Dítec
OPEN YOUR WORLD

ENERGY SAVING

24 V VIRTUAL ENCODER
SAFE

SETTING
VERSATILE

Ditec NEOS Green

Automation system for sliding gates up to **1000 kg**

EN

Ditec **NEOS**
reliable and *Green*

Ditec NEOS Green is a sliding-gate operating device for residential, commercial and industrial applications. It is designed to resist even under heavy use and demanding weather conditions.
With quick installation and easy maintenance, it is available in 3 different sizes: 500, 800 and 1000 kg, and integrates the control panel with display in the operator with bi-frequency radio receiver.

two digit display and navigation pushbuttons for easy configuration of settings and diagnostics

slot for safety-command **module cards** (self testing safety ribs and magnetic-loop motion detector)

ASA cover for greater resistance to weather and UV rays

cables prewired in the factory

internal photocell slots offer greater safety and practicality

230 V protective cover reduces the risk of electrocution

gear motor with bronze gearwheel on bearings, protected by a completely sealed die-cast case

Status LEDs for immediate control of the automation without opening the cover

rubber protective cover prevents entry of dust and insects

release handle is ergonomic and easy to use

adjustable height ensures perfect coupling with the rack

base in die-cast aluminium rovides greater stability

preconfigured **transmitter** (step-by-step and partial opening)

steel plate securely fastens to the ground

FULL COMPLIANCE WITH EU DIRECTIVES AND STANDARDS

- **2006/42/EC - MD** - Machinery Directive
- **2014/30/EU - EMCD** - Electromagnetic Compatibility Directive
- **2014/53/EU - RED** - Radio Equipment Directive
- **2011/65/EU - RoHS 2** - Restriction of Hazardous Substances
- **2015/863/EU - (modification to RoHS 2) -** Restriction of Hazardous Substances
- **Harmonised European standards which have been applied:** EN IEC 55014-1; EN IEC 61000-6-1; ETSI EN 301 489-1; ETSI EN 300 220-1; EN 60335-1; EN IEC 55014-2; EN IEC 61000-6-3; ETSI EN 301 489-3; ETSI EN 300 220-2; EN 60335-2-103
- **Other standards or technical specifications which have been applied:** EN 60529

Ditec **NEOS** *Green*
a complete product

COMPLETE PEACE OF MIND:
sturdy, durable and reliable over time

- **single-block, die-cast aluminium base** provides unmatched stability
- **special high-quality, self-levelling grease** keeps screws and crowns constantly lubricated
- our **choice of materials and the internal arrangement of components** is designed to keep out moisture, dust and insects
- the **temperature sensor** fine-tunes the gear motor's performance in the event of cold, ice and snow. (NIO - No Ice Option - function)
- **IP 24D degree protection** to prevent contact, even accidental, with live parts
- **steel plates of different thickness and design** allow for correct installation in all circumstances and **levelling screws** can be used to adjust the operating device to the millimetre

INSTALL AND CONFIGURE
the operating device more quickly

- **bi-frequency radio receiver**, thanks to the new RCB50E radio receiver module, compatible with both 433.92 MHz and 868.35 MHz frequencies (default: 433.92 MHz)
- the **self-learning procedure** is made easy by the display, navigation pushbuttons and a specific remote control, for **installation of the motor in just two steps**
- there are **three predefined configurations** for residential and condominium use.
- **removable storage** allows operating settings to be saved and copied to another operating device

ENCRYPTION AES-128

Encryption AES-128 and Protected mode

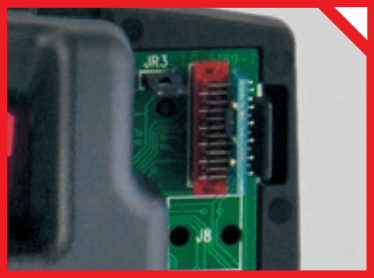
Ready to operate with the **AES-128** radio transmission encryption protocol, **making the use of cloned transmitters impossible.**

Ditec NEOS Green is capable of decrypting remote controls programmed with **a custom installation code** (Ditec **PROTECTED** Mode).

AUTOMATION SYSTEM
with guaranteed periodic servicing

- **total operation counter** keeps track of the total number of cycles carried out by the operating device
- **partial operation counter** (can be reset) to set a programmed maintenance threshold at which the flashing light will tell your customer that it's time to carry out servicing!

MOTOR SHAFT IN STEEL AND BRONZE



REMOVABLE STORAGE FOR SAVING SETTINGS

ENERGY EFFICIENCY

ENERGY SAVING < 0.6 W*

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.

This regulation repealed the previous Regulation 1275/2008/EC and extended the scope to some specific categories of products, including **motor-driven building elements, such as gate and door operators.**

The new European regulation came into effect as of May 2025.

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

The new Ditec NEOS Green consumes less power in standby than regulatory requirements with an active display: the system minimizes power consumption during standby but, thanks to its advanced technology, quickly reactivates as soon as it receives commands via radio or from other accessories, ensuring efficiency without compromising performance.

Ditec NEOS *Green*
unique performance

The **NEOS *Green* range guarantees** advanced functions and exclusive technical specifications

WANT MORE PRECISE CONTROL
over settings and more room for wiring?

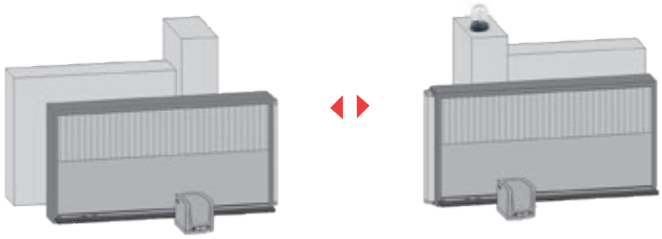
The Ditec NEOS *Green* offers you an advanced control panel for **more precise adjustment of all settings and additional terminals** for more convenient wiring operations:

- dedicated opening/closing contacts
- emergency STOP command
- contact to indicate gate status
- independent 400 W-power contact for electric/electronic devices (i.e. garden lights, fountains, garden irrigation systems, etc.)

CHECK THE STATUS
of your operating device!

LEDs allow you to easily monitor the status of the operating device without opening the ASA cover: correct operation, battery mode, release-shutter open, fault or maintenance request.
If you need more information, you can remove the cover and read the display by simply loosening one screw!

Dedicated terminal for simple and quick connection of two **Ditec NEOS *Green*** operating devices in a master/slave configuration for synchronised control of double-wing or interlocked automation systems.



IF YOU ARE UNABLE
to solve a problem

- integrated diagnostics: check the counters and the history of the last alarms on the control panel display
- with the USB accessory you can monitor the installation and the operating device. All data will be saved on the flash drive supplied and can be analysed on a PC using the software supplied with the system

SPECIFIC ACCESSORIES

- **Energy controllers**
  to manage batteries and solar energy production, complete with assembly brackets

- **Traction kit**
  with chain

- **Racks**
  - in nylon and fiberglass with steel core, 4 or 6 fixing points with buttonhole
  - in stainless steel, complete with screws and supports

- **Plates**
  - steel plate for heavy applications
  - adjustable support for lifting off the ground
  - steel plate for retrofit installations

ENERGY SAVING

Automation aligned with new European standards in terms of **energy saving and standby consumption**: with an active display Ditec NEOS Green < 0,5 W

SAFE

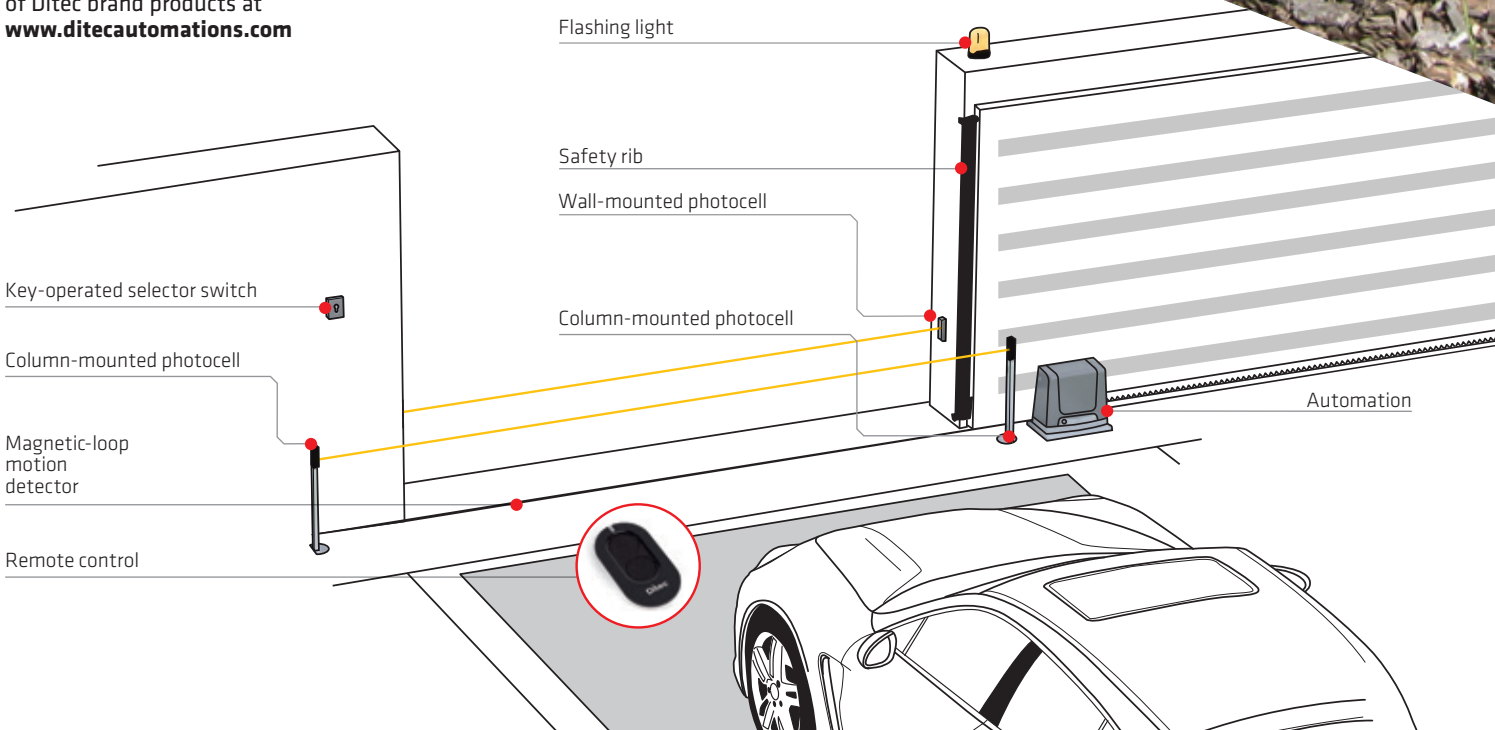
The 24 Vdc virtual-encoder technology enables constant electronic control of the impact forces and immediate obstacle detection ensuring that the operating device stops or motion is reversed (if configured).
If this is not enough, you can add **magnetic limit switches** (already included in some versions).
Additionally, in the event of a blackout, the electronic control panel intervenes activating **the incorporated batteries** (optional) which ensure correct operation of the system.

VERSATILE

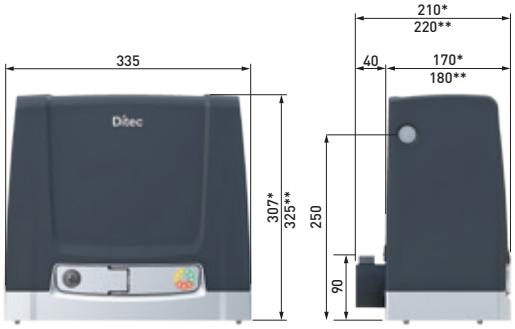
From the control panel, **it is possible to precisely manage position and speed** at all times, allowing adjustment for acceleration, deceleration, start time, slowdown distance and approach speed during opening and closing.
No more radio interference! Thanks to the new 433.92 MHz / 868.35 MHz receiver module included, choose your preferred frequency via jumper.

Example of installation

Discover the entire range of Ditec brand products at **www.ditecautomations.com**



Dítec



*NEOS 500
**NEOS 800 - 1000

TECHNICAL SPECIFICATIONS

Description	NEOS 500 G	NEOS 800 G	NEOS 1000 G
Electromechanical actuator	for gates up to 500 kg	for gates up to 800 kg	for gates up to 1000 kg
Stroke control	virtual encoder	magnetic limit switch + virtual encoder	magnetic limit switch + virtual encoder
Maximum stroke	20 m	20 m	20 m
Duty class	heavy duty - tested up to 150.000 cycles	heavy duty - tested up to 150.000 cycles	heavy duty - tested up to 150.000 cycles
Intermittent operation	S2 = 30 min; S3 = 60% (T=25°C)	S2 = 30 min; S3 = 60% (T=25°C)	S2 = 30 min; S3 = 60% (T=25°C)
Cycles / hour*	26 (T=25°C)	26 (T=25°C)	26 (T=25°C)
Countinuous cycles*	22 (T=25°C)	22 (T=25°C)	22 (T=25°C)
Power supply	230 Vca - 50/60 Hz	230 Vca - 50/60 Hz	230 Vca - 50/60 Hz - 120 Vca - 50/60 Hz (J version)
Motor power supply	24 Vcc	24 Vcc	24 Vcc
Power input	1,2 A	1,5 A	2 A
Thrust	500 N	800 N	1000 N
Opening and closing speed	0.1 - 0.25 m/s	0.1 - 0.24 m/s	0.1 - 0.19 m/s
Release system for manual opening	key operated	key operated	key operated
Operating temperature	-20°C / +55°C (-35°C / +55°C with NIO enabled)	-20°C / +55°C (-35°C / +55°C with NIO enabled)	-20°C / +55°C (-35°C / +55°C with NIO enabled)
Protection rating	IP 24 D	IP 24 D	IP 24 D
Weight (kg)	12,7	14	14,6
Control panel	CS12MG	CS12MG	CS12MG

* Cycles estimated considering a 6 m gate, T=25°C and factory settings (default speed of 15 cm/s). Different speeds may affect the maximum number of cycles. NEOS500G, NEOS800G and NEOS1000G allow a configurable maximum speed as shown in the table. A cycle is considered an opening manoeuvre followed by a closing manoeuvre

MAIN FUNCTIONS OF THE SYSTEM

GENERAL DATA

Control panel	CS12MG built-in
Radio module	RCB50E
Radio frequency	433,92 MHz (default) - 868,35 MHz (selectable from jumper)
Accessories power supply	24 Vcc - 0,6 A
Stroke control	virtual encoder for NEOS 500 G virtual encoder + magnetic limit switches for NEOS 800 G and NEOS 1000 G
Limit switch provision	■
Standby consumption according to European regulation 2023/826/EU	< 0.5 W with active display

INPUTS

Open control	■
Partial opening control	■
Close control	■
Stop control	■ or via radio
Inching control	■
Hold-to-run command	■
Automatic contact closing management (enable or disable automatic closing with external timer or a remote signal)	■

OUTPUTS

Number of 24 Vdc outputs	2
- Flashing light	24 Vcc
- Gate-open warning light (ON/OFF)	■
Configurable 230 Vac C-NO output	1, up to 400 W
- Flashing light	230 Vac
- Courtesy light	■
- Always closed contact - always open contact	■
- Automation closed, open, in movement, in opening, in closing	■

PROGRAMMABLE FUNCTIONS

Configuration of programmable functions	display and navigation buttons
Opening and closing thrust	■ adjustable
Speed	■ adjustable
Soft Start / Soft Stop	■ adjustable
Automatic re-closing time	■ adjustable
Pre-flashing time in opening and closing	■ adjustable
Integrated datalogging (counter and recent alarm history)	■
Extended datalogging (in-depth recording of each event)	■
FW update	■ with micro USB cable and Amigo SW

SAFETY AND PROTECTION FUNCTIONS

Emergency stop	■
Safe closing (inversion)	■
Safety test function (for self-monitored safety devices)	■
ODS – Obstruction Detection System (causes the gate to stop or reverses movement when an obstacle is detected)	■
NIO - Antifreeze system	■

ACCESSORIES

Battery continuity operation	■ with SBU
Battery arrangement built into the automation	■
Solar-powered operation in stand-alone mode	■ with SBU*
8.2 KΩ-resistance safety edge	■ with GOPAV
Magnetic loop detector	■ with LAB9

* With SBU it is possible to use photovoltaic panels up to max 20 W to recharge the batteries.
The battery recharging time and the number of possible operations depend on the irradiation conditions

ICIM UNI EN ISO 9001:2015 SISTEMA DI GESTIONE CERTIFICATO
Cert. n. 0957/8

Ditec S.p.A.
Largo U. Boccioni, 1
21040 Origgio (VA) • Italy

Tel +39 02 963911
info@ditecautomations.com
www.ditecautomations.com

Part of ASSA ABLOY

Technical data subject to change without notice

Cod. N251B - 07/2025
Ditec NEOS Green