

WaveLynx Technologies Ethos[®] Readers and Credentials



Key Features

- OSDP™ auto-detect capable
- LEAF Si enabled off the shelf, LEAF Cc ready
- MIFARE DESFire[®] EV2/EV1 compliant
- Mobile credentials ready
- Tristate LED Light Bar (red, green, amber) and buzzer
- Easy install bracket (patent pending) and wiring system
- Accelerometer-based tamper detection

Seamless, Versatile Transition

WaveLynx Technologies' Ethos[®] multi-technology contactless access readers were designed from the ground up to help end-users make the transition seamless when going from legacy physical credentials to highly secure smart cards or mobile credentials. Ethos readers enable the use of encrypted smart cards and mobile credentials for access control, all while maintaining functionality with existing proximity credentials. Credential-to-reader security is based on AES (Advanced Encryption Standard) 128 level encryption. By providing a choice of credential technologies that include standard Proximity (125 kHz), Smart (13.56 MHz) and mobile protocols, customers have the ability to set their own migration path to cyber-resilient credentials. All ET Series readers are fully compliant with OSDP for secure channel and feature a unique capability to Auto-Detect OSDP™ and Auto-Convert from Wiegand to OSDP without human intervention required at the reader. WaveLynx Ethos Readers are integrated with the Tyco Software House C•CURE 9000 security and event management system, providing 24x7 mission-critical security and safety protection for people, buildings, and assets.

Custom Encryption Keys and Credentials

LEAF Si stands for LEAF Secure Issuance. LEAF Si enabled products come with a standard set of keys that facilitate interoperability out of the box. LEAF Si is for end users who do not have a desire for key management but are required to transition to highly secure encrypted credentials that work with multiple vendors.

LEAF Cc stands for LEAF Custom Cryptographic Keys. End-Users who desire to use their own keys and/or have them managed by a third-party can purchase LEAF Cc, Custom Cryptographic Keys. LEAF Cc is recommended for facilities requiring high security and is optimal for campuses desiring maximum flexibility and interoperability.

OSDP Auto-Detect

All Ethos readers feature OSDP communication with the patent pending "auto-detect" feature. The reader will automatically switch from the Wiegand protocol to OSDP when the panel is upgraded to OSDP, with no need to reconfigure, rewire, or upgrade the reader in any way.

For Real World Deployments

Ethos readers are offered in various models including mullion, single-gang, and keypad with support for standard Proximity (125 kHz), 13.56 MHz smart card technologies as well as mobile-ready. The ET10 reader is designed to fit on the mullion strip found adjacent to most commercial doors. The ET20/ ET25 readers are suitable to fit perfectly in a single-gang electrical box and cover the footprint of popular legacy readers that have been replaced.

Specifications

ET10 Mullion Reader		ET10-2	ET10-3	ET10-6	ET10-7
ET20 Single Gang Reader		ET20-2	ET20-3	ET20-6	ET20-7
ET25 Keypad Reader		ET25-2	ET25-3	ET25-6	ET25-7
125 kHz			X		X
13.56 MHz		X	X	X	X
Mobile				X	X
Current (mA)	ET10	106 mA average, 144 mA peak			
	ET20	118 mA average, 169 mA peak			
	ET25	143 mA average, 193 mA peak			
Voltage		5-16 V DC			
Operating Temperature		UL -35° to 66 °C (-31° to +150.8 °F); EN -40° to 70 °C (-40° to +158 °F)			
Operating Humidity		0-85%			
Dimensions	ET10	129.54 x 43.18 x 18.03 mm (5.1 x 1.7 x 0.71 in)			
	ET20	129.54 x 82.55 x 18.03 mm (5.1 x 3.25 x 0.71 in)			
	ET25	129.54 x 82.55 x 18.03 mm (5.1 x 3.25 x 0.71 in)			
Read Range	ET10	EV1: 30.48 mm (1.2 in); EV2: 55.88 mm (2.2 in)			
	ET20	EV1: 38.1 mm (1.5 in); EV2: 63.5 mm (2.5 in)			
	ET25	EV1: 38.1 mm (1.5 in); EV2: 63.5 mm (2.5 in)			
	All Models	Prox up to 101.6 mm (4.0 in); MIFARE up to 88.9 mm (3.5 in); Configurable BLE read range			
Certifications		FCC, IC, CE, UL		EN302291, EN301489, EN300330, IP55, UL294	

Model Number	Description
WVL-ET10-2WS	WaveLynx ET10 Mullion Reader, 13.56MHz and DESFire EV2
WVL-ET10-3WS	WaveLynx ET10 Mullion Reader, 13.56MHz, DESFire EV2 and Proximity
WVL-ET10-6WS	WaveLynx ET10 Mullion Reader, 13.56MHz, DESFire EV2 and Mobile-ready
WVL-ET10-7WS	WaveLynx ET10 Mullion Reader, 13.56MHz, DESFire EV2, Proximity and Mobile-ready
WVL-ET10-2PS	WaveLynx ET10 Mullion Reader PIV/CIV
WVL-ET20-2WS	WaveLynx ET20 Single Gang Reader, 13.56MHz and DESFire EV2
WVL-ET20-3WS	WaveLynx ET20 Single Gang Reader, 13.56MHz, DESFire EV2 and Proximity
WVL-ET20-6WS	WaveLynx ET20 Single Gang Reader, 13.56MHz, DESFire EV2 and Mobile-ready
WVL-ET20-7WS	WaveLynx ET20 Single Gang Reader, 13.56MHz, DESFire EV2, Proximity and Mobile-ready
WVL-ET20-2PS	WaveLynx ET20 Single Gang Reader PIV/CIV
WVL-ET25-2WS	WaveLynx ET25 Single Keypad Reader, 13.56MHz and DESFire EV2
WVL-ET25-3WS	WaveLynx ET25 Single Keypad Reader, 13.56MHz, DESFire EV2 and Proximity
WVL-ET25-6WS	WaveLynx ET25 Single Keypad Reader, 13.56MHz, DESFire EV2 and Mobile-ready
WVL-ET25-7WS	WaveLynx ET25 Single Keypad Reader, 13.56MHz, DESFire EV2, Proximity and Mobile-ready
WVL-ET25-2PS	WaveLynx ET25 Keypad Reader PIV/CIV
WVL-CEK	WaveLynx Custom Encryption Key
WVL-50H8	WaveLynx DESFire EV2 Card ISO thickness with LEAF Data Model 8K
WVL-50D8	WaveLynx DESFire EV2 Card ISO thickness with LEAF Data Model 8K + 125KHz FSK Proximity
WVL-51H8	WaveLynx DESFire EV2 Card ISO thickness with LEAF Data Model 8K + Mag Stripe
WVL-51D8	WaveLynx DESFire EV2 Card ISO thickness with LEAF Data Model 8K + Mag Stripe + 125KHz FSK Proximity
WVL-60H8	WaveLynx DESFire EV2 Key Fob with LEAF data model 8K

About Johnson Controls

Johnson Controls is a global diversified technology and multi-industrial leader serving a wide range of customers in more than 150 countries. Our 120,000 employees create intelligent buildings, efficient energy solutions, integrated infrastructure and next generation transportation systems that work seamlessly together to deliver on the promise of smart cities and communities. Our commitment to sustainability dates back to our roots in 1885, with the invention of the first electric room thermostat.