

# Product Data Sheet

## VeriProx Fingerprint/Proximity Card Reader

Morley and HID offer the combination of biometric fingerprint technology together with proven proximity access for increased security in an installation and operation friendly mullion enclosure.

The VeriProx combined biometric and proximity reader prevents unauthorised access via lost, borrowed or stolen proximity cards by requiring the cardholder to confirm identity via the presentation of a fingerprint, which is compared to the fingerprint of the cardholder. This dual technology solution includes fingerprint verification together with a proximity card reader. The two technologies are housed together in a mullion housing which is easy to install and easy to operate.

VeriProx uses existing card tokens and therefore is suitable for retrofitting into existing installations, where increased security is required.

VeriProx is able to recognise fingerprints even on swollen, aged, dirty, scarred or cut fingers, making it an ideal choice for factories, construction sites and similar environments that have previously been unable to implement biometric-based access solutions.

VeriProx is suitable for both standalone and networkable applications and will operate with Morley's Sentinel, SentinelPro and Nexus controllers. Please refer to Morley sales for details of both types of solutions.

### Features

- Compatible with HID proximity cards
- Standalone or networkable.
- Self-contained unit stores over 4,500 fingerprints
- Fast - 1 second fingerprint verification
- User-friendly installation
- Single gang or mullion mount capability
- RS232, RS485 and Wiegand interfaces
- Simple and quick enrolment
- Red, green and amber LED signals
- Fake finger detection (FFD)



### Biometric Technology

The VeriProx's fingerprint identification mechanism is based on Ridge Recognition technology, which is the industry-leading fingerprint verification algorithm.

This patented algorithm works by computing a 'map' of a finger or thumb based on the ridges and valleys created by a fingerprint. The algorithm, which creates this template, can verify the presentation of a finger presented to the reader, against a library of 4,500 fingerprint 'templates'.

VeriProx also takes into account, the changes to the finger and adjusts for the effects of swollen, aged, dirty, scarred or cut fingers.

VeriProx will not accept fake finger presentations and includes detection filters to identify such false presentations.

## Technical Data

### Dimensions:

13 x 5 x 5.6cm (5.12 x 1.97 x 2.2")

### Housing Material:

Grey/Black ABS plastic

### Input Voltage range:

6-32 Vdc unregulated

### Peak Current:

300mA @ 12Vdc

150mA @ 24Vdc

### Current consumption:

200 – 300 mA in normal and program modes

23mA in idle mode

**Enrolment Time:** < 1 second

**Verification Time:** < 1 second

**Number of Templates:** 4,500 per unit

**Template Size:** 350 bytes

## System Operation

The user places or presents their proximity card to the VeriProx unit, which, after accepting the token, prompts (via LED's) the user to place their finger on the reading window. The VeriProx reads the fingerprint and compares it to a stored record of the user. If the comparison is matched, the user fingerprint is accepted and the user's ID number is transmitted to the Morley access control unit. In the event of the reading failing, the LED's will indicate a failure. Once the sequence is complete, the Morley controller will initiate a door release, via the controller.

## Part number

- 105052 – Morley VeriProx Fingerprint/Proximity reader

**Warranty:** VeriProx readers are warranted against defects in materials and workmanship for one year from installation or date of shipment.

**Morley Electronics Ltd**  
**Unit 34, Moorland Way,**  
**Nelson Park, Cramlington,**  
**Northumberland,**  
**NE23 1WE**

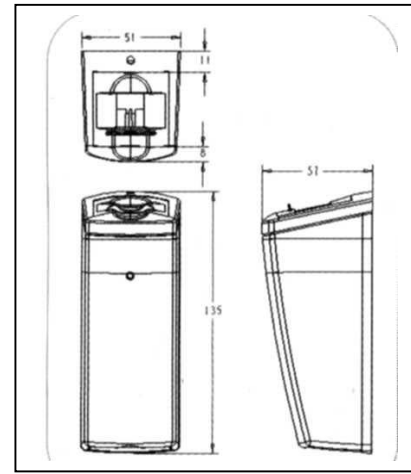
T: +44 (0) 1670 732444

F: +44 (0) 1670 707333

Email: [accesssales@morleyuk.co.uk](mailto:accesssales@morleyuk.co.uk)

Web: [www.morleyuk.co.uk](http://www.morleyuk.co.uk)

*Morley Electronics operates a policy of continuous product improvement and reserves the right to change products without notice.*



### Communication:

RS232, Wiegand, RS485

### True EER:

Equal Error Rate 0.0005

### Mounting Specifications:

Pigtail wire connection for RS232, RS485, Wiegand out, single gang or mullion mountable

### Cable Connections:

|              |                         |
|--------------|-------------------------|
| Red/Black    | Wiegand Out Data 0      |
| Green/Black  | Wiegand In Data 0       |
| Orange       | Wiegand Out Data 1      |
| Orange/Black | Wiegand In Data 1       |
| Green        | not in use              |
| Red          | Wiegand GND             |
| Blue/Black   | RS-485 (-)              |
| White        | RS-485 (+)              |
| Black/White  | RS-232 Tx               |
| Red/White    | RS-232 Rx               |
| Black        | Power GND               |
| Green/White  | Signal GND              |
| Blue/White   | Unreg'd input (6-32VDC) |
| Blue         | Regulated input (5VDC)  |
| White/Black  | Shield                  |

### Cable Distance:

|            |                           |
|------------|---------------------------|
| RS-485     | 4,000 ft (1,220m)         |
| RS-232*    | 9,600 bps – 50 ft (15m)   |
|            | 56,000 bps-20ft (6m)      |
|            | *Dependent upon baud rate |
| Wiegand    | 328 ft (100m)             |
| Cable Type | 24AWG                     |

## Presented by

