UHF **Desktop** RE40

RFID UHF reader and writer

Interfaces: USB, Bluetooth® 5.1

Bluetooth® profiles: keyboard emulation and serial emulation

Automatic reading of EPC and/or TID

Data format HEX, ASCII or SGTIN-96 string with optional prefix/suffix

UHF SmartAntenna RE40 UHF Desktop RE40 is a desktop RFID reader, capable of reading UHF tags and transmitting the acquired data to any device equipped with an USB wired interface, including PCs and POSs, or equipped with a Bluetooth radio interface, including Android or iOS smartphones and tablets.

Taking advantage of the integrated linear polarization antenna, the maximum reading distance is around 4 meters depending on the FF-type UHF tags used. Since it is a loop antenna, the reading of miniaturized NF-type UHF tags is also facilitated.

As an alternative to the integrated antenna, to achieve greater reading distances or to be used in special applications, it is possible to connect one external antenna to the UHF Desktop RE40 via an optional SMA connector.

The use of UHF Desktop RE40 is easy and intuitive, thanks to the automatic activation of UHF tags scanning and the use of one LED and a multi-tone beeper to alert the operator of the reading done. A special optical proximity sensor can be used to activate UHF tag scanning only when necessary.

UHF Desktop RE40 is usually powered via the USB interface. This interface is also used for the communication with the device that manages the RFID reader. Bidirectional data transmission occurs in virtual serial mode. A simple serial protocol, named TT-RFID and available on all TERTIUM Technology products, allows the user to carry out all the classic operations of an RFID reader, including ID scanning and reading/writing of the UHF tag memory (specifications of TT-RFID protocol and API in Java language are available for developers).

UHF Desktop RE40 integrates Bluetooth 5.1 radio transmission technology. There are two profiles available: keyboard emulation and serial emulation. In keyboard emulation, the reader is able to transmit data read from UHF tags to any pre-existing application, in any keyboard data input field. In serial emulation, through specially developed applications, the reader is able to carry out any reading or writing operation on UHF tags (API for Android or iOS are available for developers).

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MAN/MACHINE INTERFACE	1 LED and 1 multitone beeper to report the outcome of the RFID scan 3 LED to report the operating status of the reader 1 optical proximity sensor for the RFID scan activation (optional)
RFID ENGINE	ZEBRA RE40 RFID UHF module Air Interface Protocol: EPC Global UHF Class1 Gen2 / ISO 18000-63 Operating Frequency: 865- 928 MHz band for worldwide support Regulatory and Compliance: EMI/RFI EN 55032:2012 / AC:2013 (Class B) EN 5032:2015 /AC:2016 (ClassB) EN 55024:2010 EN 5024:2010 / A1:2015 EN 55035:2017 47 CFR Part 15, Subpart B, Class B RF Power: max 500mW / 27dBm worldwide, max 250mW / 24dBm Japan Integrated antenna with linear polarization (or external antenna via SMA connectors option available)
INTERFACES	USB type A female connector, Bluetooth 5.1 radio, 1 digital inputs 12V/24V optocupled (optional), 1 digital outputs 12V/24V optocupled (optional)
OS COMPATIBILITY	Android, iOS, Windows, macOS, Linux
MAIN PROCESSOR	Nordic Semiconductor nRF52833
POWER SUPPLY	5Vdc from USB cable
WORKING TEMPERATURE	-20°C / 60°C
DIMENSIONS	Height 11.7cm, Width 8cm, Depth 2.4cm
WEIGHT	70g
PROTECTION DEGREE	IP54

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