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SIEMENS

MOBY® U

Mobile Data Memory - MDS U313

Product Sheet

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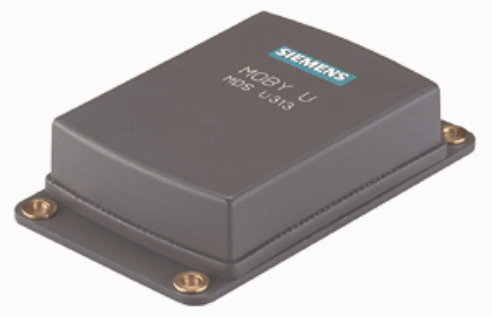
A&D SE PS 3, R. Völler



Description

The MDS U313 is a mobile data memory of the MOBY U long-range identification system. With a storage capacity of 2 Kbytes, it is designed for use in transportation and logistics tasks. Very low power consumption ensures a long life of approx. 5 years. The extremely sturdy, interference-proof MDS can be read and write-accessed at a distance of up to 3 m. The MDS U313 is addressed directly with byte memory accesses. 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 U313 with 2-Kbyte memory	**6GT2500-3BD10**	See FDB.		

Technical Data

MDS type **Identification system**	**MDS U313** **MOBY U**

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	2 Kbytes
Memory organization	Byte access
Data retention	10 years
MTBF (at +40°C)	2.5 x 10^6 hours (regardless of battery)
Read/write cycles	10^7 at +25°C
Read/write distance	0.15 m to 3 m
Multitag capability	Yes
Power supply	Battery
Battery lifespan	$\geq$ 5 years [1]; no changing
Shock/oscillation in acc. w. DIN EN 60721-3-7, class 7 M3	50 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 67
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 +70°C
During transportation and storage	-40°C to +85°C
Weight, approx.	100 g
Certifications	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 $_{C}UL_{US}$ 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	Maxi-mum	
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	0.35 m	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 U313