



The faster way to the pallet

Complete solution for pallet pocket recognition

- Powerful video processing unit with pre-installed "Pallet Detection System (PDS)" software
- Interfaces for 6 camera heads and other sensors for efficient AGV controller
- High frame rate ensures reliable and fast tracking during pallet movement

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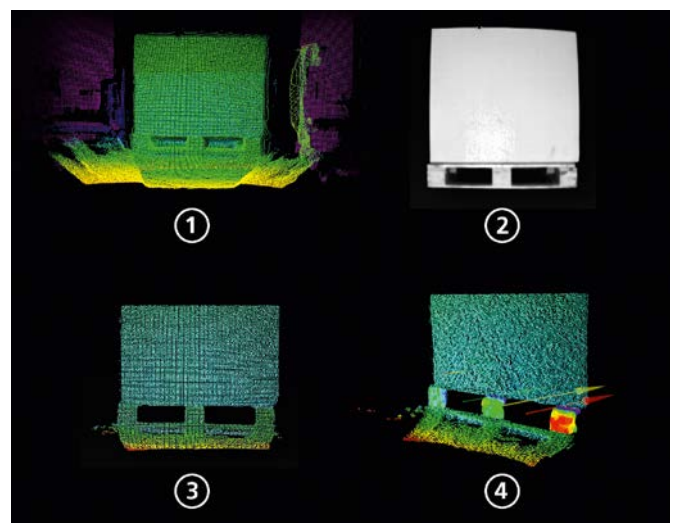


Video Processing Unit (VPU)			
Version			Order no.
Connection for up to 6 cameras, Gigabit Ethernet interface for sensor signals; integrated pallet detection system			OVP812
With additional collision protection			OVP813
Camera heads			
Dimensions [mm]	Image resolution [pixels]	Angle of aperture [°]	Order no.
90 x 31 x 26	38 K	60 x 45	O3R222

Powerful solution for more efficiency

The Pallet Detection System PDS contributes to more efficient intralogistics processes by accelerating autonomous and semi-autonomous pallet handling. The proven combination of powerful 2D/3D camera heads and an equally high-performance video processing unit has been extended to include software that quickly and precisely identifies all standard pallet types with two pockets, fully automatically and regardless of their position, and takes over the navigation of the forks down to the centimetre.

The quality of the camera heads and the high repetition rate ensure the availability of meaningful 3D point clouds even in dynamic and difficult operating conditions. Unexpected pallet movements are quickly detected so that the programme can quickly implement fork tracking.



In a first step, the PDS pallet detection processes the amplitude and distance data detected by the O3R2xx vision sensor ①. Unlike the 2D image ②, the 3D image may still contain artefacts and interference. This is why the image is filtered in the next step to “clean” the image and eliminate unwanted pixels ③. The filtered image is then used to exactly determine the location and position of the pallet and its pockets in three dimensions ④.

BEST FRIENDS

We reserve the right to make technical alterations without prior notice. · 11.2024
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Graphic display
Programmable HMI for the control of mobile machines



Multiturn encoders
Precise detection of positions and rotational movement



ecomatController
Powerful 32-bit controllers reliably control AGVs



For further technical details, please visit:
ifm.com/fs/OVP812