# SIEMENS

# MOBY U identification system with a read/write range of up to 3 m

## Latest Information on MOBY

**Greater and greater demands are being placed on identification systems in the most varied of applications for the automotive industry, logistics and distribution. Large read/write distances, multi-tag capability or rapid and reliable data transfer under difficult conditions are being demanded. Other requirements are that out-of-range distances and reflections do not influence the results of identification, that other 2.4 GHz systems are not subjected to interference and that little effort is needed for installation. Maintenance-free operation and simple system integration are also expected by users as a matter of course.**

**In short, a whole series of requirements for which there are only a few solutions.**

**MOBY U Identification System. And there are many reasons in its favour.**

By using proven highly-innovative UMTS/GSM technology from the telecommunications sector, it became possible to develop a fast and efficient solution to the known problems encountered with conventional 2.4 GHz systems. MOBY U thus features the performance capability of innovative HT technologies and also ensures continuity thanks to its compatibility with the MOBY I identification system which is already in use all over the world.

Main uses in logistics and industrial production
• Main assembly lines in the automotive industry (bodyshell construction, paintshop, assembly)
• Vehicle identification/road access monitoring for haulage companies, depots etc.
• Containers/pallets/load-carrier identification in transport logistics and distribution
• Traffic control systems
• Assembly lines.

**World-wide certification**

MOBY U has been designed and certified for heavy industrial use all round the world. It uses the globally certified ISM frequency band at 2.4 GHz and its emission level of < 10 mW is far below international limits, thus excluding the possibility of any damage to health.

**Simple start-up and years of maintenance-free operation**

The use of proven and innovative UMTS/GSM technologies were the preconditions which enabled the following:
• A homogeneous transmission field with circular polarization makes antenna tuning unnecessary.
• Reflections, interference and overreach are actively excluded.
• Automatic selection of free channels
• Automatic mutual synchronization of up to 3 write/read units
• Can be directly mounted on metal
• Service functions for rapid fault analysis

# PRODUCT SOLUTIONS

# The main characteristics at a glance –

## Innovative technologies simplify configuration, start-up and maintenance

- It uses the globally certified ISM frequency band at 2.4 GHz
- Transmission ranges up to 3 m can be limited in steps by software programming
- Read/write with a high level of net data transmission speeds of up to 16 Kbyte/s
- Innovative GMS and UMTS functions feature:
  - a high level of data integrity
  - suppression of overreach/reflections and interference
  - simple start-up, i.e. no interference-source measurement and antenna alignment
  - no effect on other users in the frequency band thanks to automatic selection of free channels without interference (frequency hopping) and very low emission values < 10 mW, EIRP
- Wide selection of robust data memories with a RAM of up to 32 Kbytes (prepared for up to 256 Kbytes) and up to +85 °C or +220 °C cyclically
- Multi-tag capability (up to 12 MDS)
- File handling with data access via logical addresses (similar to DOS)

- Call-compatible with MOBY I
- Mobile hand terminal (available soon)
- Designed and certified for heavy industrial use all round the world: CE, BAPT, FCC, UL and CSA
- Ability to cope with future developments thanks to standardization acc. to ISO 18000-4
- World-wide support and service

### Mobile data memories MDS U 313, MDS U 524 and MDS U 589

- 2 or 32 Kbyte RAM
- 32-bit serial number incl. 16 byte uniquely recordable fixed code memory
- High degree of protection up to IP 68
- Operating temperature: -25 °C to +85 °C
- Special heat-resistant data memory up to +220 °C for e.g. paintshop incl. KTL
- Robust long-life housing with the dimensions (mm): 111 x 67 x 23.5 or ø 114 x 83 (MDS U 589).

### SLG U 92 read/write unit

- Max. read/write distance: 3 m, can be limited in steps by means of software
- Integrated antenna: with circular polarization

- RS422 or RS232 interface for link-up to any systems
- RS232 service interface
- Degree of protection IP 65
- Operating temperature: -25 °C to +70 °C
- Dimensions (mm): 290 x 135 x 42 (without connector)

### MOBY U with tailor-made system integration for simple incorporation in the respective application

- System integration by means of interface module (ASM 452, ASM 473, ASM 475), including FC for PROFIBUS-DP-V1 and SIMATIC S7
- Windows 98/NT C library for direct integration in the PC/SICOMP
- Can be integrated in any system via RS232/RS422

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