Product family overview



Pallet Classification System

Quick and reliable classification of different pallet types

SICK
Sensor Intelligence.

Advantages



Accounting clarity for your pallets

Out of the millions of pallets needed and in circulation, some are subject to a deposit and others are subject to various pooling systems. If pallets are categorized incorrectly or not at all at receiving, a company may end up paying for pallets that aren't subject to a deposit or not exchanging them on a one-to-one basis. And manually inspecting pallets not only tends to yield errors, it's also time intensive.

Recording, identification and transmitting information during ongoing operations



Automated, dynamic image acquisition
Two midiCam2 2D machine vision cameras record the marked pallet block moving through the conveyor system. Optionally, an additional midiCam2 placed above the conveyor belt can record and document the pallet's load.



Classifying pallets with deep-learning technology
The images of the pallet block, the individual evaluations, and the overall result are based on a pretrained deep-learning classification network. Using the neural approach does not require any expert knowledge and enables simple installation and operation.



Readout of relevant master data
The Sensor Integration Machine SIM1012 transmits the acquired data to the higher-level warehouse management system. This creates full transparency with regard to the recorded pallet types so the customer can correctly complete accounting.

Save costs by correctly accounting for deposits and create transparency in pallet stocks through the reliable classification of different types of pallets.



Technical data overview

Ambient temperature, operation	0 °C ... +40 °C
Supply voltage	24 V DC (21.6 V DC ... 26.4 V DC)

CE

Product description

The Pallet Classification quality control system automatically classifies the pallets arriving at the incoming goods department. To do so, midiCam2 2D machine vision cameras record images of the pallet blocks while the pallet passes through the system. With the help of a pre-trained artificial neural network, the pallet type, for instance EPAL, Chep or UIC, is checked. This prevents incorrect deposit payments and allows for smooth pallet management.

At a glance

- Automatic pallet classification during operation
- Artificial neural network for evaluating a wide range of pallet types
- Sensor Integration Machine as an interface to warehouse management systems
- Additional midiCam2 records pallet loads
- Simple extension of the currently supported pallet types
- Space-saving design

Your benefits

- Direct recording of deposit pallets for correct billing – without manual work
- Transparency about pallet stocks
- No expert knowledge needed to operate the system
- Easy integration into existing plants
- Documentation of the incoming load in the incoming goods department

Fields of application

- Areas with high pallet turnover, for example retail, food and beverage industry and production logistics

Ordering information

Other models and accessories ➜ www.sick.com/Pallet_Classification_System

- **Industries:** Distribution and fulfillment

Load documentation	Type	Part no.
✓	PACS1000-321	1127835
–	PACS1000-221	1132663

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com