

Q40100-DUALTAGspecial

DUAL BAND UHF/HF RFID transponder

- passive RFID communication ISM UHF band + HF band (ISO15693)
- EPC Class1 Gen2 + NFC compatible
- Shared HF and UHF accessible EEPROM memory
- On metal and non-metallic flexible mounting possible
- useable under harsh environmental conditions
- especially designed for mobile maintenance and asset management of metal objects under industrial conditions

This transponder device is an integral part of *microsensys* iID® system solutions.



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This data sheet is subject to change. Please contact microsensys for latest technical information. Picture may differ from original product.

Q40100-DUALTAGsp 011.DOCX

Contactless interface:

far field UHF RFID system iID®4000, near field HF RFID system iID®2000

Chip Type / Compliance:

em | echo-V / UHF: EPC Gen2v2, ISO1800-63
HF: NFC forum type 5 compatible ISO15693/18000-3

Carrier Frequency / Communication Rate:

UHF: 860-868 MHz, 915 MHz (preferably 860-868 MHz), HF: 13.56 MHz
UHF: forward link: 40-160kBit/s, return link: 40-640kBit/s, HF: 26.4 kbps

Polarisation:

linear

Communication Distance:

UHF: 0 ... 6.5 m, HF: 0 ... 8 cm
(depending on reader system and environmental conditions)

Memory parameters:

EPC/TID memory:

Up to 480-bit EPC/UII encodings, 64bit HF UID, 96bit UHF TID memory

User memory:

246Byte HF and 246Byte UHF maximum user memory

Type:

EEPROM

Endurance:

100000 cycles, data retention min. 50 years (T<55°C)

Sensor / security features:

Sensors:

-

Write protection:

lock feature

Password:

-

Authentication:

-

Originality:

dual frequency, shared memory

Environmental:

Temperature and climate resistance:

Storage temperature:

-40°C ... +85°C

Operating temperature:

-40°C ... +65°C

Environmental test conditions:

storage in climate chamber (85%rH, 85°C) for 24 hours

IP-Protection class:

IP 68

Chemical resistance:

Immerse for 24 hours:

motor oil, Ethanol, salt mist (IEC60068-2-11)

Mechanical resistance:

Vibration:

according to IEC60068-2-6

Drop test:

according to IEC60068-2-31

Operation:

Functions:

INVENTORY, READ, WRITE, (PERMA)LOCK

Measurement:

-

Reading:

Industrial environment:

INDUSTRY 0906 UHF plus M8/M18 antenna, stationary industrial read write unit

Desktop/OEM environment:

iID® module U80

Mobile use:

iID® POCKETwork, iID® PENsolid wireless reader with Bluetooth™ interface

Software:

iID® DEMOsoft for PC x86/x64, iID® UII writer for PC x86/x64

iID® DEMOsoft for Android

Device interface:

UHF: ISO18000-63, EPC Gen2v2

HF: ISO15693/18000-3, NFC forum type 5 compatible

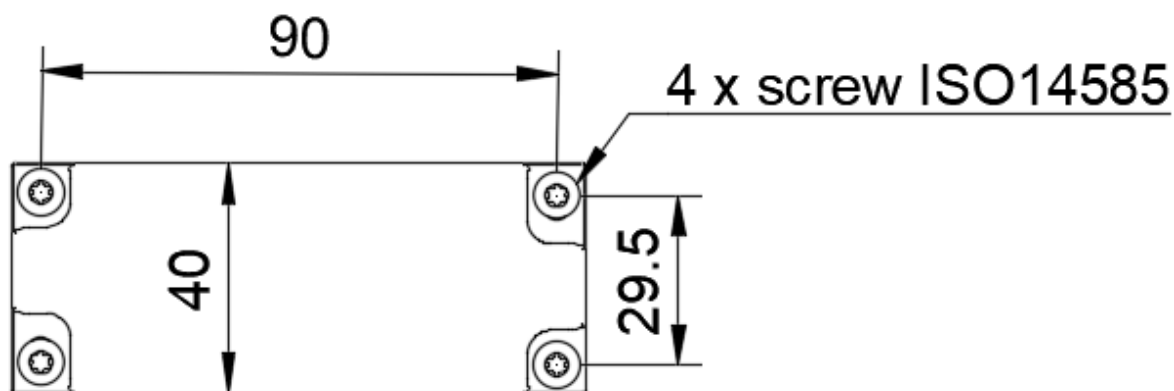
iID® driver engine Windows/Android (for iID® contactless RFID interfaces)

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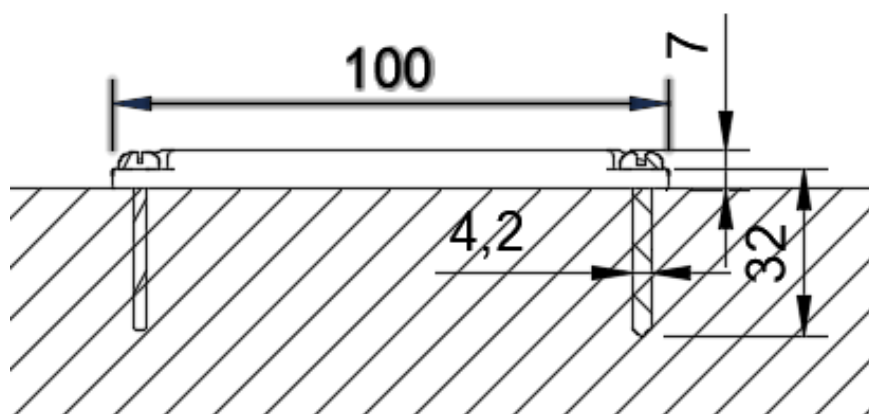


Device type:	Transponder	Unit
Mounting	Adhesive glue or screw mounting	
Package	Glas fibre enforced plastic, metal back plate	
Dimension	Approx. 40 x 100	mm
Thickness	7	mm
Delivery form:	Individual	
Marking:	one color graphic print, serialization possible Optional: customer logo, serialization and TAG initialization	
Product code	16.380.459.00	

Application & Drawing of Q40100-DUALTAGspecial:



Top view, with screw



Front view, mounted on surface