

ScanGate® MultiTag

Hybrid Transponder NFC - UHF with identically UID and TID

Worldwide unique ID, R/W memory, more than just a simple RFID transponder

A rugged design features optimal adaption to the application



ScanGate® MultiTag Transponder

NFC and UHF in a rugged housing, designed for harsh environment!

- ❑ Dual Frequency 1-step inlay
- ❑ Common unique ID
- ❑ Shared memory
- ❑ Minimum 100k write cycles endurance
- ❑ Extended temperature range (-40°C to +85°C)

Features and Benefits, Technical Data, how it works and what it does



NFC interface

- ❑ ISO/IEC 14443A -3 compliant tag
- ❑ NFC Forum Type 2 compatible
- ❑ Enables NDEF data structure configurations
- ❑ Communication baud rates at 106kbps
- ❑ 7 byte unique ID number using same serialization as EPC interface
- ❑ 1920-bit user's memory
- ❑ Anti-tearing support for NFC capability container (CC) and Static/Dynamic lock bytes
- ❑ NFC Memory locking mechanism per block/page
- ❑ ACCESS counter increased at first reading
- ❑ Optional read-only locking function
- ❑ Optional limit of unsuccessful LOGINs
- ❑ Optional security timeout for unsuccessful LOGINs
- ❑ Optional control of EPC privacy features
- ❑ UHF power detection

EPC interface

- ❑ ISO/IEC 18000-63 compliant
- ❑ EPC Gen2 V2 compliant
 - Alteration EAS compliant
 - Tag Alteration (Core) compliant
- ❑ 128-bit or 224-bit UHF/EPC encodings
- ❑ 96-bit TID using same serialization as NFC interface
- ❑ 160-bit or 64-bit USER memory
- ❑ 32-bit Access and Kill passwords
- ❑ Fast writing using the *BlockWrite* command
- ❑ Block permalock for USER memory
- ❑ NFC field detection
- ❑ NFC ACCESS counter is readable

The chip corresponds to the latest generation of contactless devices, bringing innovative features to the NFC and EPC™ worlds. It combines two functionalities on one single die, the EPC technology used for long range application purposes and the NFC used to exchange data in a proximity range. Both protocols may share a common unique ID.

The chip is a dual frequency device supporting ISO/IEC14443 Type A, NFC Forum™ Type 2 specifications, ISO/IEC18000-63 and EPC Gen2 V2. Additional features have been added to provide chip privacy. For the NFC interface, the smart counter increments its value each time the NFC message has been read by the end-user.

Each chip is manufactured with a 96-bit unalterable unique identifier (UID) to ensure full traceability. The same UID number is used by both RF protocols. During an ISO/IEC14443 anti-collision procedure, the 7 bytes which are part of the 96-bit are sent back by the transponder IC.

The chip offers two non-volatile memories which are accessible by both RF air interfaces. The two memories are segmented to implement multiple applications.

Supported is the optional *BlockWrite* command, enabling the fast encoding of a 96-bit EPC. As well supported is the optional *Untraceable* command to hide portions of memory of the tag.

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Applications

Targeted applications and market segments include vehicle, assets and product authentication. The tag based on the Hybrid Multitag technology provides multiple benefits and usages via the EPC communication interface like stock inventory, product returns, and data privacy. The same tag or card or even label also enables new marketing services like product information or loyalty programs using an NFC enabled smartphone.

NFC

- Product Information
- Wifi, Bluetooth pairings
- Smart posters, Advertisings
- Coupons, loyalty programs

EPC

- Supply chain management
- Tracking and tracing
- Container identification
- Asset control

Asset Tracking and Tracing

Assets and inventory are a main part of the property of a company. Sustainable and reliable marking with ScanGate® Multitag with a worldwide unique ID enables tracking and tracing and easy continuous inventory.

Vehicle Identification and Logistics

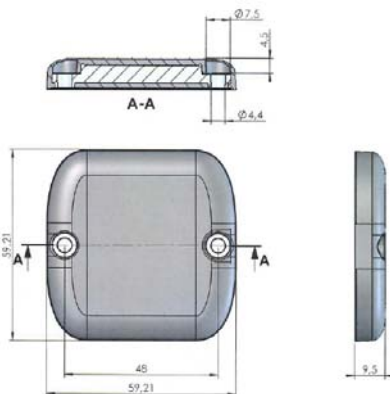
ScanGate® MultiTag provide

- Access to private, business and public premises
- Control of refuelling and collect refuelling data automatically
- Authentication to enable refuelling



Dimensions and Ordering Codes

Dimensions:



ScanGate® MultiTag

Part Numbers

SGS-MT-40013A-MOM

MultiTag UHF/NFC Hybrid Transponder
-MOM -mount on metal surfaces

SGS-MT-40013A-STD

MultiTag UHF/NFC Hybrid Transponder
-STD -mount on non metal surfaces
Maximum reading distance for UHF

SGS-MT-40013A-UNI

MultiTag UHF/NFC Hybrid Transponder
-UNIversal for metal and non metal surfaces

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