



## Zodiac Fingerprint Access Reader

### Introduction

The Zodiac Fingerprint Reader uses the portable template approach by storing the user's fingerprint template in a small, stick-on BioPatch. BioPatch uses ISO 15693 or 14443B contactless smart card technology for fingerprint template storage. The BioPatch is ideal for installations with existing access control systems and credentials wishing to upgrade some doors to the security of biometrics, without compromising the original investment of the existing access control system. Simply stick the BioPatch on to whatever access credential is currently being used. This allows the existing cards to still function on the old readers while adding biometric template data for use on the new Zodiac readers.

Zodiac's design allows it to easily replace any conventional access control reader in a matter of minutes with no change required to the existing access control panel or host software. Because the user carries the template with them, there is no need for additional wiring for template management (upload/download) from a host PC. Since there is no need to connect enrollment stations to Zodiac readers, multiple (and portable) enrollment stations can be deployed for rapid implementation. Enrollment takes only 15 seconds per user making Zodiac the quickest, easiest, and most cost-effective biometric product to implement.

### Ease of Implementation and Retrofit

Zodiac readers output data in industry standard formats such as 26-64 bit Wiegand and Track 2 ABA, allowing them to easily replace most existing readers in a matter of minutes. Since Zodiac does not store fingerprint templates in memory or on a PC, no additional wiring is required keeping installation costs to a minimum. During the enrollment process, the administrator can also encode the card ID number of the BioPatch. This allows the BioPatch ID to be encoded the same as the card to which it is to be attached. Now the new combined credential will "look" the same so no additional data entry is required in the host access control software.

### Performance and Reliability

Because Zodiac authenticates the user using a "one to one" comparison, the authentication time is always fast and always the same no matter how many users. Zodiac uses an optical based sensor, proven to be extremely vandal resistant so you cannot scratch or break it. Unlike solid state sensors, Zodiac is immune to ESD (electrostatic discharge). Solid state sensors can easily be damaged using common items such as a ball point pen!





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### Additional Features

The Zodiac solution has many other features in addition to the obvious benefits of biometric authentication.

#### **Security:**

The **STAR** module prevents the unit from being defeated by replacing it with a conventional Wiegand reader or keypad. Zodiac can be placed into Secure Transmission Mode via a dipswitch on the back of the unit. The data will then be encrypted and sent to the **STAR** module installed at the access control panel. The **STAR** module then decrypts the signal back to the standard format. Zodiac is the first product of its kind to address this industry wide vulnerability inherent in virtually all biometric access control products.

#### **Bypass Mode:**

Credentials can be issued **Bypass Privilege**. Such credentials do not require biometric authentication. This is important for people who have no usable fingerprints due to injury (amputations etc). There are always a very small percentage of users that cannot be enrolled for some reason so it is extremely important that the system still be useable. Bypass Mode can be also used to handle visitors.

#### **Backup Template:**

Zodiac credentials store two fingerprint templates – one for backup if the primary is temporarily not usable. This can be implemented at the time of initial enrollment. No additional action need be taken if the user needs to use the backup template.

#### **Secure Mode Change:**

Allows the mode of the reader to be changed from Card + Fingerprint to Card Only via a contact closure from the access control system. Mode CANNOT be changed by removing the unit and tampering with it.

#### **Non-Biometric Reader:**

Cansec manufactures a very cost competitive non-biometric reader that uses the same credential as the fingerprint reader. This allows us to provide a total reader solution for new installations using just one credential.

#### **Standard Card Size:**

Standard CR-80 smart card credentials are also available for use on Zodiac. These cards are suitable for dye-sublimation printing.

#### **PC Logon:**

Cansec recognized a long time ago that once people carry a credential, they want to use it for as many things as possible. Even more so with a credential which supports biometric authentication. Cansec has a solution that allows the same card to be used for physical biometric access and logical biometric access (PC Logon).



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### **SDK:**

A Software Development Kit (SDK) is also available so that the Zodiac enrollment process can be easily integrated to other applications. In the very near future, we will also offer an SDK to allow third parties to use the remaining memory on Zodiac credentials for other applications suitable for read-write smart cards.

### Availability & Cost to Implement

Zodiac products have been shipping for almost 1 year and are readily available. We sell our products to security system integrators as they have the knowledge and required training of the existing access control system. Due to the simplicity of our solution, Zodiac can easily be implemented by the personnel that maintains the access control system.

We are confident that Zodiac is by far the most cost-effective solution on the market. See included list pricing. Cost to install and deploy will vary from site to site but will be most cost-effective using our solution. Time to replace existing readers with Zodiac can be estimated at a maximum of .5 hours each. User enrollment takes approximately 15 seconds.

### Channel Focus and Knowledge

Zodiac was designed by an access control company specifically to target the retrofit market. If someone is looking at biometrics for access control, you can guarantee that they already have a traditional card access system (which they are NOT going to want to throw out). We understand this because we know the access control channel better than any other biometric company out there – period.

### Conclusion

The biggest problem in trying to implement a standard biometric solution across multiple facilities is trying to integrate the product into the existing system. If these systems are all manufactured by different companies, using different formats and card technologies, it is impossible to accomplish a standard. That is...until Zodiac and BioPatch. The Zodiac solution allows the client to keep the investment of the original system and selectively upgrade the security on the required doors for a minimal cost. Zodiac and BioPatch is a solution that can be easily implemented now across multiple facilities with minimal cost and impact on the existing system.

### About Cansec Systems Ltd.

Cansec Systems is a small, privately owned Canadian company which has manufactured complete access control systems since 1987. Unlike all other “biometric companies”, Cansec has been profitable since it was founded in 1987. All Zodiac development has been funded from ongoing operating revenues.

**No venture capital. No long-term debt. Excellent credit rating.**