

# Terminal Intelligent Gate Control Solution



## Introduction

The transmit speed of container terminal gate has a directly effect on the efficiency of receiving and sending container, and whole operation efficiency of the terminal. It is also a rendezvous point of handing over equipment and information with outside world such as customs, box stations and freight forwarders etc. Due to the terminal has devoted to improve their gate transmit ability by adopting all kinds of latest technology, the terminal, a place with high-tech assemble, has become a window to get well understanding of the terminal's station.

The speed of getting the container number and car license number greatly decides the gate's passing ability. The container information like container number, box sharp, size, weight, destination port and discharging port etc. has been input to TOS system from all kinds of way before they enter into the terminal gate. While entering the gate, the system will call out the other relevant information of this container box and assign it a most appropriate position. Gate also needs to get the license plate number, because the box number is too small to identify for the driver. They need to refer to the box number to process the container firstly, which forces the binding of license number and container number while entering the terminal gate.

## Solution

How to access the container and trailer license plate number is the key for gate control. The most common technologies to finalize it are OCR (Optical Character Recognition), IC card and RFID (Radio Frequency Identification). Associated with the use of these high technology and accuracy improved, each terminal is moving toward unmanned gate direction.

1. OCR is mainly used in container number identification. You just need to apply the OCR equipment in gate, not need to coordinate with factors from outside world like the trucks.
2. The IC card of contact type can read the message successfully next to 100%. But it needs the vehicle manage department to ensure each local vehicle that wants to access the gate is equipped with IC card and read message at pointed position, except of equipping with reading data equipment of IC card at terminal.
3. RFID technology of non-contact type is a very mature technology to replace the IC card, the driver don't need a parking to swiping card. Darveen fanless embedded controller products (EBC Series), contain rich I/O interface, can provide up to 8 serial ports, multi-channel video input interface, 2-9 Gigabit internet access ports and multi-channel DIO, it is the best choice of the intelligent gate application for terminal.

