

S1456 MarkTag HDS *Heavy Duty High Speed R/O Tag*



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MarkTag HDS S1456 is a 2.45 GHz identification tag with extremely short reading time allowing for very fast passing speed. It is specially designed for tough environments and high temperatures. Typical applications are trains, high-speed vehicles and other fast moving objects.

Each tag is factory pre-programmed with an 8 decimal ID number, unique to all tags in the TagMaster family.

The ID number comprises a 32-bit checksum for automatic verification and error detection, thereby effectively eliminating substitution errors even if the tag is far away or under severe noise environments.

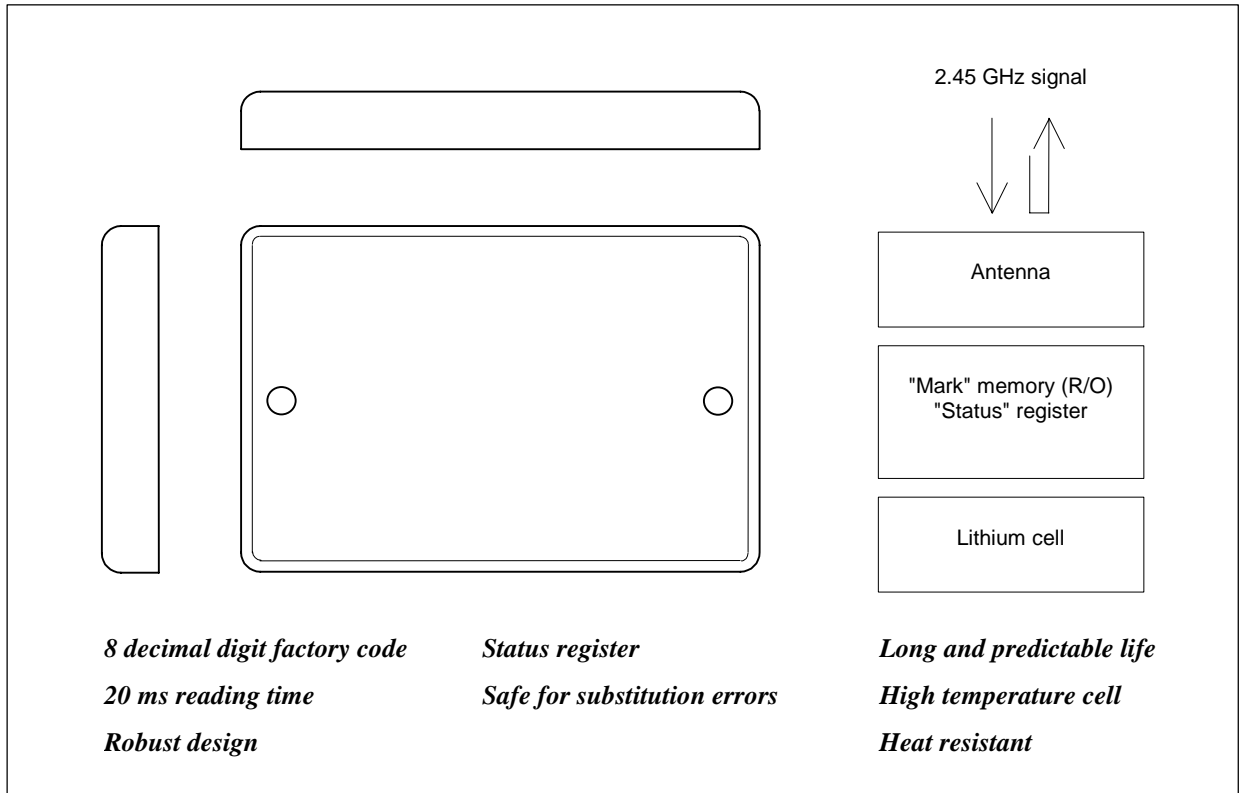
Environmentally harmless lithium cell powering gives long reading range and a high speed. The battery life is totally independent from how often the tag is read or illuminated by any other transmitting source.

The battery resists long-term operation at elevated temperatures. When the capacity is about to run out, a status bit is set and can give automatic warning to the user via the tag reader software.

Life recordings from the manufacturer of the lithium battery cell used in S1456 span for over 15 years. The lithium cell has been qualified against the UL safety standards and does not contain corrosive or toxic active materials.

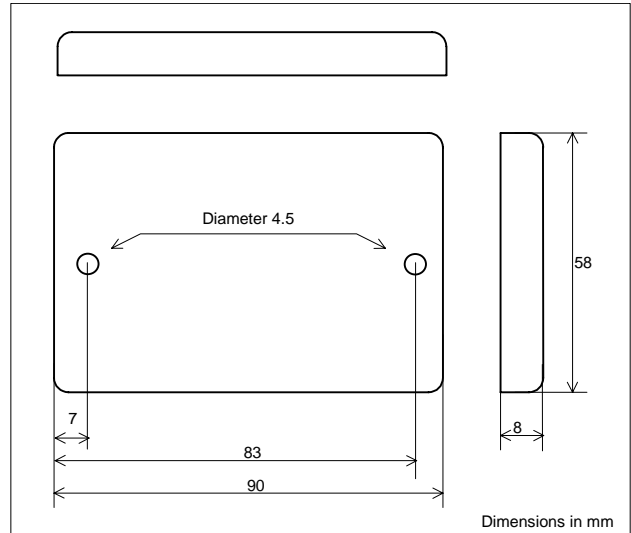
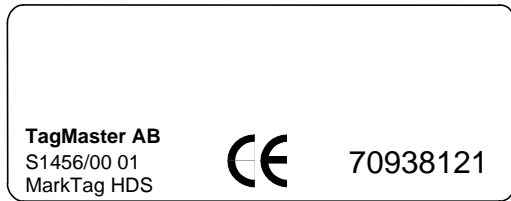
MarkTag S1456 is mounted on any surface, including metal, with M4 screws or adhesive tape. The tag front surface shall be directed towards the Communicator but can be rotated freely in the X/Y-direction.

The design is chemical and vibration resistant, watertight, corrosion free and UV stable. The front side can be printed according to user requirements. The rear side label is printed with type code and serial number.



Mechanical data

Product information according to the figure below is printed on the MarkTag rear side label.



Bottom left serial number have no correlation to the 8 digit electronic ID number.

Weight:	60 grams
Colour:	Black
Logo colour:	Red (186)
Material:	Polymer

Functional data

Reading range, $R_{low\ speed}$:	-
Reading range, $R_{high\ speed}$:	3.4m with S1500 and S1501
	5m with S1503
Writing range, W:	-

Reading time:	20 ms
ID mark:	8 digits, factory coded
Checksum:	32 bit CRC
Multi tag reading:	No

Environmental data

Battery life	8 years	Shock	500 g 1 ms, IEC68-2-27 test Ea	3 x 3 dir	Immunity	Acc. to CE
Life reduction for 2000h@85°C	10%	Bump	40 g 6 ms, IEC68-2-29 Eb	1000 x 3 dir	leg. prETS 300 683	Acc. to CE
Cold IEC68-2-1 Ad	- 40 °C	Vibration	10-500Hz, 5g IEC68-2-6Fc	10 sweeps x 3	dir I-ETS 300 440	
Heat IEC68-2-2 Bd	+ 85 °C	Solar radiation	1120 W/sqm IEC68-2-5 Sa C	56 days	Chemical Resistance:	
Sealing IEC 529	IP 67				Oil, grease	Resistant
					Petrol	Resistant
					Triclorethylene	Resistant
					Acid	Resistant
					Alkali (bases)	Resistant

Options

The ordering code of the product in this data sheet is "MarkTag HDS S1456/00".

The standard ID tag is called S1456/00. Different printing styles are designated as /00, /01, /02 etc.