

# MOBY Identification Systems Introduction

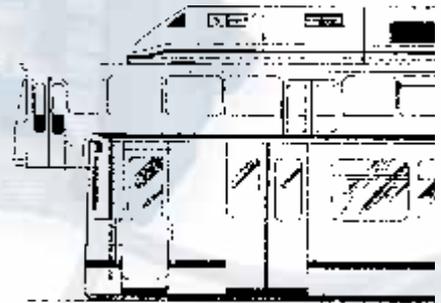
## Overview

Users working with identification systems all have their own personal requirements. One might require low-price SmartLabels for logistics and another might require rugged data memories for assembly lines. In the automotive industry, such mobile data storage units (MDS) must above all be heat-resistant, and for transport control and logistics it is essential to have long-range data memories.

Irrespective of your requirements: we have the solution: MOBY®. These clever electronic identification systems from Siemens are the right choice for pioneering companies that exactly know what they require for the future. The reason: MOBY identification systems control and optimize material flow.

They carry out identification functions reliably, rapidly and economically, are insensitive to contamination, and save data directly on the product. We of course offer our complete servicing facilities worldwide for these systems.

Successful industrial companies worldwide use the MOBY identification systems – from the leading supplier.



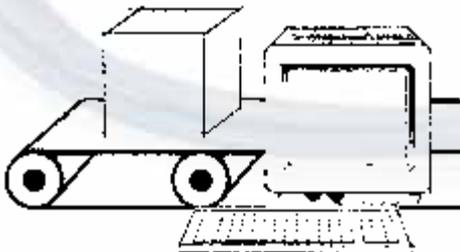
**Transport/traffic**  
**Transport logistics**  
**Detecting**

**MOBY U**  
**MOBY R**



**Industrial production**  
**Assembly lines**

**MOBY I**  
**MOBY E**  
**MOBY U**



**Warehouse/logistics**  
**Distribution**  
**Order picking**

**MOBY D**  
**MOBY F**



## Overview

The advantages of MOBY data memories compared to other information media, for example barcodes, are quite clear:

- MOBY carries out identification fully automatically, rapidly and with 100% transmission reliability.
- MOBY is insensitive to temperature fluctuations and contamination such as oil, dust, water.
- MOBY data memories can be repeatedly reused.
- Production and quality data can be saved directly on the product; up to 32 KB.
- MOBY has a long service life.
- MOBY has a convincing cost/benefits ratio.

Furthermore, MOBY is fully integrated into the SIMATIC/SI-COMP/PROFIBUS environment or PCs with Windows, can be connected to any PLCs and – particularly important – it can be easily configured and installed exactly according to customer requirements.

Mobile handheld terminals provide even greater flexibility for a wide range of applications.



# MOBY Identification Systems Introduction

## MOBY D



- For logistics and distribution applications
- 13.56 MHz identification system
- Read/write distance up to 680 mm
- Low-cost EEPROM data memory (44/112 byte) up to +80 °C or +200 °C
- Bulk/multitag capability
- High data transfer rate ( $\geq 9.5$  ms/byte)
- Powerful mobile handheld terminal
- Approvals: EN 300330 (Europe)

## MOBY F



- For logistics and distribution applications
- 125 kHz identification system
- Read/write distance up to 420 mm
- Low-cost read-only or EEPROM data memory (192 byte/224 byte) up to +130 °C
- Bulk-/multitag capability
- High data transfer rate ( $\leq 10$  ms/byte)
- Powerful mobile handheld terminal
- Approvals: EN 300330 (Europe)

## MOBY E



- for logistics applications and for industrial assembly lines
- 13.56 MHz identification system
- Read/write distance up to 100 mm
- Various EEPROM data memories (752 byte) up to max. +150 °C
- Bulk/multitag capability (only SIM)
- High data transfer rate ( $\geq 2.8$  ms/byte)
- Powerful mobile handheld terminal
- Approvals<sup>1)</sup>: EN 300330 (Europe)  
FCC Part 15 (USA),  
UL/CSA

### Special features:

- |   |   |                           |
|---|---|---------------------------|
| • For SmartLabels based on I-Code 1 and standard ISO 15693, e.g. I-Code SLI, Tag-it HFI | —   | —                         |
| • Customer-specific data memories and antennas on request                               | • Customer-specific data memories and antennas on request | • Tool pill to DIN 69 873 |
- Standard components (catalog products) for versatile applications and individual solutions
  - High reliability even with contamination (oil, dust, ...) or temperature fluctuations
  - Simple integration into SIMATIC S5/S7 or PROFIBUS-DP/DP-V1
  - Connection possible to any systems/PC through serial interface
  - Worldwide configuring and service support

1) Also see „Manual for Configuration, Assembly and Service“

## MOBY I



- For universal industrial application
- 1.81 MHz identification system
- Read/write distance up to 150 mm
- Comprehensive range of rugged FRAM/EEPROM data memories (max. 32 KB) up to +85 °C or +220 °C
- 
- High data transfer rate (≥ 0.8 ms/byte)
- Powerful mobile handheld terminal
- Approvals<sup>1)</sup>: EN 300 330 (Europe)  
FCC Part 15 (USA),  
UL/CSA

## MOBY U



- For universal industrial and logistics applications
- 2.4 GHz identification system
- Read/write distance up to 3000 mm
- Comprehensive range of rugged RAM data memories (max. 32 KB) up to +85 °C or +220 °C
- Bulk/multitag capability
- Very high data transfer rate (≥ 0.12 ms/byte)
- Powerful mobile handheld terminal
- Approvals<sup>1)</sup>: EN 300440-2  
FCC Part 15C,  
UL/CSA

## MOBY R



- Ideal when objects must be localized in real time
- 2.4 GHz Real time locating system
- Localization range up to 300 m with an accuracy of 3 m
- Read/write distance up to 3000 mm
- 32 bit ROM
- Bulk capability, practically unlimited number of MDS
- Data transfer rate depends on flashing rate (5 s up to 9 h)
- Powerful mobile handheld terminal
- Approvals: EN 55022 EN 55024  
FCC Part class B

- No battery needed for FRAM data memory
- Comprehensive range of read/write units

- Automatic switching to vacant frequency channels (frequency hopping)
- Read/write range can be reduced with software

- Write/read device (SLG) can be incorporated in a WLAN infrastructure
- The TRIG R201 instantly recognizes a passing MDS (mobile data storage)

Powerful „Visibility Server Software“ makes it possible to calculate a position

Hooks up to a server through LAN/WLAN