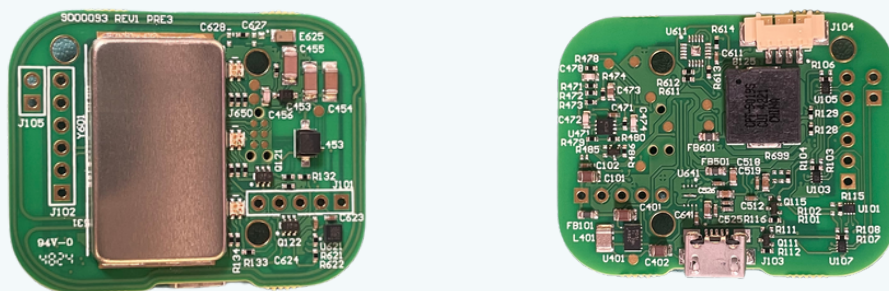


APEX Module

Secure, Multi-Frequency Access Module.



APEX Modules offer all the advanced features of Wavelynx Readers, now in a certified module that's easy to integrate into OEM devices. It's designed to provide flexibility, reliability, and security, making it the ideal choice for manufacturers seeking a cutting-edge access control solution. With NFC capability, bring wallet credential access to your solution.

The Modules are small, powerful devices designed to make access control technology easy to add to other products. It has the same advanced features as Wavelynx's Readers but comes in a compact form that manufacturers can build directly into their own devices. Think of it as the "brain" behind secure access control for things like intercoms, smart locks, elevators, or biometric scanners. It handles all the communication between the user's credentials (like a key card, mobile phone, or Prox card) and the access system.

CAPABILITIES

- **Multi-Frequency Support:** 13.56 MHz NFC and 125 kHz Prox.
- **Wireless Connectivity:** Bluetooth 5.4 for firmware and keyset updates.
- **Secure Communication:** OSDP V2.2 (UART) and Wiegand protocols.
- **Audio/Visual Feedback:** Integrated buzzer and RGB LED.
- **High-Security Profiles:** EAL 6+-rated crypto module for custom keysets.
- **Certified Integration:** FCC modular certification for regulatory compliance.
- **Power Efficiency:** Operates on 4.35V to 5.5V.
- **Credential Compatibility:** Fully interoperable with Wavelynx Readers.

TECHNICAL SPECIFICATIONS

	AX-01	AX-02	AX-05
Frequencies	13.56 MHz NFC: Full NFC capability, including NFC Wallet compatibility and support for LEAF Universal and LEAF Custom Keysets. 125 kHz Prox: Supports both FSK and ASK Prox credentials for backward compatibility. Bluetooth 5.4: Enables wireless functionality, including over-the-air firmware and keyset updates.		
Antennas	BLE Antenna onboard, and connector to external NFC and Prox Antenna		NFC and Prox antennas for dual-frequency support.
Dimensions	1.65"L x 1.75"W x 0.153"H	1.15"L x 1.46"W x .286"H	1.29"H x 1.65"W x .286"D
Power	Input power range: 4.35V to 5.5V.		
Temp Range	-40° to 70°C		
Supported Options & Transponders	High-security EAL-rated crypto module. Credential support consistent with Ethos Readers, including custom keysets and high-security profiles.		
Peripheral Interfaces	Wiegand: 3.3V Wiegand output for legacy system integration. UART (OSDP V2.2): 3.3V UART with secure communication, firmware upgrade options, and compatibility with Ethos readers		
Certifications	FCC Modular Certification		
A/V Feedback	No AV Feedback		Includes a 4 kHz buzzer and multi-color (Red/Green/Blue) LED for user feedback.
Applications	Intercom, biometric devices, lock devices, and elevators.		
Additional Device Info	Single Side Assembly with castellated vias		Can be paired with AX-05-PB for a small size reader

Learn more

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