



SMART



ENERGY
SAVING



SAFE

Automation
system for
sectional garage doors

Ditec **AIR**

Ditec AIR

Discover the evolution in the garage door world with **the new 600 N and 1000 N Ditec AIR motors**, fast and powerful for maximum convenience. With superior materials and bi-frequency radio receiver, Ditec AIR ensures **reliable performance and maximum flexibility**. Technology and reliability come together for maximum comfort!



A FLEXIBLE AUTOMATION

suitable for every context

- Ditec AIR is compatible with **sectional garage doors, side doors and up-and-over doors with counterweights**, using an optional accessory
- For **intensive use**: designed for 70 cycles per hour and over 1600 cycles per day!

HALVE THE INSTALLATION TIME

- **Quick-mounting rails and brackets** for ceiling mounting ensure fast and reliable installation of the automation
- **Self-learning procedure** for installing the motor in just two maneuvers, using the automation's navigation buttons, wall station or App
- **Impact force control** guarantees excellent safety for users

DOOR CONTROL AT YOUR FINGERTIPS

with the new wall station

- **Effortless Control**: Ditec wall station allows to open and close the door, start the self-learning procedure, view alarms and adjust parameters
- **Enhanced Convenience**: say goodbye to the hassle of having to reach the operator at the ceiling. Ditec wall station provides easy access to all essential controls and settings, right at your fingertips



FULL COMPLIANCE WITH EU DIRECTIVES AND STANDARDS

- **2006/42/CE** -Machines Directive - regarding the following essential health and safety requirements 1.1.2, 1.1.3, 1.2.1, 1.2.2, 1.2.3, 1.2.4.2, 1.2.6, 1.3.9, 1.4.3, 1.7.2, 1.7.3, 1.7.4, 1.7.4.1, 1.7.4.2
- **2014/30/EU - EMCD** - Electromagnetic Compatibility Directive
- **2014/53/EU - RED** - Radio Equipment Directive
- **Harmonised EU Standards**: EN 60335-1, EN 55014-1; EN 55014-2; ETSI EN 300 220-1; ETSI EN 300 220-2; ETSI EN 300 328; ETSI EN 301 489-17; ETSI EN 301 489-1; ETSI EN 301 489-3; EN IEC 62311; EN IEC 62368-1
- **Other standards/technical specifications applied**: EN IEC 60335-2-95; EN IEC 60335-2-103; EN 12453; IEC 60335-1; IEC 60335-2-95; IEC 60335-2-103; FCC CFR 47 - Part 15 Subpart B; ICES-003 Issue 7



Ditec AIR

A PROFESSIONAL AUTOMATION with a thousand capabilities

- ✦ **Radio receiver bi-frequency**, thanks to new RCB100E radio receiver module, available both 433.92 MHz and 868.35 MHz (default: 433.92 MHz)
- ✦ **Battery voltage-level display** to check the battery status
- ✦ **Imbalance level** to check if the door is properly balanced or if the system detects imbalances when opening or closing
- ✦ **Automation efficiency level detection**
 - The automation determines the level of efficiency: the mechanical quality of the gate is evaluated and whether the chosen automation is adequate. Mechanical maintenance could be recommended to restore efficiency or the adoption of an automation with higher performance may be suggested (e.g., motor with higher power)
 - During normal use, continuous monitoring of automation efficiency, updating the degradation status in real time. Notification if the performance degraded and maintenance is required
- ✦ Ready to operate with the **AES-128** radio transmission encryption protocol, **making the use of cloned transmitters impossible**.
But that's not all! Ditec AIR is capable of decrypting remote controls programmed with a **custom installation code** (Ditec **PROTECTED** Mode)



THE END USER ENJOYS unique advantages

- ✦ **Buzzer**, for audible signaling of automation in motion
- ✦ **Vacation mode**, to disable radio commands of transmitters and radio keypad and strengthen the security of the entrance
- ✦ **Fast automation** that reduces waiting times in the opening and closing phases
- ✦ **External unlocking device with key**, useful in case of power failure
- ✦ **High brightness courtesy light** to ensure safety and comfort
- ✦ **Emergency batteries** to avoid annoying power outages
- ✦ **Parking assistance**: the courtesy light flashes quickly three times when the vehicle has cleared the photocells in the passageway, indicating it can be closed
- ✦ **Hold the door**: if the system detects that the door is "falling" (spring breaking), the motor intervenes to brake the fall as much as possible



ENERGY EFFICIENCY

The new **European Regulation 2023/826/EU** establishes **new eco-compatible design requirements for off mode, stand-by mode, and networked-stand-by energy consumption** of electrical and electronic household and office equipment within the scope of Directive 2009/125/EC.

It abrogates the previous Regulation 1275/2008/EC and its amendments, adding some specific product categories, among them **motor-operated building elements, like gate and door operators**.

The new European Regulation will become mandatory from May 2025.



**ENERGY
SAVING < 0.6 W***

Ditec is **continuously committed to promoting energy saving** and carefully evaluating the **environmental impact of its products**.

New **Ditec AIR consumes less in standby than regulatory requirements** with an active display and an active Bluetooth network device, thanks to:

- ✦ Switching power supplies instead of traditional power supplies (e.g. transformer)
- ✦ High-efficiency control unit developed using state-of-the-art technology that reduces energy losses
- ✦ More precise control of output voltage and ability to better adapt to input voltage fluctuations
- ✦ Low heat dissipation leading to longer component life and higher reliability over time

* < 0.6 W networked equipment for AIR600B
< 0.8 W networked equipment for AIR1000B

SMART CONTROL



CONTROL AND MANAGEMENT of automation with your smartphone

In the age of complete connectivity, gate and garage automations have become essential components of modern living. Integrating these automations offers access to an unprecedented level of convenience and security.

Utilizing the Ditec App and the Web app, it's possible to:

- Control and monitor the status of the gate or garage from anywhere, ensuring safe and smooth access
- Receive real-time notifications to keep track of access and security
- Simplify configuration and maintenance, reduce response time and improve efficiency
- Provide fast and effective remote support, monitor performance and resolve any problems in real time, ensuring superior service quality
- Operational efficiency and reduced response times translate into economic benefits for both installers and end users, creating a win-win ecosystem for both parties.



**Ditec App available in
Autumn 2024.
Remote control functions
as of early 2025**

New Ditec App and Cloud

For PROFESSIONALS / INSTALLERS

- **Startup and configuration**
 - Local or remote configuration and programming
 - Guided start up (wizard)
 - Retrieval of documentation, videos, training, ...
 - FW update procedure
- **Routine maintenance: standard professional activities**
 - Retrieval of information from the automation
 - Scheduling of intervention agenda based on number of cycles or time
 - Geolocation
 - Overview of events and access
 - Transmitter management
- **Extraordinary maintenance:**
 - Early intervention
 - Notifications if something unexpected happens
 - Remote diagnostics
 - Remote support and troubleshooting



For END USERS

- Local and remote control via app
- Status notification (e.g. gate is opening now,...)
- User management, access control via Bluetooth
- Creation of scenarios and scheduled events
- Manage installer permissions



SPECIFIC ACCESSORIES



- ▶ **Adapter for up-and-over doors**
with counterweights



- ▶ **LED courtesy light built-in**
high brightness (3500 lms, 4000°K)



- ▶ **Emergency battery kit**
24 Vdc NiMH batteries with battery charging board and wirings



- ▶ **24 Vdc / 24 Vac photocells**
 - 2-wire with auto-test and 4-wire version with -90°/+90° orientable card
 - also available in battery-powered version



- ▶ **Active radio safety edges**
868 MHz radio transmission system of safety signals for active safety edges



- ▶ **Track systems**
 - 3.3 m or 4.4 m belt-driven robust steel tracks (complete with trolley and mounting brackets)
 - easy transport pallet version or two-piece split version



Example of installation



SMART CONTROL

Through **Ditec Cloud**, the automation for sectional garage doors becomes an integral part of your lifestyle: local and remote **Smart Control** via Bluetooth and Wi-Fi; **User management**; **quick, guided configuration** to customize all automation parameters in just a few clicks; **Stress-free maintenance and reduced intervention time**.



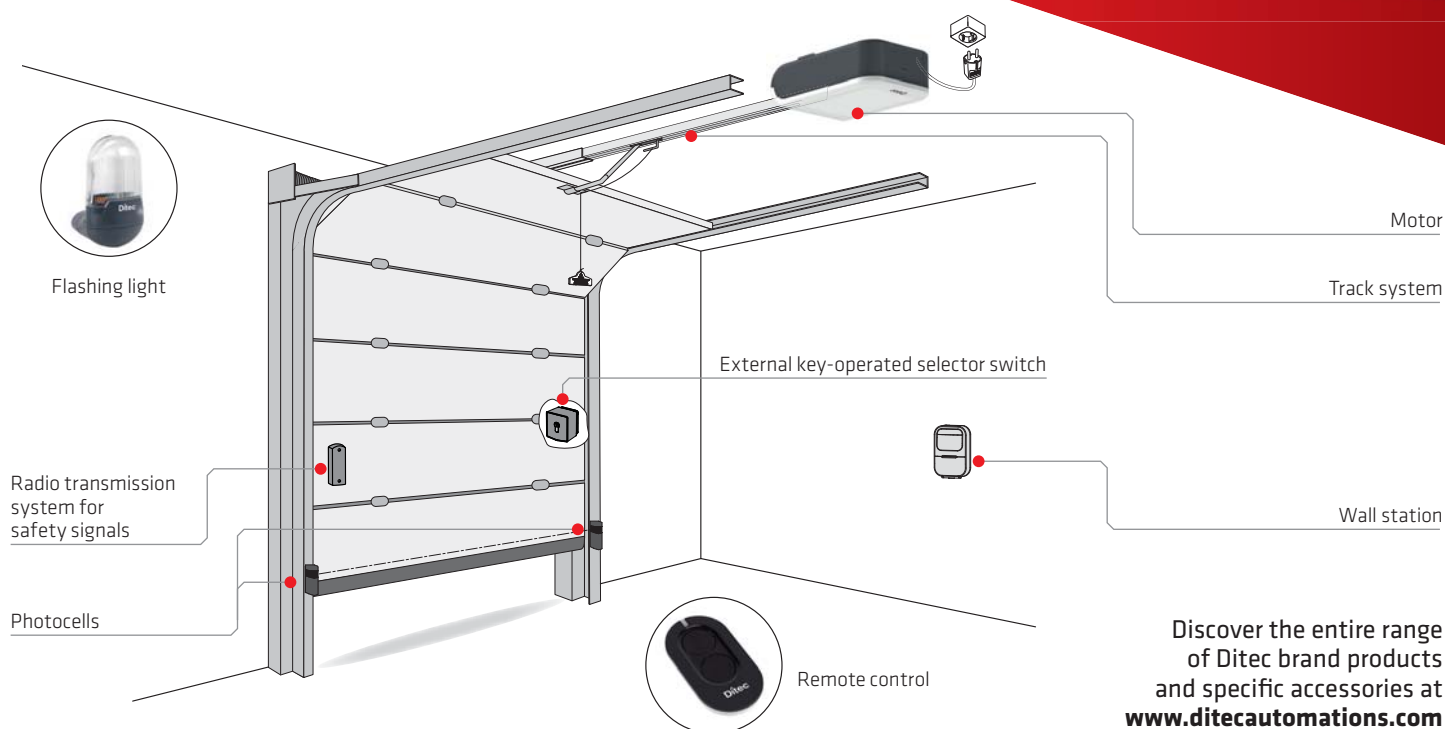
ENERGY SAVING

Automation aligned with new European standards in terms of **energy saving and standby consumption**: with an active display and an active bluetooth (networked equipment) AIR600B < 0.6 W and AIR1000B < 0.8 W. High efficiency switching power supply and DC control unit.

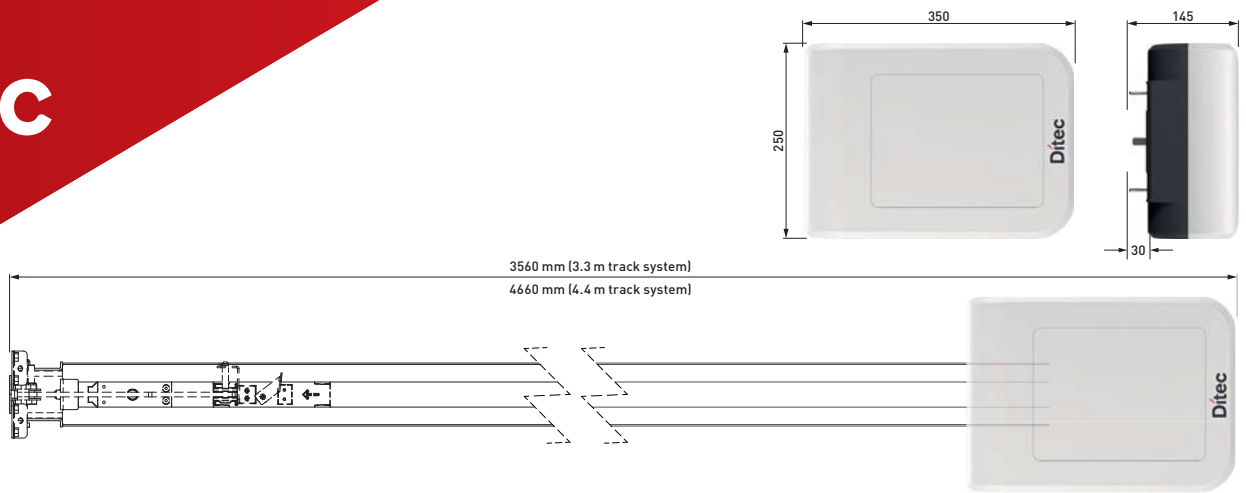


SAFE

The 24 Vdc encoder technology, combined with the advanced control algorithm, provides continuous electronic monitoring of **impact forces and immediate obstacle detection**, ensuring that the system stops or reverses motion.



Discover the entire range of Ditec brand products and specific accessories at www.ditecautomations.com



TECHNICAL SPECIFICATIONS

DESCRIPTION	AIR600B	AIR1000B
Electromechanical actuator	for sectional overhead doors	for sectional overhead doors
Transmission system	with belt	with belt
Stroke control	encoder	encoder
Max. door area	12 m ²	17 m ²
Max. door weight	130 kg	200 kg
Duty class	Intensive (tested up to 200.000 cycles)	Intensive (tested up to 200.000 cycles)
Intermittent operation	S2 = 60 min S3 = 75%	S2 = 60 min S3 = 75%
Cycles / hour*	70 cycles (T=25°C)	70 cycles (T=25°C)
Countinuous cycles*	100 cycles (T=25°C)	100 cycles (T=25°C)
Power supply	100-240 Vac 50/60 Hz	100-120 Vac, 200-240 Vac (by switch) 50/60Hz
Motor power supply	24 Vdc	24 Vdc
Max. Torque / Thrust	600 N	1000 N
Power input	100 W	150 W
Opening speed	20 cm/s (adjustable 8-22 cm/s)	20 cm/s (adjustable 8-22 cm/s)
Closing speed	10 cm/s (adjustable 8-22 cm/s)	10 cm/s (adjustable 8-22 cm/s)
Power consumption (Stand by)	< 0.6 W Networked equipment	< 0.8 W Networked equipment
Operating temperature	-20°C / +50°C	-20°C / +50°C
Protection rating	IP 20	IP 20
Noise level	< 55 dB (operator only)	< 55 dB (operator only)

*indicative cycles considering a 2350 mm high door and factory settings (default opening speed of 20 cm/s and closing speed of 10 cm/s). With higher speeds, the number of cycles increases. A cycle is considered an opening maneuver followed by a closing maneuver

DESCRIPTION	TS100X3 - TS150X2	TS100X4 - TS200X2
Track system length	3300 mm	4400 mm
Maximum carriage stroke	2875 mm	3975 mm
Maximum door height	2350 mm	3450 mm

MAIN FUNCTIONS OF THE SYSTEM

GENERAL DATA	
Control panel	LCU60E built-in
Radio module	RCB100E (433.92 - 868.35 Mhz selectable)
Bluetooth	built-in
Accessory power supply	24 Vdc / 0.3 A max 2 s 24 Vdc / 0.15 A continuous
INPUTS	
Opening control	■
Partial opening control	■ adjustable
Stop control	■
Step-by-step control	■
OUTPUTS	
Courtesy light	built-in. 1750 lms
Flashing light	■
Electrically operated lock	■ alternative to flashing light
Gate-open warning light (ON/OFF)	■ alternative to flashing light
Gate-open warning light with proportional blink rate	■ alternative to flashing light
Wall station	■
ACCESSORIES	
Wall station	■
Battery	■
Up-and-over door	■
Additional courtesy light	■ up to 3500 lms
Emergency release	■
PROGRAMMABLE FUNCTIONS	
Stroke control	■
Configuration of programmable functions	display and navigation keys Via App
Opening and closing thrust	■ adjustable
Speed	■ adjustable
Soft Start / Soft Stop	■
Automatic re-closing time	■ adjustable
Pre-flashing time in opening and closing	■ adjustable
Integrated datalogging (counter and recent alarm history)	■
Monitoring of door unbalance	■
Monitoring the level of automation efficiency	■
FW Update	■ SW and USBPROG or Via App
SAFETY AND PROTECTION FUNCTIONS	
Emergency stop	■
Safe closing (inversion)	■
Automatic force adjustment during movement	■
D-ODS Dynamic Obstacle detection system (automatic adjustment of the thresholds to reduce the possibility of false obstacle detection)	■
Execution methods for force detection tests in accordance with EN 13241-1	■