COMMERCIAL ACCESS CONTROL
SMARTair™, Mul-T-Lock’s friendly access control solution upgrades your security to new levels – with minimal effort on your part.

SMARTair™ is an outstanding, modern High Security solution, combining exceptional quality with appealing convenience and stylish design. It is ideal for a wide range of organizations and businesses in a wide range of sectors: retirement homes, small hotels, campuses, healthcare facilities, office buildings, sports clubs, government and municipal agencies, airports and many others.

SMARTair™ is extra-easy to install. All you need to do is mount SMARTair™ directly onto the existing mechanical lock – no wiring required! SMARTair™ fits almost any lock in just about any type of door including glass doors, interior doors, emergency exits with panic bars, lockers, cabinets and more.

Versatile SMARTair™ is available in several versions

SMARTair™ Standalone – This basic version of SMARTair™ manages access to a single door. Requiring no software or programming device, it relies on a friendly programming card to authorize or cancel electronic access cards.

SMARTair™ Offline – Independent of cumbersome computer connections, this effective system manages access to multiple doors with an easy-to-use portable programmer and encoded contactless smart cards.

SMARTair™ Update-on-Card – SMARTair™ Offline can be upgraded with an innovative Update-on-Card feature. This smart add-on facilitates system management by employing the users’ cards to pass information from the central station to doors throughout the premises.

SMARTair™ Guest – the SMARTair™ Guest replaces inconvenient room keys with a wireless locking system operated by smartcards. The SMARTair™ Guest software includes ‘reception’ functions such as ‘check-in’, ‘check-out’ etc.

SMARTair™ Genesis – SMARTair™ Genesis is ideal for small- to medium-sized organizations needing a simple, yet highly effective access control solution. Affordable and easy to install, it allows you to secure and manage up to 30 doors.

SMARTair™ Wireless – Controlled directly from the system manager’s PC, this sophisticated version of SMARTair™ notifies managers immediately about events at every door, enabling them to change authorizations and schedules and even open distant doors – without leaving their desks.

SMARTair™ Web – Get complete access control from anywhere and all the time. With SMARTair™ Web you’ll be able to manage access control from anywhere with a connected PC, tablet or smartphone. It allows you to open doors, manage authorizations, receive alerts, view audit trails and much more.
SMARTair™ Electronic Escutcheon

Euro profile

(Offline, UOC, Wireless)

The SMARTair™ wireless and battery powered escutcheons are ideal for transit, office or meeting room doors. The wide range of escutcheons offer a RFID reader and locking mechanism in one for all kind of doors.

Wireless

Technical data - SMARTair™ escutcheon

<table>
<thead>
<tr>
<th>Door profiles</th>
<th>Suitable for wooden, narrow or glass doors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic volume</td>
<td>Medium to high</td>
</tr>
<tr>
<td>Exterior usage</td>
<td>IP54 (Extreme version)</td>
</tr>
<tr>
<td></td>
<td>Up to 85% humidity</td>
</tr>
<tr>
<td></td>
<td>-20°C to + 70°C</td>
</tr>
<tr>
<td>Hardware compatibility</td>
<td>High retrofit (compatible with most common mortise locks)</td>
</tr>
<tr>
<td>and installation</td>
<td>Drilling, no cabling</td>
</tr>
<tr>
<td></td>
<td>Doors from 30mm up to 110mm (thicker doors may be possible on demand)</td>
</tr>
<tr>
<td>Power supply</td>
<td>Battery (from 60,000 to 80,000 cycles)* max. 2 years standby**</td>
</tr>
<tr>
<td></td>
<td>Type of batteries: 3 LR03 AAA 1.5V alkaline batteries</td>
</tr>
<tr>
<td>Multi-authentication</td>
<td>There are 2 models:</td>
</tr>
<tr>
<td></td>
<td>- RFID only</td>
</tr>
<tr>
<td></td>
<td>- RFID and PIN (keypad)</td>
</tr>
<tr>
<td>Status information</td>
<td>Handle usage</td>
</tr>
<tr>
<td></td>
<td>Thumb turn use: only in privacy model</td>
</tr>
<tr>
<td></td>
<td>Door position: door sensor not included</td>
</tr>
<tr>
<td></td>
<td>NO (normally open) connection</td>
</tr>
<tr>
<td></td>
<td>Override cylinder (in combination with special mortise lock)</td>
</tr>
<tr>
<td>Certifications</td>
<td>CE (EMC, R&amp;TTE)</td>
</tr>
<tr>
<td></td>
<td>ROHS, REACH, WEEE</td>
</tr>
<tr>
<td></td>
<td>EN1634 (Fire)</td>
</tr>
<tr>
<td>RFID technologies</td>
<td>HID iCLASS®</td>
</tr>
<tr>
<td></td>
<td>MIFARE Classic and Ultralight</td>
</tr>
<tr>
<td></td>
<td>SKIDATA DESFire</td>
</tr>
<tr>
<td>System management</td>
<td>Escutcheons can be upgradeable from</td>
</tr>
<tr>
<td>upgradability</td>
<td>Standalone &gt; Offline / Update On Card</td>
</tr>
<tr>
<td></td>
<td>&gt; Wireless Online by:</td>
</tr>
<tr>
<td></td>
<td>• Adding RF module</td>
</tr>
<tr>
<td></td>
<td>• Firmware upgrade</td>
</tr>
<tr>
<td></td>
<td>• Change of internal cover (plastic top)</td>
</tr>
</tbody>
</table>

* Depending on reading technology (MIFARE, iCLASS etc.)
** Depending on cycles per day.

Wireless, Offline, UOC
Electronic Technical Characteristics

1 Reader Module
- Activation Mode: the escutcheon is activated without any previous contact with the escutcheon, just approaching the credential, ensuring an efficient power consumption
- Reading distance: 2-4 cm read/write distance with standard RFID credentials
- Emergency opening: jack connection is available to connect the portable programmer and emergency kit
- RFID reader with capacitive keypad and backlighting LEDs (green/red/blue) for different warning signals: access authorized or denied, low battery level, etc
- Buzzer included for PIN confirmation and access denied
- Operating modes:
  - Only RFID
  - Only PIN
  - RFID + PIN
  - PIN + RFID

2 Control Unit
- Upgradeable firmware.
- Non-volatile memory. The escutcheon can be programmed to operate in 2 modes:
  - Normal mode: 1500 users and 600 events
  - High traffic door: unlimited number of users filtered into 48 groups (permissions). Stores 1000 events
- Number of PINs:
  - PIN + RFID (or RFID + PIN): unlimited PINs (stored in card)
  - Only PIN mode: 8
    - 1 door PIN
    - 7 common PINs per installation selectable in each door
  - Type of PIN: 4-6 digits
- Real-time clock and calendar:
  - 14 time zones with 5 time periods (week days and holidays selectable)
  - State tables: configure 20 changes of operating modes in a door per day (switch door from lock to unlock).
  - Yearly calendar: is updated every month automatically by the wireless system
  - Automatic DST: daylight Saving Time change updated with calendar
- Operating modes:
  - Standard: default operating mode. Freewheeling handle until valid credential presented, then allows to open the door for 4-10 seconds (configurable)
  - Standard ADA: standard with double opening time
  - Passage mode: escutcheon is always in open mode (configured by time zones or by authorized user after double badging)
  - Double user: two valid credentials needed to open the door
  - First user: lock in standard mode until first valid user enters, then will remain in passage mode (until closed by authorized user or automatically by time zone, state tables)

3 Battery Module
- Easy battery change
- Maintains clock/calendar for 5 minutes without batteries.
- Battery status reported on every event or once a day if no event happens

4 RF Module
- 868MHz or 915MHz selectable in field
- 30 configurable channels:
  - From 868,00 to 875,25 in steps of 0,25Mhz each channel
  - From 915,00 to 922,25 in steps of 0,25Mhz each channel
- Auto-link with communication Hubs (easy setup)
- Upgradable firmware

©2015 Mul-T-Lock Technologies Ltd

The Mul-T-Lock name and the muscleman logo, in the field of locking products, and any other name, mark or logo used by Mul-T-Lock and marked by ® or ™ sign, are registered/pending trademarks of Mul-T-Lock Ltd. in various countries. Mul-T-Lock reserves the right to make any product improvements or modifications without prior notice.

www.mul-t-lock.com
Mechanical Technical Characteristics

**Mortise Lock**
- Compatible with standard European mortise locks with different distances between axes 70, 72, 85, 90 & 92mm
- 7, 8 & 9mm spindle models available
- Pass through follower required (no split spindle)
- 42° handle turning should insert whole latch bolt (special model with 60° turning available)

**Door width**
- Suitable for doors with a thickness from 33 to 110mm
- The escutcheon’s spindles have different lengths depending on the thickness of the door. It is necessary to provide the X and Y measurements (from mortise lock center to outside and inside)
- Spindle is dismountable, for flexibility in field

**External Handle**
- Freewheeling handle connects to spindle when access is granted
- Different designs available in SMARTair™ portfolio
- Compatibly with other handles (check compatibility with your dealer):
  - Maximum weight 300gr (at 50mm from spindle)
  - Lateral fixing screw required

**Internal Handle**
- Panic function, internal handle always opens door

**Handle shapes and surfaces**

- Vector
- Xara
- Sena
- Zafira
- Stainless Steel
- PVD Satin Chrome
- PVD Polish Brass
- PVD Matt Brass

www.mul-t-lock.com

The Mul-T-Lock name and the muscleman logo, in the field of locking products, and any other name, mark or logo used by Mul-T-Lock and marked by ® or ™ sign, are registered/pending trademarks of Mul-T-Lock Ltd. in various countries. Mul-T-Lock reserves the right to make any product improvements or modifications without prior notice.

©2015 Mul-T-Lock Technologies Ltd
SMARTair™ Electronic Escutcheon
Euro profile
(Standalone)

The SMARTair™ wireless and battery powered escutcheons are ideal for transit, office or meeting room doors. The wide range of escutcheons offer a RFID reader and locking mechanism in one for all kind of doors.

Technical data - SMARTair™ escutcheon

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door profiles</td>
<td>Suitable for wooden or narrow doors</td>
</tr>
<tr>
<td>Traffic volume</td>
<td>Medium to high</td>
</tr>
<tr>
<td>Exterior usage</td>
<td>IP54 (Extreme version)</td>
</tr>
<tr>
<td>Up to 85% humidity</td>
<td>-20°C to + 70°C</td>
</tr>
<tr>
<td>Hardware compatibility and installation</td>
<td>High retrofit (compatible with most common mortise locks)</td>
</tr>
<tr>
<td></td>
<td>Drilling, no cabling</td>
</tr>
<tr>
<td></td>
<td>Doors from 30mm up to 110mm (thicker doors may be possible on demand)</td>
</tr>
<tr>
<td>Power supply</td>
<td>Battery (from 60.000 to 80.000 cycles)* max. 2 years standby**</td>
</tr>
<tr>
<td></td>
<td>Type of batteries: 3 LR03 AAA 1.5V alkaline batteries</td>
</tr>
<tr>
<td>Certifications</td>
<td>CE (EMC, R&amp;TTE)</td>
</tr>
<tr>
<td></td>
<td>ROHS, REACH, WEEE</td>
</tr>
<tr>
<td></td>
<td>EN1634 (Fire)</td>
</tr>
<tr>
<td>RFID technologies</td>
<td>HID ICLASS®, MIFARE Classic and Ultralight DESFire</td>
</tr>
<tr>
<td>System manage-ment upgrad-ability</td>
<td>Escutcheons can be upgradeable from Standalone &gt; Offline / Update On Card</td>
</tr>
<tr>
<td></td>
<td>&gt; Wireless Online by:</td>
</tr>
<tr>
<td></td>
<td>• Offline/ UoC: firmware upgrade</td>
</tr>
<tr>
<td></td>
<td>• Wireless Online:</td>
</tr>
<tr>
<td></td>
<td>- Adding RF module</td>
</tr>
<tr>
<td></td>
<td>- Firmware upgrade</td>
</tr>
<tr>
<td></td>
<td>- Change of internal cover</td>
</tr>
<tr>
<td></td>
<td>(plastic top)</td>
</tr>
</tbody>
</table>

* Depending on reading technology (MIFARE, iCLASS etc.): ** Depending on cycles per day.

Mechanical dimensions

![Mechanical dimensions diagram]

www.mul-t-lock.com

The Mul-T-Lock name and the muscleman logo, in the field of locking products, and any other name, mark or logo used by Mul-T-Lock and marked by ® or ™ sign, are registered/pending trademarks of Mul-T-Lock Ltd. in various countries. Mul-T-Lock reserves the right to make any product improvements or modifications without prior notice.

©2015 Mul-T-Lock Technologies Ltd
Electronic Technical Characteristics

1 Reader Module
- Activation Mode: the escutcheon is activated without any previous contact with the escutcheon, just approaching the credential, ensuring an efficient power consumption
- Reading distance: 2-4 cm read/write distance with standard RFID credentials
- Emergency opening: jack connection is available to connect the emergency kit and to open with emergency or user card
- RFID reader with capacitive keypad and backlighting LEDs (green/red/blue) for different warning signals: access authorized or denied, low battery level, etc
- Buzzer included for PIN confirmation and access denied

2 Control Unit
- Upgradeable firmware
- Non-volatile memory
- 100 PINs per device. (4-6 digits)
- 500 User cards per device
- Operating modes:
  - Standard: default operating mode. Freewheeling handle until valid credential presented, then allows to open the door for 4 seconds
  - Passage mode: escutcheon is always in open mode (configured by authorized user after double badging or double PIN)

3 Battery Module
- Easy battery change
- All Users (Cards and PINs) sign low batteries during the reading (red and green led blink). For very low batteries red and green led will blink alternatively but the escutcheon will not grant the access
Mechanical Technical Characteristics

**Mortise Lock**
- Compatible with standard European mortise locks with different distances between axes 70, 72, 85, 90 & 92mm
- 7, 8 & 9mm spindle models available
- Pass through follower required (no split spindle)
- 42º handle turning should insert whole latch bolt

**Door width**
- Suitable for doors with a thickness from 33 to 110mm
- The escutcheon’s spindles have different lengths depending on the thickness of the door. It is necessary to provide the X and Y measurements (from mortise lock center to outside and inside)
- Spindle is dismountable, for flexibility in field

**External Handle**
- Freewheeling handle connects to spindle when access is granted
- Different designs available in SMARTair™ portfolio
- Compatibly with other handles (check compatibility with your dealer):
  - Maximum weight 300gr (at 50mm from spindle).
  - Lateral fixing screw required

**Internal Handle**
- Panic function, internal handle always opens door

**Handle shapes and surfaces**
- Vector
- Xara
- Sena
- Zafira

**Materials**
- Stainless Steel
- PVD Polish Brass
- PVD Satin Chrome
- PVD Matt Brass