



Smart Solar Parcel Locker [Linux cost-effective]

Smart Solar Parcel Locker D2, the Linux cost-effective model, is a dedicated cost-effective solution for various applications. Featuring cost-effective galvanized sheet with e-coating process, it is moisture-proof, enables low-power operation, and supports basic customized development, meeting mass commercial deployment at affordable procurement costs. It fully opens its system framework to allow customers to carry out targeted secondary development according to their unique business demands.



Business Challenges of Smart Solar Parcel Locker [Linux cost-effective]



Weak Grid Power Coverage

Conventional lockers cannot be placed in rural areas without stable municipal power supply.



High Wiring Costs

Cable construction and power access approval bring extra investment to traditional locker deployment.



Flexible Site Layout

Stable and reliable solar parcel lockers require no electrical works and fit scenic spots, plazas and temporary outdoor zones.

Solution

Designed for cost-sensitive markets, our economical solar-powered parcel locker provides a practical and reliable delivery solution without requiring a grid connection. Powered by high-efficiency solar panels and a long-lasting battery system, it ensures stable operation while reducing energy and installation costs. Its durable, weather-resistant construction is suitable for outdoor environments, making it ideal for residential communities, rural areas, campuses, and remote locations. An affordable choice for businesses seeking sustainable, flexible, and low-maintenance last-mile delivery.

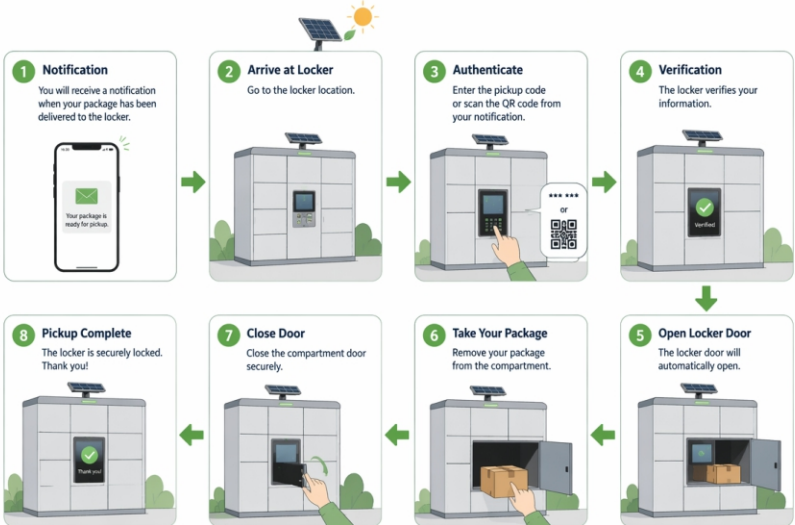
Key Features of Smart Solar Parcel Locker [Linux cost-effective]

- Ultra-low overall power consumption
- Long-lasting temp-resistant lithium battery
- High-strength outdoor protection, IP54 rating, resistance to level 12 strong wind.
- Anti-prying & anti-leakage design, and data encryption.
- Modular quick maintenance design
- Top centralized emergency door unlocking system
- High-performance electromagnetic lock
- D8Rotary solar panel can be manually adjusted to fully capture solar power

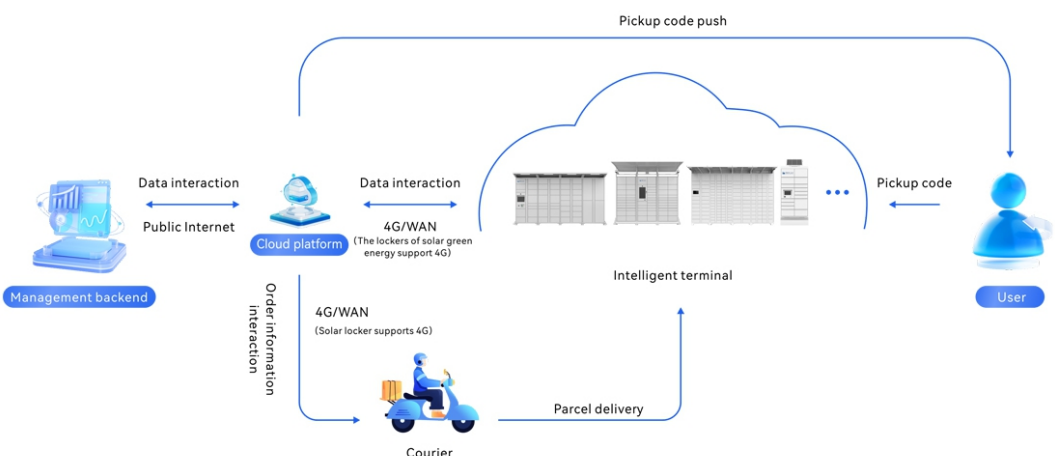
Specification of Smart Solar Parcel Locker [Linux cost-effective]

Model	ZL-PL-A31-A-000205
Locker dimension	960mm(W)*2012mm (H)*600mm(D)
Screen	Capacitive touchscreen/10.1" AG/ full lamination
OS	Linux (2GB RAM ARM-based IPC)
Power supply	Solar power/battery pack/grid power
Operating voltage	12V
Standby power consumption	0.312W
Weight	120KG
IP rating	Ip54
Battery pack	12V/232AH/lithium iron phosphate battery/chargeable
Solar panel	12V/50W
Material	Locker frame: 0.6mmgalvalized sheet; Locker door: 0.6mm galvanized sheet
Number of compartments	15 (excluding the control compartment)
Grid power range	AC110V~AC230V
Operating humidity	10%~85%RH; no condensation
Operating temperature	-20°C~60°C
Wind resistance	Level 12
Standby operation 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.

Solar-Powered Parcel Locker Pickup Process



System Architecture



Application Scenarios of Smart Solar Parcel Locker [Linux cost-effective]



Suburbs



Town



Beach