



Solar Powered Parcel Locker [Linux Flagship]

Solar Powered Parcel Locker D1, the Linux flagship model, is a high-end version for target markets, which equips with the low-power Linux system and intelligent power management solution. It leverages solar energy, battery, and grid power supply to deliver green energy efficiency and ultra-long battery life. Supporting low power consumption and high availability, it is an optimal smart parcel locker solution for well-lit overseas outdoor scenarios requiring plug-and-play and flexible deployment.



Business Challenges of Solar Powered Parcel Locker [Linux Flagship]



Mature Solar Technology

High-efficiency panels and lithium storage realize steady off-grid self-power supply.



Carbon Reduction Goals

Global low-carbon policies urge logistics terminals to cut power consumption and emissions.



Low Maintenance Expense

Remote intelligent monitoring cuts frequent manual field inspections for faraway equipment.

Solution

Built for demanding commercial deployments, our premium solar-powered parcel locker combines exceptional durability with advanced customization capabilities. Designed with over 1 mm thick galvanized steel, it delivers outstanding corrosion resistance and withstands winds up to Level 12. The open architecture supports secondary development, enabling seamless integration with third-party platforms and customized applications. Powered by a high-capacity battery system, the parcel locker delivers exceptional energy efficiency and long-lasting performance. Even without grid power or direct sunlight, it can continue operating for months, making it an ideal solution for remote locations and areas with limited infrastructure.

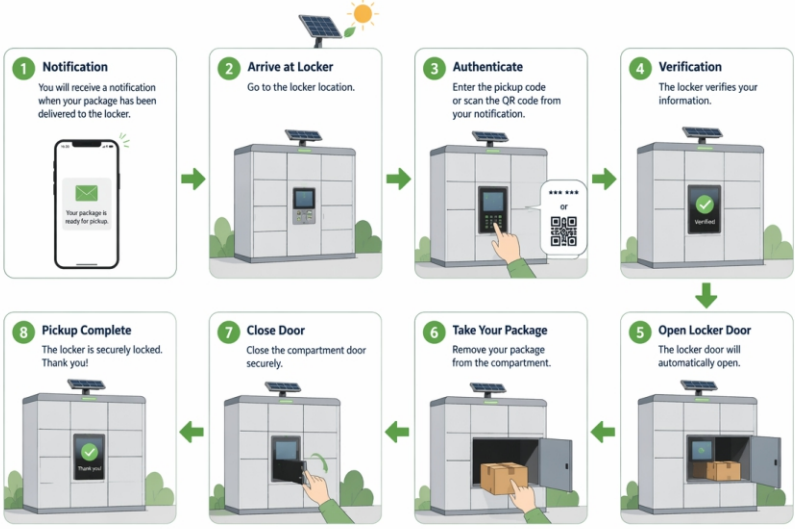
Key Features of Solar Powered Parcel Locker [Linux Flagship]

- Thickened galvanized sheet (> 1.0mm) ensures sturdy and durable structure
- E-coating process delivers long-lasting and exquisite appearance
- Low-power operation greatly reduces long-term operating costs
- Open architecture enables customizable secondary development upon request
- Rotary solar panel can be manually adjusted to fully capture solar power
- Intelligent parcel detection system provides real-time accurate detection of parcel storage and retrieval status
- Independent beams, hidden drains, baffle & concrete base boost stability, waterproofing & mounting reliability
- Top centralized emergency system

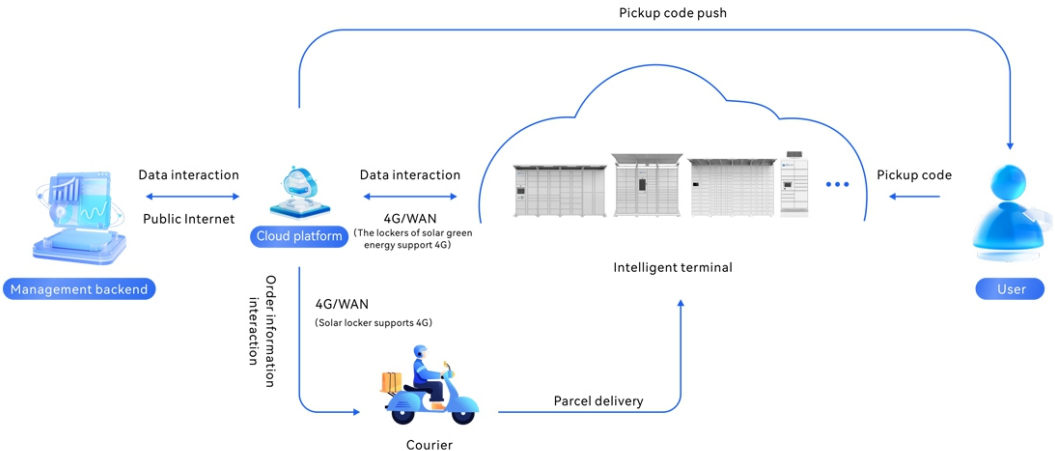
Specification of Solar Powered Parcel Locker [Linux Flagship]

Model	ZL-PL-A31-A-000165
Overall locker dimension	960mm(W) *2019mm(H) *600mm(D)
Screen	Capacitive touchscreen/10.1"AG/full lamination
Operating system	Linux (2GB RAM ARM-based IPC)
Grid power	110V-230V
Power supply method	Powered by grid power/battery pack/solar energy
Grid outage duration	When fully charged, with no grid power and no sunlight, the locker can operate for more than half a year with one 232AH battery pack based on 30 operation cycles per day and duration of 1 minute per operation. (Each set of locker is equipped with one battery pack)
Operating temperature	-20℃ - 60℃
Material	Locker frame: 1.0mm galvanized sheet; Locker door: 1.5mm galvanized sheet
Operating humidity	10%-85% RH, non-condensing
Operating voltage	12V
Standby power consumption	0.312W
Weight (with the concrete base)	624.5kg
Battery pack status query	232Ah\12.8V\RS485
Solar panel	12V system/50W
Wind resistance	Passed level 12 test

Solar-Powered Parcel Locker Pickup Process



System Architecture



Application Scenarios of Solar Powered Parcel Locker [Linux Flagship]



Beach



Countryside



Office parks