



# DIGITAL ENCRYPTED SECURITY INTERFACE (DESI)

SAFE | SECURE | RELIABLE




## Product Overview

Prometheus has developed a revolutionary module that replaces the traditional supervised loop end of line resistor or the simple switched voltage relay controls with a state-of-the-art miniaturized computational element located within the security device housing. The Digital Encrypted Security Interface (DESI) is a revolutionary approach for upgrading current security and control interfaces and gathering authenticated, confidential data from the edge. DESI is deployed over the existing infrastructure and provides data authentication and confidentiality. DESI extends data protection right to the fielded security component. DESI provides true edge to cloud authentication and encrypted data for sensing and control applications such as Intrusion Detection, Burglary Systems, Access Control, Fire, SCADA, Building Controls and more

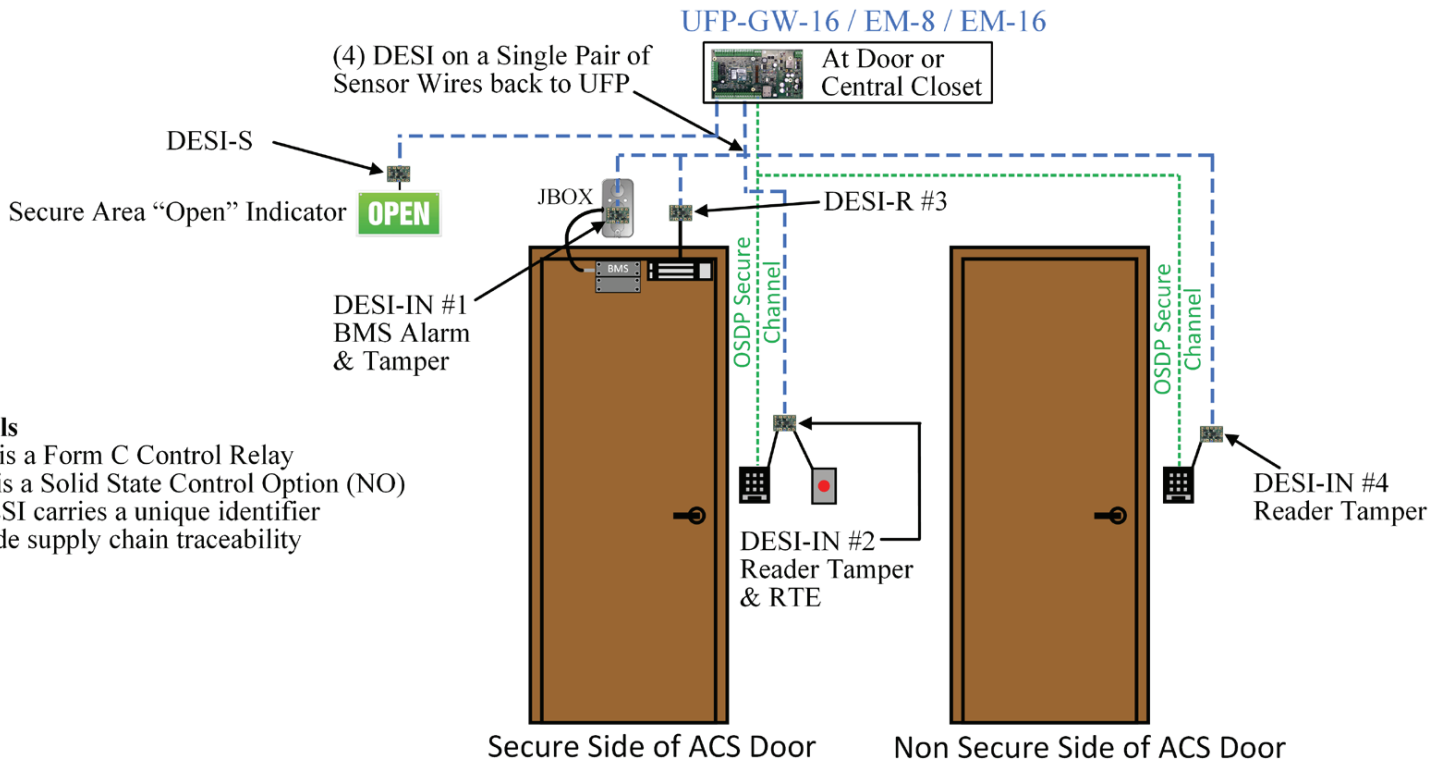
**ZERO TRUST - EDGE TO ENTERPRISE AUTHENTICATION™**

DESI provides a FIPS compliant public key cryptography interface (PKI) which uses elliptic curve digital signature algorithm (ECDSA) signing operations paired with elliptic curve Diffie-Hellman (ECDH) key exchange for field commissioning without need for symmetric key databases. This PKI approach allows the integration of DESI from various manufacturers without the need for insecure master keying arrangements. The device can generate private keys internally which are never exposed, not even to the field panel. It supports four PKI rekey events over the life of the device and features write authenticated protection of rekey operations. . The device actively monitors for authentication failures and upon detection of a tamper responds by sending an alert. DESI carries a unique identifier that provides supply chain traceability so sensors and electro-mechanical devices can be authenticated as genuine products of their manufacturer.

## Product Description

	<p><b>DESI-R: A single form-C relay output that can be used for controlling electromechanical devices</b></p>
	<p><b>DESI-IN: Dual Input Device that can be fielded for monitoring sensors</b></p>
	<p><b>DESI-S: Single Form - A relay output (N.O.) that can be used for controlling low power output devices</b></p>

## Secure/Non Secure Door Diagram



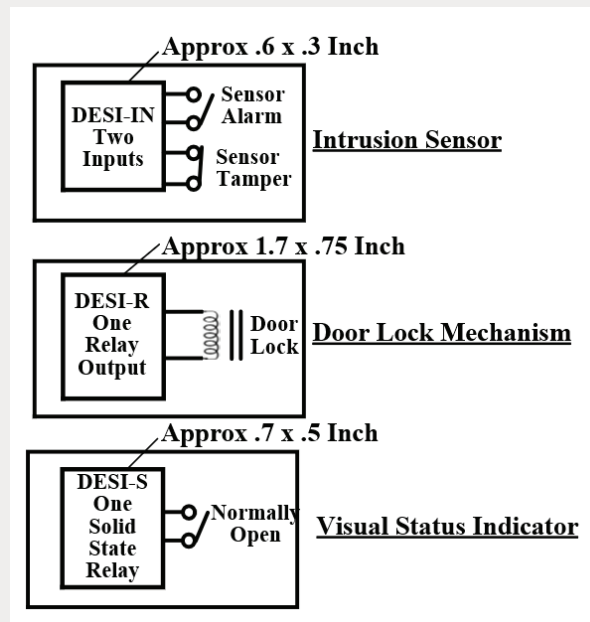
### DESI Details

- DESI-R is a Form C Control Relay
- DESI-S is a Solid State Control Option (NO)
- Each DESI carries a unique identifier to provide supply chain traceability

## Ordering information

Current stocked variants

DESI-IN	Dual input device
DESI-R	Single FORM-C Relay
DESI-S	Single FORM-A Solid State



† Specifications are subject to change without notice. PSG is not responsible for customer use of this data.