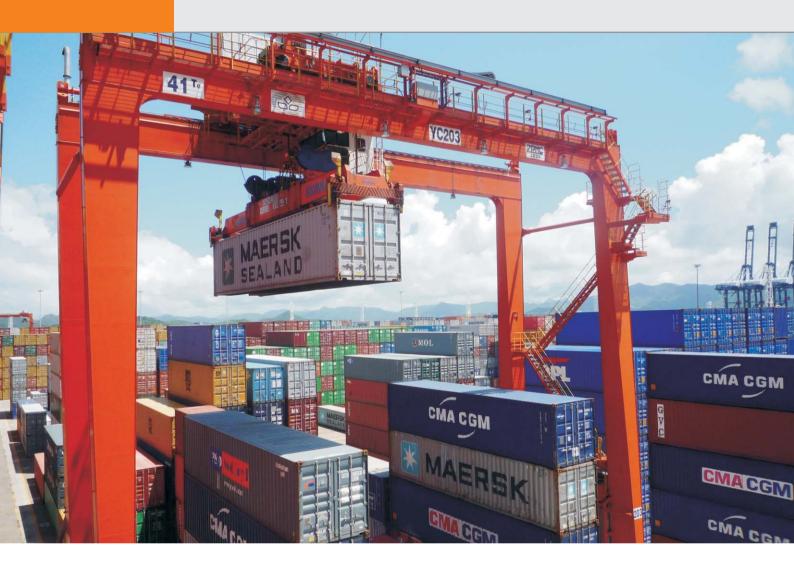
# **Container Terminal Solution**



### Introduction

For port operation, how to optimize the process of container handling from ship to yard and then to ex-factory area, so as to achieve the aims of increasing efficiency and reducing cost, is the most important topic in terms of revenue generation. To accomplish this goal, the world's leading container yard and port have applied one after another various advanced TOS (Terminal Operation Systems) to optimize the efficiency of container handling.

To allow container terminal customers to use TOS easily to dispatch different cranes, reach stacker, trailers and workers, Darveen proposes the container terminal solution and also designs a complete range of industrial computers coupled with stable wireless communication networks and relevant technologies and applicable to different service environments. These allow the control center to easily control computer terminals mounted in any place on the wharf, and to improve the wharf operation efficiency.

### **Solutions**

#### • Vehicle Computers for Cranes and Reach Stackers

For different service conditions of various cranes (RTG/RMG/Shore Crane) and reach stackers, Darveen designs a larger-size vehicle computer for mounting in the cab based on customer requirements. Also, Darveen offers a waterproof wide voltage power supply, a waterproof external mounted keyboard and various antennas (rubber stick, ceiling-mounted or fiberglass antenna) for effectively meeting customers' demands in stability and convenience.

#### Vehicle Computer for Trailers

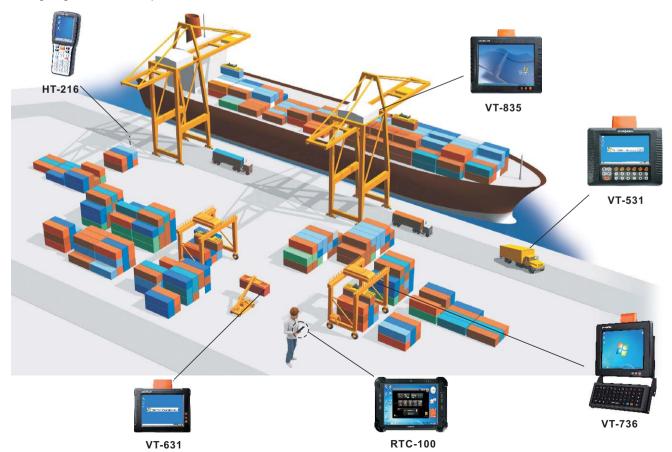
- For the service conditions of container trucks, Darveen designs a small-sized vehicle mounted computer for easy mounting in the cab. Also, Darveen also provides a waterproof wide voltage power supply, an integrated function keyboard and various antennas (rubber stick, ceiling-mounted or fiberglass antenna) for effectively meeting customers' demands in stability and convenience.
- **Dual display computer for container trucks:** In order to meet demands of particular customers, we design a LED display on the other side of vehicle computer to allow workers outside to know clearly the task of each trailer at a glance.
- **LED display for trailer:** In order to satisfy the needs of some of our customers, we design an independent high brightness LED display for trailers to allow workers outside to know clearly the current task of each trailer at a glance.

#### Handheld computer and Rugged Tablets

To meet demands of dock and yard workers in mobile terminals, we design two series of handheld terminals and industrial panel PCs to meet customers' demands for different sizes of mobile terminals.

#### Gate Control Computers

For gateway control, we provide a fan less embedded computer (EBC) with more serial ports, power over Ethernet (POE) and a higher grade of industrial protection.



## **Advantages**

#### Comprehensive Wireless Communication

In order to improve data communication between vehicle mounted computers and control centers, Darveen's vehicle mounted computer supports multiple methods of wireless communication, including WIFI, GPRS, 3G and the latest LTE, for more choices by customers. Furthermore, this kind of computer is designed for multipleantennae, and could be equipped with 4 kinds of RF antennas simultaneously, satisfying the needs of many customers.

#### Professional mounting-bracket design

Based on special service conditions of various cranes, reach stackers, trailers, and other equipment, Darveen design a complete range of brackets to install vehicle mounted computers securely and safely in a variety of positions.

#### Complete antenna solutions

A complete range of antennas, including types of embedded, glue stick, probe and fiberglass, are available for Darveen's vehicle mounted computers. Furthermore, we also offer accessories such as lightning protectors and signal boosters to furnish antenna solutions under different situations.

#### Power supply with features of waterproof, power ignition, UPS and wide-voltage

As unstable power supply of trucks and harsh environment, Darveen especially design wide-voltage, lightning protector and aviation-connector for power supply to improve their performance. Power ignition to delay booting or shutdown, and a UPS battery to keep the computer on during replacement of forklift battery.

#### High industrial protection grade

We have quite high requirements for protection of our vehicle mounted computers on account of the violent vibrations in various cranes and forklifts, the extremely low or high working temperatures in different geographical locations and the corrosion of salt mist and rainwater.

#### Remote equipment management software

In order to help workers in control centers easily diagnose vehicle mounted or handheld computers at anytime and to also allow them to easily update software, we offer remote equipment management software to provide convenience for workers to manage remote devices without the need of going to the site.

## Applicable Industries

- Container terminal
- Container yard
- Train station
- Crane in steel mill