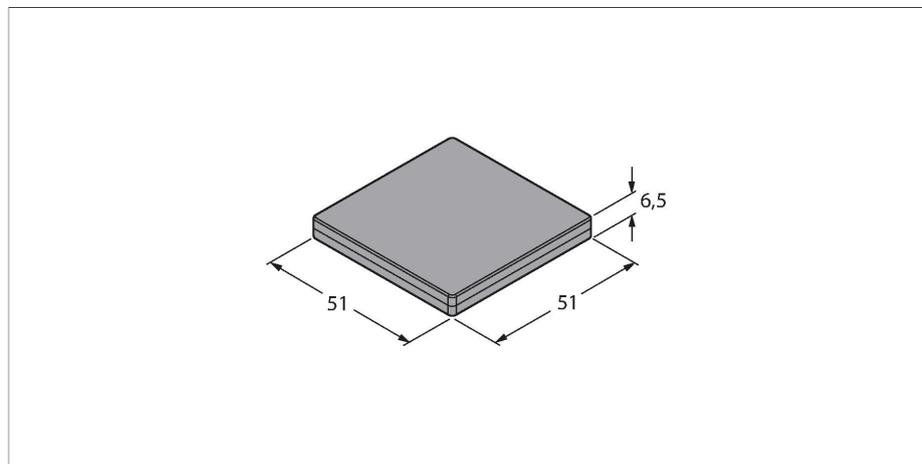


# TW865-868-Q51WH-HT-B112

## UHF Tag



### Features

- The high-temperature tags must undergo adequate stress tests within the proposed temperature processes before deployment. Otherwise, their durability cannot be guaranteed when exposed to temperatures outside the denoted range.
- 1000 cycles with a cool-down time of 20 min/cycle
- The TH-Q51S-HT and TH-Q51T-HT brackets protect the tag from mechanical loads and allow the mounting on metal.
- EEPROM, memory 112 byte
- TID serial number: 8 byte
- Not for direct mounting on metal

### Technical data

Type	TW865-868-Q51WH-HT-B112
ID	100003892
Remark to product	High temperature
Data transfer	Alternating electromagnetic field
Technology	UHF RFID
Region (UHF)	Global (860...960 MHz) ETSI (865...868 MHz) FCC (902...928 MHz)
Reading range on metal	5 m (2W ERP)
Memory type	EEPROM
Chip	Alien Higgs 3
Memory	112 Byte
Memory	Read/Write
Freely usable memory	64 Byte
EPC memory	12 byte
Number of read operations	unlimited
Number of write operations	10 <sup>5</sup>
Typical read time	2 ms/Byte
Typical write time	3 ms/Byte
Radio communication and protocol standards	ISO 18000-63 EPCglobal Gen 2
Temperature during read/write access	-20...+85 °C
Temperature outside detection range	-55...+185 °C
	200 °C, 60 min.
	220 °C, 45 min.
	240 °C, 30 min.
Design	Hard tag
Housing length	51 mm

### Functional principle

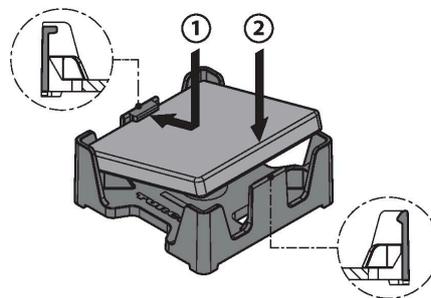
The UHF read/write heads form an air interface the size of which may vary, depending on the combination of read/write head and tag.

The read/write distances mentioned here only represent standard values measured under laboratory conditions and free from any influences caused by materials. Attainable distances may vary due to component tolerances, mounting conditions, ambient conditions and material qualities, especially when mounted in metal. Testing of the application under real operating conditions is therefore essential, especially with read/write on-the-fly!

## Technical data

Housing width	51 mm
Housing height	6.5 mm
Housing material	Plastic
Active area material	Plastic, black
Protection class	IP68
Packaging unit	1

## Mounting instructions/Description



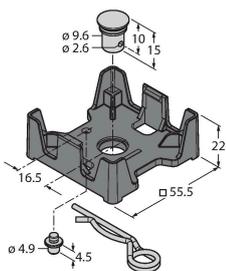
Mounting the data carrier properly in the retainer  
 To avoid damage to the retainer, follow the instructions below.  
 Carefully push both sides of the data carrier in the retainer until they latch (the latches are designed differently):

1. Insert data carrier
2. Latch data carrier

## Accessories

TH-Q51S-HT

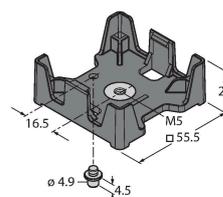
7030541



Retainer with spring cotter for Q51 tag. The use of the 4.5 mm lock pin ensures protection against twisting of the retainer or the tag. Suitable for repeated use in high-temperature. Only suitable for a single assembly (engage the tag in the retainer). The use of the retainer results in a clearance of 12 mm between metal to tag.

TH-Q51T-HT

7030540



Retainer with M5 threaded bush to screw on Q51 tags. The use of the 4.5 mm lock pin ensures protection against twisting of the retainer or the tag. Suitable for repeated use in high-temperature. Only suitable for a single assembly (engage the tag in the retainer). The use of the retainer results in a clearance of 12 mm between metal to tag.