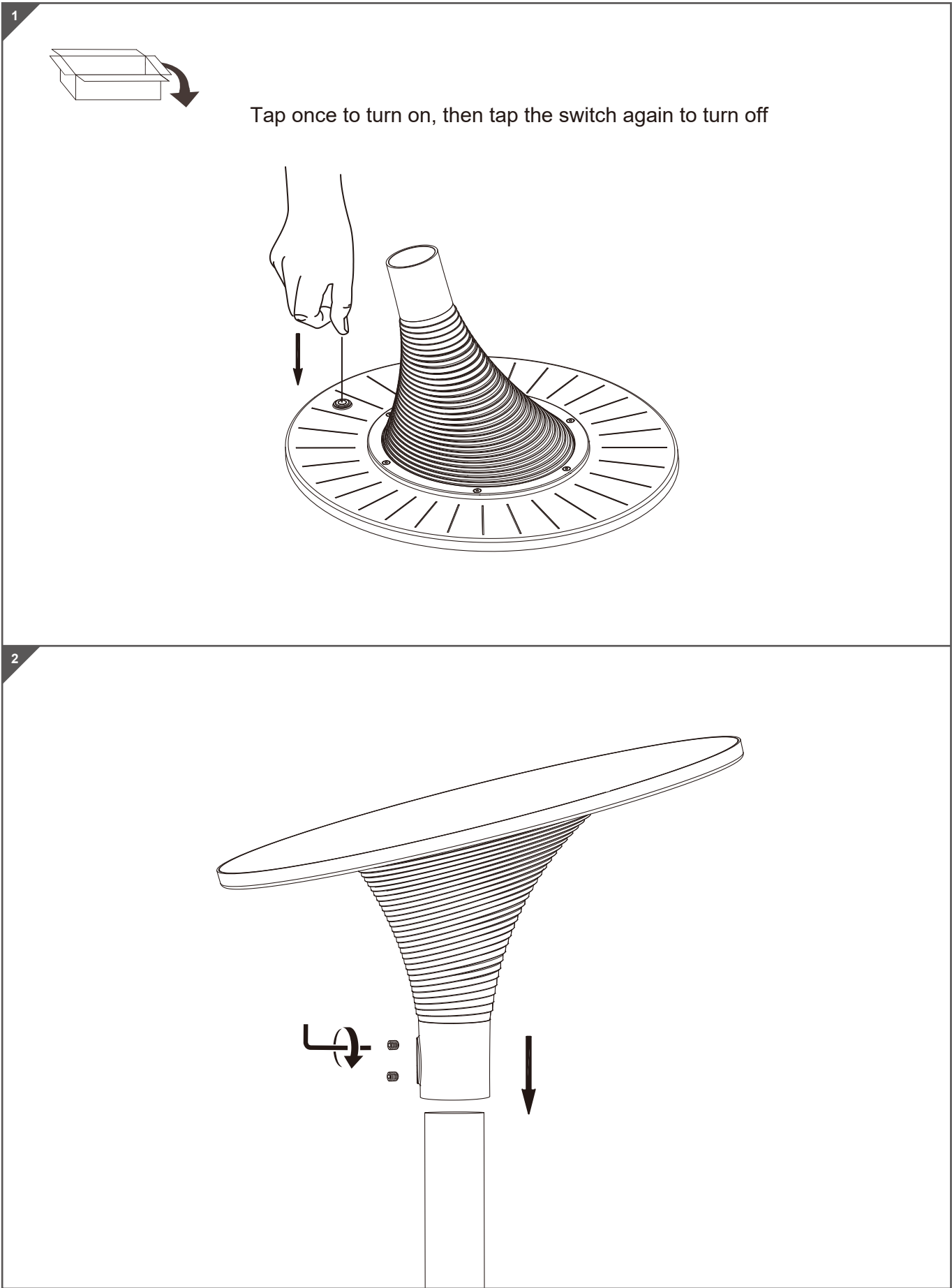
名称 Name	单晶黑底玻璃组件 monocrystalline silicon black base glass assembly
最大峰值功率 Maximum Peak Power	50W(±3%)
开路电压 Open-circuit voltage	21.55V
最大工作电压 Maximum Power Voltage	18.15V
最大工作电流 Working current	2.75A
短路电流 Short-circuit current	2.89A
太阳能电池片效率 Solar cell efficiency	>23%
电池片种类 Type of battery	单晶硅 monocrystalline silicon
尺寸 (mm) Dimension	693*593*5
工作温度 Operating temp	-40℃~85℃
工作环境湿度 Working ambient humidity	20%~98%(RH)
寿命 Lifetime	25 years
质保 Warranty	5 years

太阳能板尺寸 Solar panel size



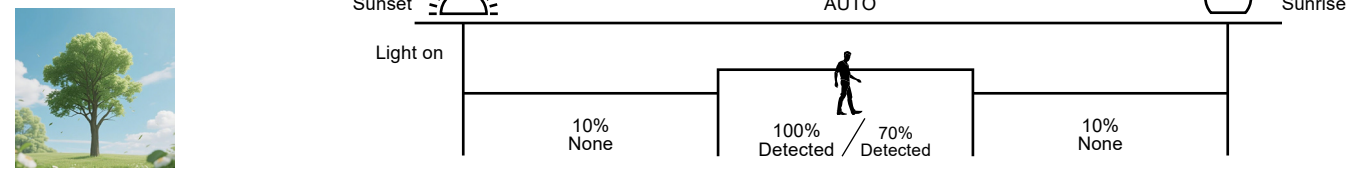
18V50W Monocrystalline silicon
black base glass assembly

安装说明 Installation instructions

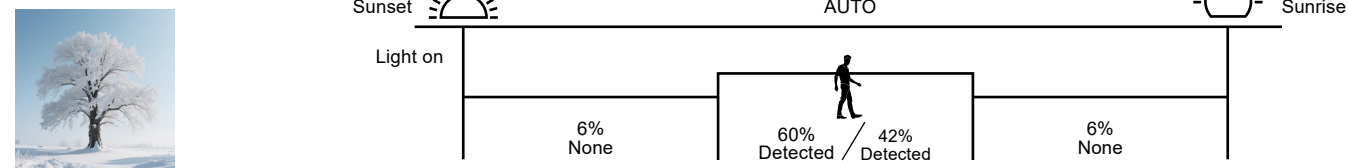


照明模式 Lighting mode

夏季模式
Summer model ▶



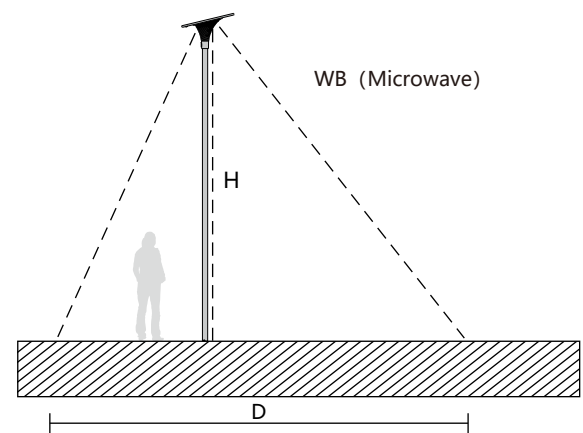
冬季模式
Winter model ▶



双季节: 当连续亮灯时间超过11H使系统自动进入冬季模式，冬季模式的功率是夏季模式60%，这样能使系统在整个冬季都能够整晚亮灯。

Double season: When the continuous lighting time is more than 11H, the system will automatically enter the winter mode, the power of winter mode is 60% of summer mode, so that the system can be lit all night throughout the winter.

检测距离 Detection distance



感应类型 Inductive type	灯杆高度 (H) Light pole height	感应宽度 (D) Inductive width
WB (Microwave)	6-10m	7-10m

遥控器距离10米无遮挡，安装高度和环境等因素会影响遥控器灵敏度，请参考实际现场。

注: 在使用遥控器时，请勿同时放置2个或更多灯在12米以内，接收或发送可能会失败。

Remote control distance 10 meters without shelter, installation height and environment and other factors will affect the sensitivity of the remote control, please refer to the actual site.

Note: When using the remote control, do not place 2 or more lights within 12 meters at the same time, receiving or sending may fail.

遥控器 Remote control unit

The remote control unit is a black device with several buttons. At the top are a red 'OFF' button and a grey 'AUTO' button. Below them is a large circular 'SENSOR' button with 'S100%' at the top and 'S75%' at the bottom. Under the sensor button are four smaller buttons labeled 'M1', 'M2', 'M3', and 'M4'. At the bottom is a 'CCT' button. Blue lines connect these buttons to their respective descriptions on the right.

[100%感应模式]
长按1.5秒，感应到人，灯具100%工作，人离开后45秒，灯具功率降低至总功率10%。
注：感应模式只有在灯具具有感应模块才能使用。

[S100%]
Sensing people, the lamp is 100% working. 45 seconds after the person leaves, the lamp is 10% working.
Note: The induction mode can only be used if the lamp has an induction module.

[75%感应模式]
长按1.5秒，感应到人，灯具75%工作，人离开后30秒，灯具功率降低至总功率10%。
注：感应模式只有在灯具具有感应模块才能使用。

[S75%]
Sensing people, the lamp is 75% working. 30 seconds after the person leaves, the lamp is 10% working.
Note: The induction mode can only be used if the lamp has an induction module.

[双色温模式]
长按1.5秒，灯具会有双色温转换。

[CCT]
Press and hold for 1.5 seconds, and the lamp will have a two-color temperature transition.

模式 Mode	第一时段 1st Time Period	第二时段 2nd Time Period	第三时段 3rd Time Period
M1	1 hour, 100% power	1 hour, 60% power	Sunrise, 30% power
M2	2 hour, 100% power	2 hour, 60% power	Sunrise, 30% power
M3	3 hour, 100% power	2 hour, 60% power	Sunrise, 30% power
M4	4 hour, 100% power	2 hour, 60% power	Sunrise, 30% power

MPPT太阳能控制器 MPPT solar controller

- 适用于磷酸铁锂电池
- 采用MPPT 最大功率跟踪技术，跟踪效率高达99.5%
- 降功率曲线，控制方式灵活，有效避免蓄电池亏电导致灭灯
- 一键操作进入微低功耗休眠，适合远程运输和存储，可通过遥控或光控的方式唤醒控制器
- 可扩展人体感应功能，来人亮灯，人走低功率运行。在低人流路段或时段使用该功能，可有效节约电能
- 控制策略灵活，各时段有人无人功率分别可调，人体感应功能可开启
- 系列具备无线通讯功能，可穿透塑料或铝制外壳进行遥控，无需外引指示灯面板，降低故障率



- Suitable for LiFePO₄ battery
- MPPT maximum power tracking technology, tracking efficiency up to 99.5%
- Power reduction curve, flexible control mode, effectively avoid battery power loss caused by lamp off
- One-click operation to enter micro-low-power sleep, suitable for remote transport and storage, can be remotely or light-controlled by the way to wake up the controller.
- It can expand the human body sensing function, the bearer lights up, and the person runs at low power. The use of this function in low-flow road sections or periods can effectively save power.
- The control strategy is flexible, the power of each period can be adjusted respectively, and the human body sensing function can be opened.
- The column has wireless communication function, can penetrate the plastic or aluminum housing for remote control, no external pilot light panel, reduce the failure rate.

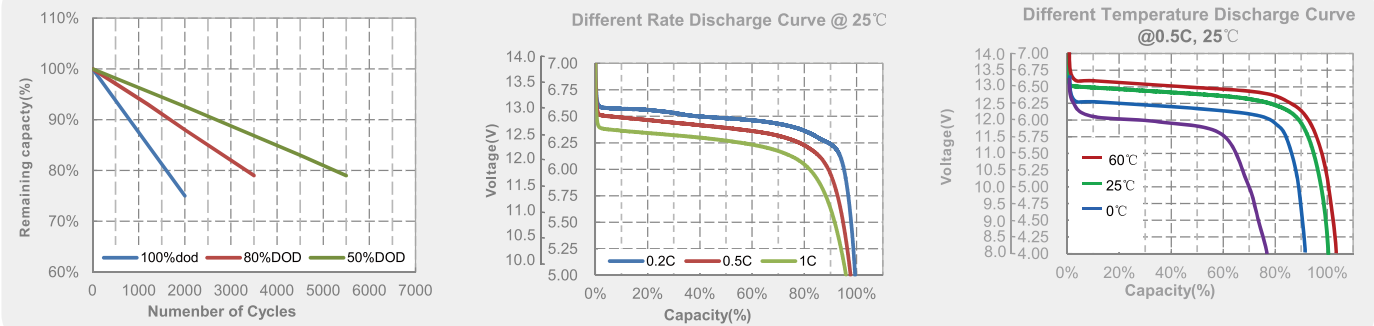
名称 Item	QS-01C25D		QS-01C25S	
功能描述 Function description	时段调光	Interval dimming	微波人体感应	Microwave sensing
遥控距离 Remote control distance	10m（无遮挡）		10m（uncovered）	
充电方式 Charging mode	MPPT（最大功率点跟踪）		MPPT（Maximum power point tracking）	
适用电池串数 Applicable battery string	4串		4 series	
蓄电池电压范围 Battery voltage range	10.8 ~ 14.4V			
光电池电压范围 Photocell voltage range	16 ~ 25V			
最大充电电流 Maximum charging current	6A			
放电方式 Discharge mode	升压恒流	Boost voltage with constant current		
适用负载 Applicable load	6 ~ 10串	6 ~ 10bunches		
输出电压 Output voltage	Vin+3 ~ 35V（MAX）			
最大输出电流 Maximum output current	1.3A			
最大输出功率 Maximum output power	25W			
输出电流误差 Output current error	< 3%			
输出纹波 Output ripple	≤600mA			
最大放电效率 Maximum discharge efficiency	92%			
最大充电效率 Maximum charging efficiency	95%			
光控延时 Optical delay	20s			
工作温度 Operating temperature	-35~55℃			
空载电流 No-load current	≤15mA			

长寿命耐用电池 Durable & Long Lifetime Battery

- 磷酸铁锂电池
- 最安全的锂化学，高能量密度
- 内置自动保护，可防止过充电，电流过大和温度过高
- 高效&持久，可达 4000多个循环 DOD 80%
- > 2000 个循环@0.2C，充电/放电在100% DOD
- 宽温度范围:-20℃~70℃
- 安装后免维护



- Lithium Iron Phosphate (LiFePO₄) Battery
- Safest lithium chemistry with high energy density
- Built-in automatic protection for over-charge, over djaxharge, over
- Efficient&long-lasting up to 4000+cycles DOD 50%
- >2000 cycles @0.2C，Charge/Discharge at 100% DOD
- Wide temperature range:-20℃~60℃
- Maintenance free after installation



参数名称 Item	参数值 Parameter value
电池容量 Battery capacity	154WH/12.8V 12AH
电池类型 Battery Type	LiFePO4 Battery Pack
循环寿命 Lifetime in cycles	2000 cycles
单元类型 Cell Type	32700 3.2V/6000mAH
电池单元的数量 Quantity of battery cell	2P4S
充电模式 Charging mode	Constant Current Constant Voltage
充电电压 Charge voltage	14.6V
放电截止电压 Discharge Cut-off Voltage	≥8.0V
最大连续充电电流 Max. Continuous Charging Current	3.0A（0℃~65℃）
存储温度 Storage Temperature	-10℃~45℃
工作温度 operating temperature	-20℃~70℃