

# APEX Reader

Enhanced. Sleek. Built to Last.



**AX-20**  
Single Gang



**AX-25**  
Single Gang Keypad



**AX-10**  
Mullion



**AX-15**  
Mullion Keypad

## Overview

The Wavelynx APEX Reader is a next-generation RFID access control suite designed for durability, flexibility, and brand-focused customization. Key highlights include:

- **Robust Design:** Features a metal cast mounting plate for maximum installation stability and is available in four form factors, including a new Mullion Keypad.
- **Seamless Upgrades:** Built with OSDP V2.2 Verified communication and the APEX OSDP Autodetect feature, ensuring a secure, cost-effective, and seamless transition from Wiegand to OSDP over existing wiring.

## Key Features

- Reduced power consumption
- Broad power range (5-24VDC)
- Expanded credential compatibility and security
- IP65 outdoor rating
- Upgraded NFC chipset
- Advanced security with EAL6+ Secure Element and tamper detection via accelerometer
- Support of modern and legacy credentials
- Terminal block to make installation standardized
- Pigtail

## Encryption Key & Credential Interoperability

- Hardware configured with our default encryption key or custom key
- Credential support for NFC, Bluetooth 4.2+, and 125 kHz prox
- Supports MIFARE DESFire® and MIFARE Classic® credentials
- NFC mobile credentials in Apple Wallet® and Google Wallet™
- Wavelynx MyPass Bluetooth Credential

Reach out to our [support team](#) for our full Credential Compatibility Matrix

## TECHNICAL SPECIFICATIONS

| Four Form Factors<br>(part number / dimensions) |                              | Mullion<br>(AX-10)<br>133.4 x 46 x 18.5mm                                                                                                                                                                                                                    | Mullion and Keypad<br>(AX-15)<br>133.4 x 46 x 23.5mm | Single Gang<br>(AX-20)<br>133.4 x 83.6 x 18.5mm | Single Gang and Keypad<br>(AX-25)<br>133.4 x 83.6 x 23.5mm |
|-------------------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------|
| Current                                         | Max Current<br>@5V, 12V, 24V | 194mA/95mA/50mA                                                                                                                                                                                                                                              | 205mA/101mA/53mA                                     | 254mA/125mA/64mA                                | 237mA/141mA/72mA                                           |
| Colors                                          |                              | Black                                                                                                                                                                                                                                                        |                                                      |                                                 |                                                            |
| Voltage                                         |                              | 5-24 VDC                                                                                                                                                                                                                                                     |                                                      |                                                 |                                                            |
| Temp Range                                      |                              | -35 to 66 C and EN -40 to 70C and 93% humidity                                                                                                                                                                                                               |                                                      |                                                 |                                                            |
| Cable Length                                    |                              | Wiegand: 200 feet = 22 AWG, 300 feet = 20 AWG, 500 feet with 18 AWG Wiring<br>OSDP RS485 (powered at 12VDC): 1000 feet with 22 AWG Twisted Pair                                                                                                              |                                                      |                                                 |                                                            |
| Read Range                                      |                              | 125 kHz (LF/Prox): up to 4", 13.56 MHz (HF/NFC): up to 2"                                                                                                                                                                                                    |                                                      |                                                 |                                                            |
| Security Level                                  |                              | EAL6+ Secure Element                                                                                                                                                                                                                                         |                                                      |                                                 |                                                            |
| Country of Origin                               |                              | Designed and assembled in Colorado USA                                                                                                                                                                                                                       |                                                      |                                                 |                                                            |
| Warranty                                        |                              | Lifetime on non-keypad models, 3-year on keypad models                                                                                                                                                                                                       |                                                      |                                                 |                                                            |
| Regulatory Compliance                           |                              | <ul style="list-style-type: none"> <li>FCC and IC Certified</li> <li>CE DoC with EN 62368-1:2018 and related EMC/Spectrum tests</li> <li>UL294</li> <li>CAN / ULC 60839-11-1: Outdoor Rating Grade 1</li> <li>OSDP Verified to V2.2</li> <li>IP65</li> </ul> |                                                      |                                                 |                                                            |
| APEX Summit<br>Part Number: AX-##-S-XXXX        |                              | <ul style="list-style-type: none"> <li>Full functionality (Equivalent to Ethos -7WS Reader)</li> <li>Prox / 13.56 MHz (Leaf + Wallet) / BLE credentials</li> <li>Bluetooth admin support (Configure App)</li> <li>OSDP &amp; Wiegand capability</li> </ul>   |                                                      |                                                 |                                                            |
| APEX Ascent<br>Part Number: AX-##-A-XXXX        |                              | <ul style="list-style-type: none"> <li>13.56 MHz (Leaf + Wallet) / BLE credentials</li> <li>Bluetooth admin support (Configure App)</li> <li>OSDP &amp; Wiegand capability</li> </ul>                                                                        |                                                      |                                                 |                                                            |

## FEATURES

|                          |                                                                                    |
|--------------------------|------------------------------------------------------------------------------------|
| RF Technology            | 13.56 MHz (NFC), 125 kHz (Prox), Bluetooth BLE 4.2+                                |
| Autodetect               | Seamlessly transition to OSDP after establishing a secure channel with the panel   |
| Remote Firmware Upgrades | Update firmware or change reader configuration remotely through OSDP file transfer |
| Credential Support       | All Ethos-supported credentials, including NFC, Prox, and Bluetooth                |
| LEDs                     | Red/Green/Blue LED light bar at the top (Visual Feedback)                          |
| Tamper                   | Accelerometer-based tamper detection                                               |