

# Axio™

RFID Electromechanical Locking Cylinder



**ACCESS** redefined.

“With Axio, I can easily and cost-effectively add access control to any door.”



- ▶ Increases security by granting access rights to individual users and by storing event data.
- ▶ Cost-effectively add access control to doors traditionally secured with lock and key.
- ▶ Uses existing access control cards to reduce installation costs and eliminate re-keying costs.
- ▶ Installs easily by simply replacing the existing mechanical cylinder.
- ▶ Integrates to existing access control databases to manage both on-line and off-line access control readers and cards with a single database.
- ▶ Supports most contactless card technologies and several cylinder types.

Axio™ is an RFID electromechanical locking cylinder which uses your existing access control card to unlock the door. With this technology, you can cost-effectively add an extra level of security to any door by applying advanced access control features to a locking cylinder.

Axio is an off-line access control reader solution. There is no need to purchase additional access control hardware or run new wires. Axio can be programmed to function like an on-line access control reader. Access rights, including time zone control, can be stored in Axio and synchronized with an on-line access control system. Event log data can also be stored; this will allow you to monitor access activity.

Axio works with your existing access control cards. HID proximity, iCLASS®, MIFARE®, Legic® Advant, HITAG™ I, EM4102 and EM4150, and Temic are all supported.

Axio is available in three cylinder types: the standard Euro Profile, Swiss Round, and Scandinavian Oval<sup>2</sup>.

Axio is easy to install and use. Simply remove two screws and replace the mechanical cylinder with the new electromechanical cylinder. It should take no more than 5 minutes to install the unit. To use Axio, simply hold your access control card close to the outer knob. When access is granted, open the door by turning the knob.

Axio offers a long battery life. Using a single 3.6 volt lithium battery, Axio provides up to 80,000 operations or a battery life of 2.5 years. An advanced multi-stage battery warning level provides users with early notification to replace the battery.

Axio... the cost-effective way to bring advanced security and access control to more doors!



# Features

# Specifications

### Supports Most Contactless RFID Technologies

**125 kHz**  
 HID Proximity  
 EM4102 and EM4150  
 Temic 555X  
 HITAG™ I

**13.56 MHz**  
 iCLASS<sup>1</sup>  
 MIFARE®  
 Legic® Advant

### Cylinder Types Available

Euro Profile (Double-Knob)  
 Swiss Round  
 Scandinavian Oval<sup>2</sup>  
 US Profile<sup>3</sup>

### Access Control Functions Provide Greater Security

- Axio offers 8 access groups.
- Each access group has 4 time zones per day.
- Manages up to 48 holidays.
- Automates daylight savings time.
- Axio's dynamic memory system allows for flexible management of stored keys (a maximum of 3,000) and transactions (a maximum of 4,000). The default is 1,000 keys and 3,212 event logs.

### Environmental Condition

- The outer knob may be installed outside.
- The inner knob must be installed inside.
- Axio can be installed at some retardant (T30) fire protection doors.
- The Axio DK-3100 electromechanical locking cylinder should be operated in a dry environment at room temperature.

### Programming and System Integration

- PDA based programming and database management via infrared interface.
- "Data on card" and "network on card" capability using 13.56 MHz contactless smart cards.

### Software Developers Kit

An SDK is available to assist OEM partners with the integration of Axio into their access control software application. Order the development kit with support for the technology you need.

Your toolkit will contain:

- An Axio electromechanical locking cylinder that supports the technology you selected
- Sample cards and keyfobs
- An IR interface with USB port
- A CD with the DLL and necessary integration tools

### Warranty

2 Years

### Base Product Name

DK-3100

### Transmit Frequency

- Available in 125 kHz and 13.56 MHz models.

### Customized Cylinder Lengths

- Axio cylinder lengths can be customized to fit most doors.
- The basic cylinder length is 60mm (2.36"). The maximum cylinder length is 170mm (6.69").
- The inner and outer cylinder lengths may be different.

### Battery Life:

- Axio uses a standard 3.6 volt lithium battery.
- A single battery provides up to 80,000 operations or a battery life of 2.5 years.
- The multi-stage battery warning level provides early notification to replace the battery.
- Uses automatic card identification and reader activation to support a long battery life.

### Tamper Protection and Security:

- A security screw protects access to the electronics.
- To increase security and prolong battery life, the electronics and battery are located in the inner knob.

### Materials:

- Cylinder Housing: Brass Nickel
- Knobs: Aluminum

### Operating Temperature:

- The outer knob may be exposed to temperatures between -20°C and +80°C (-4°F and 176°F).
- The inner knob temperature may not drop below the freezing point (0°C or 32°F).

### Operating Humidity:

- 0% to 95% relative, non-condensing

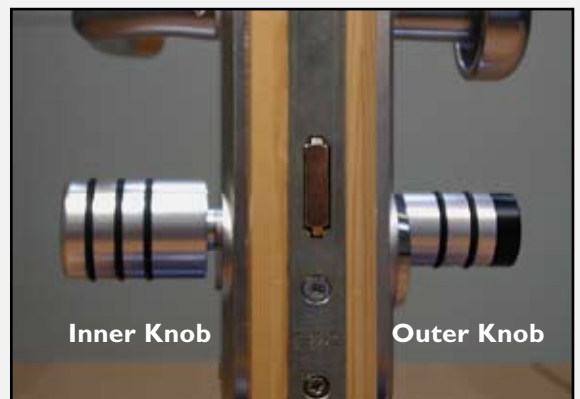
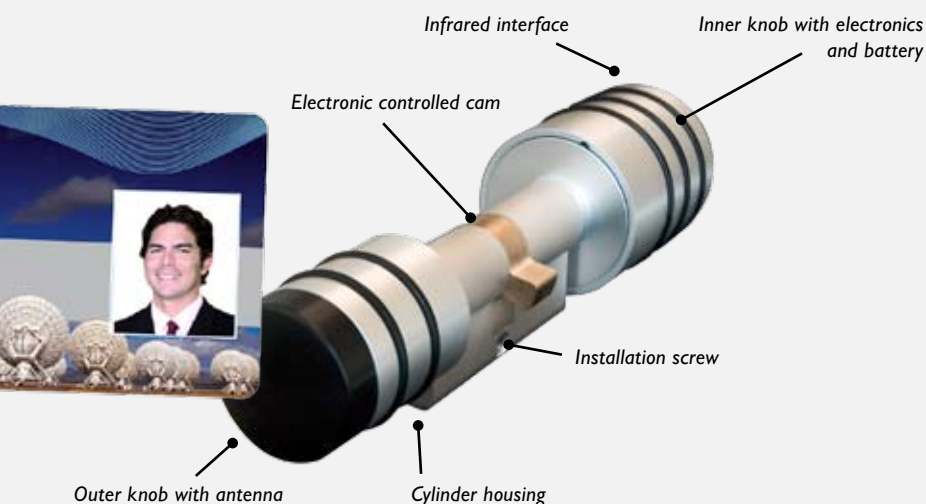
### Certifications:

- CE Mark, Europe
- Health and Safety Requirements
  - EN61000-4-2: 1996
  - EN61000-4-3: 1998
  - EN60950-1
- Protection Requirements Concerning Electromagnetic Capability
  - EN 301 489-1 V1.4.1 (2002-08)
  - EN 301 489-3 V1.4.1 (2002-08)
- Air Interface of the Radio Systems
  - EN 300 330-1 V1.3.2 (2002-12)
  - EN 300 330-2 V1.1.1 (2001-06)

<sup>1</sup>iCLASS CSN read is fully supported. Full application read/write support under development.

<sup>2</sup>Available in 125 kHz technology only.

<sup>3</sup>Under development.



Euro Profile shown

# Experience the security and convenience of contactless access control in an electromechanical locking cylinder!

Axio works with existing access control systems to bring high security access control performance to doors traditionally secured with lock and key.

Axio works with existing access control cards



- HID Proximity
- iCLASS®
- MIFARE®
- Legic® Advant
- HITAG™ I
- EM
- Temic



Axio Off-line Access Control Reader

On-line Access Control Readers



Access Control Hardware<sup>4</sup>



Remote Programming



Data on Card  
Network on Card

Integrated Access Control Software<sup>4</sup>



<sup>4</sup>Access control hardware and software is available from your access control system provider.

Specifications are subject to change without notice.

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