Dual-Technology Access Fob Keychain

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VIEW IN BROWSER

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Summary

An access fob that allows for two wireless access technologies to be used in the same housing.

0.50 hrs	1 pcs	0.10 mm	0.40 mm	PLA	3 g	Prusa MK3/S/S+

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Tags: keychain keyfob nfc rfid

At my current apartment complex the main door and lift use a RFID HID Prox system to give residents access.

After moving in we decided to install a smart lock on my apartment's front door. The Yale Unity uses more modern and secure Mifare NFC technology to restrict access.

After a few months I have gotten sick of having two “fobs” to get into my apartment.
So I created this fob which has space to take two of these little coin tokens:

T5577 (RFID Re-programmable to emulate HID)
https://www.ebay.com.au/itm/313305746019

Mifare Classic 1K
https://www.ebay.com.au/itm/174916669238

Both sellers advertised them as “30mm” but I found that the T5577 were actually 28mm.

Pausing the print at the last layer before the top is printed allows for them to be placed securely inside the fob casing.

Model files

whole_fob.stl

half_fob.stl

half_keyed_fob.stl

Print files

fob_wpause_01mm_pla_mk3s_30m.gcode

PLA 0.40 mm 0.10 mm 0.50 hrs 3 g Prusa MK3/S/S+

Contains a pause to place tokens into shell.

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