

## PRODUCT SPECIFICATIONS

P/N900W0099

MultiMode "All Weather" Credential Reader for TWIC



### Card and Card Formats

Reads GSC-IS compliant containers, TWIC cards and any data model based on MIFARE®, DES-fire® or ISO 1443A/B cards.

### Operation

**Multi-factor Authentication:** configurable in both contact and contactless card read mode for Card only or Card + PIN.

**Multi-mode operation:** easily programmed to dynamically recognize multiple card formats for legacy, local and government requirements.

**TWIC, FIPS201 & SP800-116:** Validating cards when they are presented to the reader at an access point is necessary, per the guidance in NIST SP800-116, to check that the card is not counterfeit, cloned, or copied, lost or stolen. NIST FIPS-201 and SP 800-116 define authentication mechanisms (CHUID, CAK, PKI, and BIO) and their application one or more at a time for increasing levels of authentication for access to uncontrolled, controlled, limited, and exclusion areas.

### Mechanical

**Width:** 150mm (6.00 in)

**Height:** 226mm (8.9 in); 249mm(9.8in) including magnetic stripe.

**Depth:** 75mm (3.00 in) including mounting plate

**Weight:** Less than 1.1 kg (2.5 lb)

### Biometric Fingerprint Unit

<i>Sensor technology</i>	CMOS active capacitance	<i>Image processing and Matching</i>	
<i>Image Area</i>	18.0 mm high X 12.8 mm wide	<i>image resolution</i>	508 DPI
<i>Grayscale</i>	Full 8-bit	<i>Image size</i>	256 x 360 pixels
<i>FIPS 201 compliant</i>	YES	<i>ANSI 381 image format</i>	YES
<i>ESD protection</i>	IEC 61000-4-2 level 4 +/- 15KV		
<i>Extraction &amp; Verification</i>	~1 second		
<i>Allowable Finger Rotation</i>	+/- 180°		

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### Hardware-Card Readers

Contactless Smart Card Read Interface  
ISO 14443-A, B  
Card Read Range: to 1.0 in. (2.5 cm)

### Hardware-Keypad

12 Key, 3X4 sealed illuminating keypad.

### Digital Display

Display Appearance: 16 Characters X 2 Lines  
Character Size: 5.55mm X 2.95mm  
Background Color: Yellow/Green  
Text Color: Black

### User Transaction Memory

The number of records that a queue holds depends on record size.  
The main User queue typically holds at least 8,000 transaction records.

### Communications interface

*Serial port:* Available RS-485 half duplex (two wire), RS-485 (full duplex (four wire-twisted pair). Specify when ordering. *RS-485:* 38400 baud, maximum of 32 devices on each RS-485 network, recommended maximum cable length is 1220 m (about 4000 ft.).  
*Wiegand Output:* Software configurable to 512-bits; 50 mA maximum output current drive (output low).

### Electrical

Wiring types: 2 pair, stranded, twisted, overall shield for RS-485, RS-232 and Wiegand  
Wiring Distance: Refer to controller specifications. Status Indicators: LED and Digital Display for Card Reader and Biometrics Annunciation: Audible, single tone feedback for status reporting.

### Environmental

Operating temperature: -20°C to 70°C (-40°F to 158°F)  
Humidity: 0% to 100% (condensing)  
Operating altitude: 0 to 3,048 m (0 to 10,000 ft.)  
Radio frequency: 13.56 MHz  
Tamper resistant: Tamper resistant mounting and detection.  
Power: 9 to 16 VDC, less than 500mA max@12V  
Housing: Protection Classification 65 (IP65)  
Sealed against dust and protected against water jet.

### Standards

The Reader meets or exceeds the following standards:

- FCC Title 47 CFR, Part 15 Class B
- CE – EMC 93/68/EEC, 91/32/EEC, and 93/68/EEC
- Low-Voltage Directive 73/23/EEC and 93/68/EEC
- Low-Voltage Directive 73/23/EEC and 93/68/EEC