

Credential Compatibility Guide

Ethos & APEX Reader Platforms

This guide summarizes which credential technologies are compatible with Wavelynx's Ethos and APEX reader platforms. It is intended to help resellers and business development teams quickly answer customer questions about credential support during the sales process.

Items marked "custom configuration" require a Wavelynx-provided configuration file, which our engineering team can generate for a specific project. For project-specific configuration, contact your Wavelynx account team.

Support Level Key

Supported	Works with the credential as shipped, or with standard/custom Wavelynx reader configuration.
Supported (Custom Config)	Requires a Wavelynx-provided or customer-specific configuration file to enable this output.
Not Supported	Not readable today; items marked "roadmap" are planned for future firmware or hardware support.

LEAF Secure Credential Family

Credential Type	Description	Ethos Reader	APEX Reader
LEAF Verified	Reports the Open ID.	Supported (Custom Config)	Supported (Custom Config)
LEAF Verified (w/ Prox)	Reports the Open ID; otherwise reports the CSN and/or low-frequency data if enabled.	Supported (Custom Config)	Supported (Custom Config)
LEAF Enterprise	Reports secure DESFire data.	Supported (Custom Config)	Supported (Custom Config)
LEAF Enterprise (w/ Prox)	Reports secure DESFire data, with prox output available.	Supported (Custom Config)	Supported (Custom Config)
LEAF Enterprise w/ FIDO Chip	Reports secure DESFire data, does not read FIDO portion.	Supported (Custom Config)	Supported (Custom Config)
LEAF Universal	Reports Secure DESFire Data on all Leaf Si enabled readers, otherwise reports CSN.	Supported	Supported
LEAF Universal (w/ Prox)	Reports Secure DESFire Data on all Leaf Si enabled readers, otherwise reports CSN or low frequency data if low frequency is enabled.	Supported	Supported

Mobile & Wallet Credentials

Credential Type	Description	Ethos Reader	APEX Reader
Wavelynx NFC Wallet	Outputs up to 128 bits of secure data programmed to an Apple, Google, or Samsung Wallet credential.	Supported (Custom Config)	Supported (Custom Config)

Contactless Smart Card Credentials

Credential Type	Description	Ethos Reader	APEX Reader
Mifare® Classic 13.56 MHz	Reports the CSN as a 32-bit unencrypted badge ID. Secure data can be read when card file structure and encryption keys are provided (scoped as a custom engineering project).	Supported	Supported
Mifare® DESFire® EV1 13.56 MHz (LEAF)	Reports the CSN as a 56-bit unencrypted badge ID. Reads secure data when file structure follows the NXP NEX PACS specification with matching encryption keys.	Supported	Supported
Mifare® DESFire® EV2 13.56 MHz (LEAF)	Reads secure data using Wavelynx or customer-provided encryption keys. Reads CSN from non-LEAF DESFire EV2 cards as a 56-bit unencrypted badge number.	Supported	Supported
Mifare® DESFire® EV3 13.56 MHz	Reads secure data using Wavelynx or customer-provided encryption keys. Reads CSN from non-LEAF DESFire EV3 cards as a 56-bit unencrypted badge number.	Supported	Supported
Mifare® Ultralight®	Reports the CSN.	Supported (Custom Config)	Supported (Custom Config)
iClass® 13.56 MHz	Reports the CSN; can read legacy iClass badge data with custom configuration.	Supported	Supported
iClass Seos™ 13.56 MHz	Cannot be read by Wavelynx readers.	Not Supported	Not Supported
FeliCa	Reports the CSN, available by custom configuration only.	Supported (Custom Config)	Not Supported
Dual-Tech Proximity + iClass®	Reads both the proximity badge number and the iClass CSN. Note for install teams: if CSN reporting is enabled, the CSN is typically not an authorized badge number and may trigger a "Card Reject" or "Access Denied" alarm in the access control system.	Supported	Supported
Dormakaba ComID™	Reports the CSN; can be configured to read secure data.	Supported	Supported

Legacy 125 kHz Proximity Credentials

Credential Type	Description	Ethos Reader	APEX Reader
AWID® 125 kHz Proximity (FSK)	Proprietary AWID format, readable on Wavelynx readers with firmware v2.4.0 and later.	Supported (FW v2.4.0+)	Supported
Casi-Rusco® (GE-CP) 125 kHz Proximity (ASK) / Proxlite®	Reads all Casi® 40-bit proximity cards.	Supported	Supported
EM4100	Reads badge ID and facility code with custom output.	Supported (Custom Config)	Supported (Custom Config)
TK4100	Reads the badge ID and facility code of the card.	Supported (Custom Config)	Supported (Custom Config)
125 kHz Proximity (FSK) — HID® Prox	Reads all formats up to 37 bits, including IsoProx®, DuoProx®, Proxkey® III, Proxcard® II, and Microprox™. Corporate 1000 48-bit supported on firmware 3.2.0.0 / 4.2.0.0 and later.	Supported	Supported
125 kHz Proximity (PSK) — HID® Indala Prox	Cannot be read by Wavelynx readers.	Not Supported	Not Supported
48-bit Corp 1000 Prox	Standard 48-bit Corporate 1000 format.	Supported	Supported

Government & High-Assurance Credentials

Credential Type	Description	Ethos Reader	APEX Reader
FIPS-201 (PIV, CIV, TWIC, OSDP Extended Packet Mode)	The Wavelynx ETX-2PS and ETX-3PS can read the contactless chip on a FIPS-201 credential.	Supported (ET-2PS/3PS)	Not Supported