



Emdoor Information V10J Rugged Vehicle PC Helps a Container Service Company Upgrade Smart Yard Vehicle Management

Product Capabilities & Scenario Benefits

The customer, a container service company, deployed the Emdoor V10J vehicle PC on yard and port engineering vehicles. It resolved previous issues, including poor sunlight visibility, loose connectors, and incompatibility with high-voltage vehicle power systems.

High brightness & heat resistance: With 1000 nits brightness, V10J remains clearly visible under strong sunlight and operates stably in the high-temperature crane cabin.

Reinforced connectors for vibration: Industrial circular connectors prevent looseness under long-term vibration, ensuring stable power and signal transmission.

Wide-voltage input: V10J supports 9-36V or 20-80V input, adapting to most 24V and some 48V engineering vehicles, preventing failures caused by voltage fluctuations.

Stable connectivity: Built-in 4G ensures constant network access across large yards, enabling real-time data transmission.



V10J

Vehicle Mount

Accurate positioning: Integrated GPS allows real-time vehicle tracking, significantly improving scheduling efficiency.

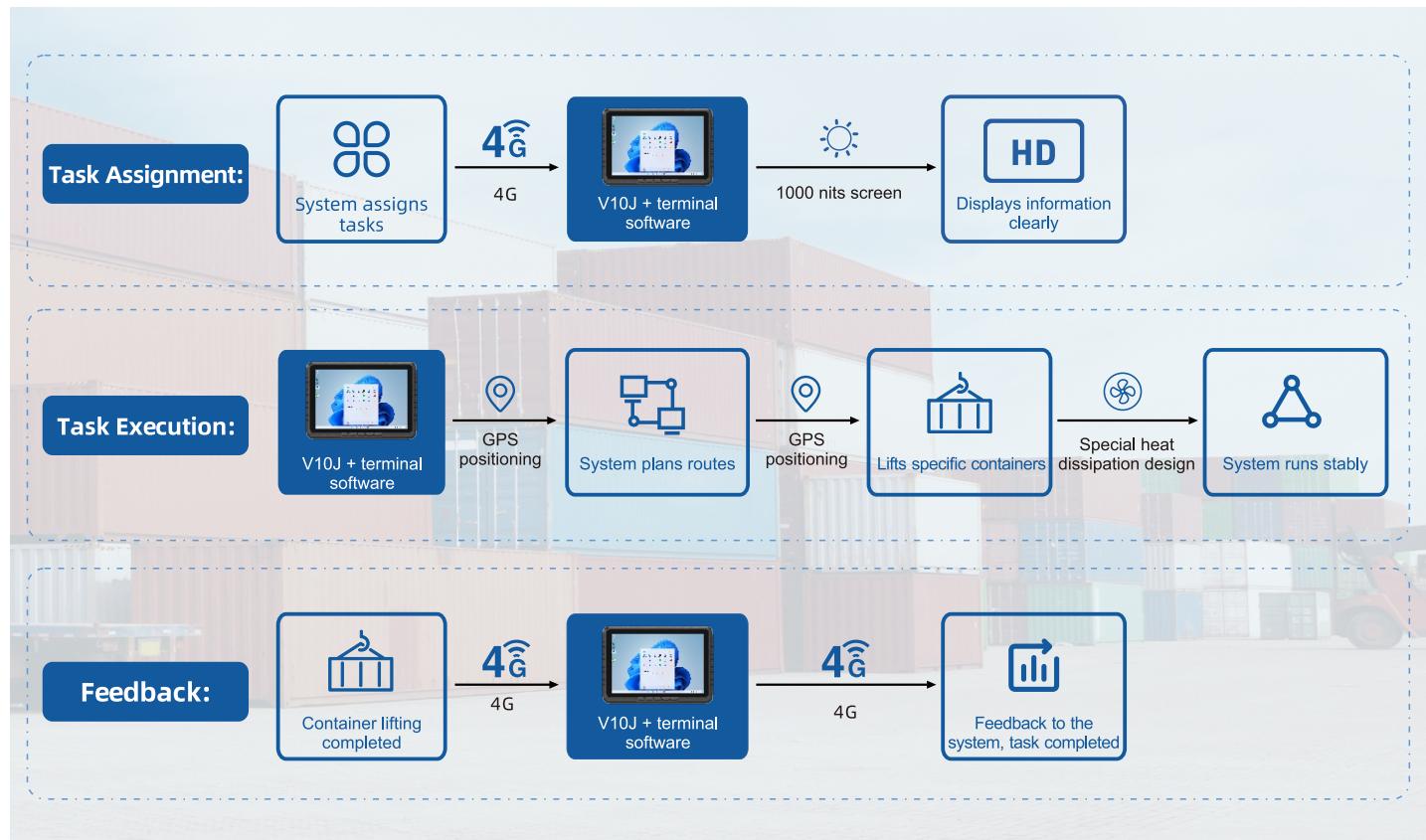
Overall, the V10J provides a rugged, reliable, and intelligent terminal that supports and promotes digital transformation in yard operations.

Client Profile

The customer offers expert one-stop container management services and operates within the transportation sector. During yard operations, the V10J monitors vehicle status, environmental conditions, and displays real-time work parameters to support safe and precise vehicle operation.

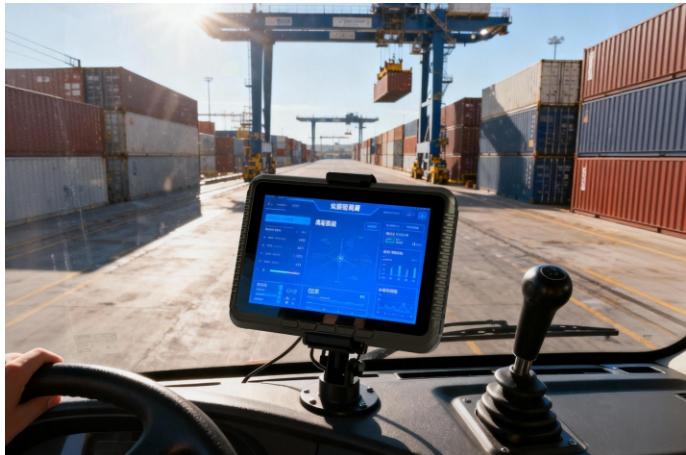


Workflow



Client Challenges

The client needed a rugged vehicle PC that performs well under strong sunlight, high temperature, vibration, wide voltage, and offers 4G connectivity. The Emdoor V10J met all these requirements.



Solution Highlights

After the dispatch center sends tasks through the management system, the V10J receives instructions in real time via 4G. Its built-in GPS allows the dispatch team to see each vehicle's location instantly and plan routes accurately.

Operators follow the GPS navigation on the V10J to reach the assigned container slot. The 1000 nits high-brightness display remains clearly readable under strong sunlight, showing container numbers, positions, and lifting instructions without visibility issues.

During more than 8 hours of continuous operation with frequent starts, stops, and vibration, the V10J's industrial circular connectors keep all cables firmly secured, ensuring stable power and signal transmission. Its wide-voltage design handles fluctuations in vehicle power, while the large heat-dissipation fins maintain high performance inside the hot, enclosed cabin, preventing lag or crashes caused by overheating.

Once the task is completed, all data – container number, status, location, and time – is transmitted back to the management platform in real time through 4G and dual-band Wi-Fi, enabling dynamic updates and full traceability.



Client Feedback

"Even under the midday sun, the V10J displays clearly. Its responsiveness exceeded expectations, it runs smoothly in heat, and the connectors stay secure — greatly improving our efficiency and accuracy."

— Yard Operations Supervisor

Client Benefits



40%

increase in
operational efficiency

Industrial-grade connectors, wide-voltage power support, and efficient heat dissipation ensure system stability. With precise GPS positioning, the dispatch center can optimize routes and reduce unnecessary travel.



95%

reduction in
operational errors

The 1000 nits sunlight-readable display makes all information easy to read, directly improving operational accuracy.



99%

data synchronization
efficiency

Real-time synchronization is ensured by the built-in 4G module and dual-band Wi-Fi, enabling seamless network switching and smooth data transmission.



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Rugged Handheld



Rugged Tablet PC



Rugged Notebook



Panel PC



Vehicle PC



Industrial PC



Outdoor Rugged Series