VISION

CSEMAT Pty Ltd
CONTROL SYSTEMS ENGINEERING MANAGEMENT AND TRAINING

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CSEMAT VISION Wagon Identification Module

Wagon ID enhances your rail loading reporting systems.

Based on Optical Character Recognition (OCR), the system is capable of identifying the printed wagon numbers and presenting the data directly to a control system or HMI. This can be used for reporting system cross referencing. For ease of integration, the smart camera can be linked to higher level systems using a number of industrial protocols.

The OCR algorithm can also give a quality factor as to the accuracy of its measurement. We can optimise it further if linked to any external train manifest.

CSEMAT VISION Speed Measurement Module

CSEMAT VISION can detect edges, wheels or any other unique feature, track them and determine wagon speed. This may be important for timing purposes in a train loading system. Its unique feature is its calibration input from independent sources.

Features of the speed measurement module.

- 100 millisecond update time
- Adaptable for different wagon
- construction types
- Utilises same industrial protocols
- as Wagon ID module
- Auto or manual calibration
- input functions available

Technical Features (typical hardware platform)

- NI 1776 Smart Camera
- High Performance 1600, 1200 (2 MP), 15 FPS, Monochrome
- 1.6 GHZ processor and real-time
- operating system
- Waterproof and dust proof design with IP67 rating, M12 connectors, and lens cover.
- 512MB System memory RAM
- 2GB Nonvolatile storage memory
- Industrial Protocol – Modbus/TCP,
- RS-232, Ethernet / IP, Modbus, TCP/IP

CSEMAT Vision Wagon Identification and Speed Measurement Modules