



Multifrequency Contactless Card Reader

ZKTeco has two universal RFID read/write feature modules that support all major RFID standards -- for frequency ranges 125/134.2 kHz and 13.56 MHz, including NFC. .

This document describes the card reading capabilities of the multifrequency card reader feature, provided as an optional partner selectable feature on certain ZKTeco product families.

Feature Physical Description

The card reader is a USB-attached device installed internally, and directly behind, the front panel of the reader module for installation within the enclosure. When installed, the reader option does not require use of external cabling which simplifies use in site applications requiring high security or freedom of concern from user access to cables carrying data.

The reader has two integrated antennas: LF (low frequency) for 125/134.2KHz media, and HF (high frequency) for 13.56MHz media. The antennas are not exposed to the end user, and the reader is attached to an internal USB connection within the appropriate product. The USB connection can be easily installed during production, at the time of configuration, or after field installation if necessary (with Ultima). The products are designed to provide power and accept data from the reader via the USB port. No configuration is required to directly read supported card types – the user simply presents their card and the reader automatically detects, decodes, and transmits data for use by the time clock in punch generation.

Partners can purchase the UltiCard option from ZKTeco when they place their order, or can also purchase it as a separate module ready for integration by a properly-trained partner’s technical team.

MULTIFREQUENCY CARD READER, UltiCard

Supported Card Types & Protocols (High Frequency)

CCID MODE

iCLASS, iCLASS SE/SR, iCLASS Seos MIFARE Classic 1K / 4K, Ultra- Light, Ultra-Light C, Plus, MIFARE DESFire 0.6, MIFARE DESFire EV1, MIFARE SE, DESFire EV1 SE, T=CL, ISO 14443A, ISO14443B CSN, FeliCa, SmartMX with up to 848 kbps transmission rate (de-pending on card1), ISO 15693 with up to 26 kbps transmission rate (depending on card)

KEYBOARD WEDGE MODE

The following credentials can be handled autonomously:

iCLASS, iCLASS SE/SR, iCLASS Seos, MIFARE SE, DESFire EV1 SE, MIFARE Classic 1K / 4K, Ultra-Light, Ultra-Light C, Plus (Security Lvl 1), MIFARE DESFire 0.6, MIFARE DESFire EV1 (MAC / DES/3DES / 3K3DES / AES), CEPAS (CAN), FeliCa (Idm), PIV, ISO14443B (CSN)

Supported Card Types & Protocols (Low Frequency)

HID Prox, Indala Prox, EM Prox (Standard Mode Only), AWID Prox



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The **UltiCard Plus Module** can be purchased already upgraded to the Enhanced Feature Set 1 (which adds card reading capability as shown in the table), and Enhanced Feature Set 2 (which supports additional card security features). ZKTeco partners also have the option to purchase the UltiCard Plus Module at the time of their order, but then use their trained technical team to upgrade to either Enhanced Feature Set option prior to shipping to their end users – providing flexibility to meet last minute or unanticipated requirements.

MULTIFREQUENCY CARD READER, UltiCard Plus

Supported Card Types & Protocols High Frequency

ISO14443A: MIFARE Classic, Classic 1k & 4k EV14), MIFARE Mini, MIFARE DESFire EV1, MIFARE Plus S&X, MIFARE Pro, SmartMX, MIFARE Ultralight, MIFARE UltralightEV1, MIFARE Ultralight C, SLE44R35, SLE66Rxx (my-d move), PayPass, NTAG2XX, LEGIC Advant

ISO14443B: Calypso including Innovatron radio protocol 14443B, CEPAS, HID iCLASS, Moneo, PicoPass, SRI512, SRT512, SRI4K, SRIX4K

ISO15693: EM4x335), EM4x355), HID iCLASS, ICODE SLI, M24LR16/64, Tag-it, SRF55Vxx (my-d vicinity), PicoPass

ISO18092 / NFC: NFCIP-1: Active and passive communication mode, Peer-to-Peer, NFC Forum Tag Type 11), NFC Forum Tag Type 2-5, Sony FeliCa

Supported Card Types & Protocols Low Frequency (includes 134.2KHz)

4100, 4102, 4200, 4050, 4150, 4450, 4550, AWID, CASI-RUSCO, Deister, HITAG 1, HITAG 2, HITAG S, Keri, Miro, Pyramid, TIRIS/HDX, UNIQUE, FDX-B, Q5, TITAN, T55x7, ZODIAC, Cardax, Nedap

ENHANCED FEATURE SET 1

Standard+Cotag, G-Prox, HID (Prox, ProxII, Duo ProxII, ISO ProxII, Micro Prox, ProxKeyIII), NexWatch(Honeywell), Indala, ioProx

ENHANCED FEATURE SET 2

Includes all media in Feature Set 1, plus: HID iCLASS SE/SR/SEOS (CSN and Facility Code/PAC)

If the card types you currently use are not listed, or there are secure data formats for your company, or you do not know what type of card you are using then please contact your ZKTeco account manager for specific instructions on how we can assist to make sure your selected ZKTeco product can read your cards for use during testing and prior to deployment.

Ordering Information

UC-HID: UltiCard

UCP -EL: UlitCard Plus

UCP-EL-1: UltiCard Plus with Enhanced feature set 1

UCP-EL-2: UltiCard Plus with Enhanced feature set 2