



**MOBY® U**  
**Mobile Data Memory - MDS U524**

**Product Sheet**

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**Description**

The MDS U524 is a mobile data memory (MDS) of the MOBY U long range identification system. It offers a large, 32-Kbyte memory. It is especially designed for use in the automotive industry and other industrial production systems with similar requirements. Very low power consumption ensures a long life of approx. 8 years. The extremely sturdy, interference-proof MDS can be read and write-accessed at a distance of up to 3 m. Addressing of the MDS U524 is easy with the filehandler familiar from MOBY I (logical file addressing). In addition, the MDS can also be used with only direct memory access. With its transmission frequency in the ISM frequency band at 2.4 GHz, the MDS offers a very high net data transmission speed of approx. 8 Kbytes per second without multitagging and approx. 4 Kbytes per second even with multitagging and two MDSs.

**Ordering Data**

Product Description	Order No.	L-Price EURO/Unit	AL	ECCN
Mobile data memory MDS U524 with 32-Kbyte memory	6GT2500-5CE10	See FDB.		

**Technical Data**

<b>MDS type</b>	<b>MDS U524</b>
<b>Identification system</b>	<b>MOBY U</b>
Fixed code memory	MDS identification number (32 bits)
Read only memory	128 bits, can be written once by user
Application memory	
Memory technology	RAM
Memory size	32 Kbytes
Memory organization	Byte access, filehandler mode
Data retention	10 years
MTBF (at +40°C)	2.5 x 10 <sup>6</sup> hours (regardless of battery)
Read/write cycles	10 <sup>7</sup> at +25°C
Read/write distance	0.15 m to 3 m
Multitag capability	Yes
Power supply	Battery
Battery lifespan	≥ 8 years <sup>1)</sup> ; no changing
Shock/oscillation in acc. w. DIN EN 60721-3-7, class 7 M3	100 g/10 g

Free fall in acc. w. DIN EN 60068-2-32	1 m
Torsion and bending stress	Not permitted
Mounting	4 M4 screws
Recommended distance to metal	Can be mounted directly on metal
Protection rating in acc. w. DIN EN 60529	IP 68
Chemical resistance	See configuration manual
Housing	
Dimensions [L x W x H]	111 x 67 x 23.5
Color/material	Anthracite/plastic PA 12 GF 25
Ambient temperature	
During operation	-25° C to +85° C
During transportation and storage	-40° C to +85° C
Weight, approx.	100 g
<b>Certifications</b>	RF: I-ETS 330440+C1:1997 SAR: 99/519/EG Safety: EN 60950:2000 EMC: EN 301489-01:2000 EN 301489-03:2000 ENV 50204:1995 FCC Part 15C cUL <sub>US</sub> Safe for pacemakers

1) The lifespan depends on several factors - the temperature, the time the MDS remains in the antenna field of the SLG (zones 1 and 2) and the amount of data read/written.

#### Field Data

	Standard	Minimum	Maximum	
Limit distance ( $S_g$ ), approx.	2.0 m	0.50 m	3.0 m	Over-the-horizon transmissions can be actively limited (in 0.5 m steps from 0.5 m to 3.5 m) by SLG.
Working distance ( $S_a$ )	1.4 m	0.35m	2.1 m	
Transmission window at $S_a$ Length/width	2.8 m	0.70 m	3.6 m	

The field data apply to reading and writing the MDS together with SLG U92 without FCC certification. Applications with SLG U92 with FCC certification have reduced declarations for the transmission field (see product sheet Read/Write Device – SLG U92 wit FCC).

**Dimensional Drawing of MDS U524**

