

idChamp ® Ultra-RE40e UHF Scanner

UHF RFID reader and writer

Interfaces: USB, Wireless

Wireless 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



idChamp® Ultra-RE40 UHF Reader/Writer is a powerful RFID reader, capable of reading UHF tags and transmitting the acquired data to any device equipped with a BLE 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 Desktop Ultra-RE40 via an optional SMA connector.

The use of the reader is easy and intuitive, thanks to the presence of a single button to activate the reading of UHF tags, combined with a multicolored RGB LED, a multi-tone beeper and a haptic actuator (vibration) that informs the operator about the result of the reading.

Ultra-RE40 integrates wireless connectivity. There are two profiles available: keyboard emulation and BLE. In keyboard emulation, the reader is able to transmit the data read by the 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 perform any reading or writing operation on UHF tags (TT-RFID protocol or API for Android or iOS are available to developers).

Ultra-RE40, during its normal use, works on battery power. Charging takes place via a USB Type C connector, making the reader compatible with all latest generation battery chargers.

Thanks to its exclusive 3.5mm jack input, the same as that of smartphones, it is possible to connect the reader to a common selfie stick, so as to make reading UHF tags ergonomic even in difficult or uncomfortable

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MAN/MACHINE INTERFACE	1 button for the RFID scan activation and for switch the device on/off 1 RGB multi-color LED (right), 1 multitone beeper, 1 haptic actuator (vibration), to report the result of the RFID scan 1 RGB multi-color LED (left) to report the operating status of the reader
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	Wireless BLE 5.1 radio, USB type C connector, 3.5 mm jack connector
OS COMPATIBILITY	Android, iOS, Windows, macOS, Linux
MAIN PROCESSOR	Nordic Semiconductor nRF52833
POWER SUPPLY	Integrated Li-Poly Battery 3.7V 1.2Ah, external 5Vdc from USB Type C connector
POWER REQUIREMENTS	Idle with full battery charge – 115mA Idle with battery near full discharge – 580mA Full RF power (500mW) – 690mA (All currents at 5V input)
WORKING TEMPERATURE	-20°C / 60°C
DIMENSIONS	Height 116mm, Width 72mm, Depth 13mm
WEIGHT	93g
PROTECTION DEGREE	IP54 (IP65 with accessories)