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**EUT: Hybrid Desktopreader** 

FCC ID: QLXDESKTOPREADER

FCC Title 47 CFR Part 15 Date of issue: 2016-11-22

Annex acc. to FCC Title 47 CFR Part 15
relating to
TeraTron GmbH
Hybrid Desktopreader

# Annex no. 5 User Manual Functional Description

Title 47 - Telecommunication
Part 15 - Radio Frequency Devices
Subpart C – Intentional Radiators
ANSI C63.4-2014
ANSI C63.10-2013



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## **Functional Description of the Hybrid Desktopreader Module**

The Hybrid Desktopreader Module offers a general RFID reader functionality for 125kHz (LF) and 13,56MHz (HF) RFID Transponders. The Hybrid Desktopreader Module is powered by a 5V DC voltage source that is provided by an external interface module that is used in combination with it. The Hybrid Desktopreader RFID functionality includes reading of several types of 125kHz (e.g. HITAG) or 13,56MHz ISO transponder (e.g. ISO15693, ISO14443) types.

The  $\mu$ Processor of the Hybrid Desktopreader is clocked by a 8MHz-Resonator. All active components are powered by an external 5V 250mA power supply. The 125kHz-Reader IC (P4097) drives the 125kHz coil antenna. The 13,56MHz Reader IC (CLRC663) drives a 13,56MHz coil antenna respectively.

When reading an RFID transponder ID, the data is sent via UART to another interface module that is able to identify the transponder RFID data and manage the transponder ID. This data can be used for further processing, e.g. authorisation of functionalities.

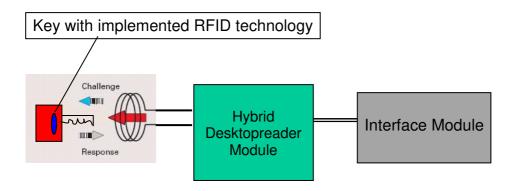


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# **Functional Block Diagram**



The Hybrid Desktopreader offers 125kHz and 13,56MHz RFID functionality using two different antennas for each RFID frequency.

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## **Compliance Statements**

#### **Compliance Statements FCC**

The title "CAUTION TO USERS" or "FCC/IC WARNING NOTE" or relevant title and "Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment."

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

#### **Compliance Statements IC**

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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