

**TECHLINE®**  
**Product Overview**

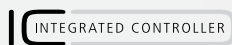


# Actuators

## LA37

Tough applications require equally tough actuator solutions. The actuator LA37 is specifically developed for heavy-duty applications in harsh environments, where there is a need for high lifting capacity and holding force. The LA37 offers the well-known LINAK quality, guaranteeing you a maintenance-free product with a long lifetime.

The LA37 is also available with:



### Features:

Thrust: 10,000 N - 15,000 N  
 Speed: 3.5 mm/s  
 Stroke length: 600 mm  
 Duty Cycle: 15 % at -30° C to +70° C  
 Voltage: 12 or 24 V DC  
 Endstop: Built-in electrical endstop

### Options:

- Trunnion mounting
- Hall effect sensor
- Endstop signals (not potential free)
- Analogue or digital feedback for precise positioning
- Possible IC options for LA37: IC Basic, IC Advanced, LINbus, Modbus and Parallel

### Scope of application:

- Agricultural applications
- Mobile "off-highway" applications
- Forestry and construction machines
- Hood lifting
- Cabin tilt
- Solar tracking

### Facts:

- Heavy-duty aluminium housing for harsh conditions
- Easy to use interface – with integrated power electronics
- Hall sensors or potentiometer for relative or absolute feedback
- Hand crank for manual operation
- Salt spray and chemical tested
- High-pressure cleaner proof
- Designed for outdoor use

## LA36

The actuator LA36 is one of the most solid and powerful LINAK actuators, designed to operate under extreme conditions. The LA36 is a maintenance-free product with a long lifetime and a high IP degree. This high-quality actuator offers a very strong alternative to hydraulic solutions.

The LA36 is also available with:



### Features:

Thrust: 10,000 N  
 Speed: Up to 160 mm/s  
 Stroke length: 100 - 999 mm  
 Duty Cycle: 20 %  
 Voltage: 12, 24 or 36 V DC  
 Endstop: Slip clutch or built-in limit switches

### Options:

- Potentiometer
- Hall effect sensors
- Adjustable signal switches
- IP66 dynamic and IP69K static
- Integrated electronics
- Possible IC options for LA36: IC Basic, IC Advanced, LINbus, Modbus and Parallel
- IECEx/ATEX certification

### Scope of application:

- Agricultural applications
- Mobile "off-highway" applications
- Floorsweeper and scrubber
- All kinds of industrial equipments
- Solar tracking

### Facts:

- Solid metal construction
- Hand crank for manual operation
- Suitable for very harsh conditions
- Salt spray and chemical tested
- High-pressure cleaner proof
- Designed for outdoor use

## LA35

The actuator LA35 is a powerful actuator with a low noise level. It is designed for a variety of both indoor and outdoor applications and provides a practical, cost-effective solution with low power consumption.

The LA35 is also available with:



### Features:

Thrust: Up to 6,000 N in push and 4,000 N in pull  
Speed: Max. 19 mm/s  
Stroke length: 600 mm  
Duty Cycle: 10 %  
Voltage: 12 or 24 V DC  
Endstop: Built-in limit switches and brake

### Options:

- Hall effect sensor
- Potential free limit switches
- IP66 dynamic and IP69K static
- Safety nut in push
- Possible IC options for LA35: IC Basic and Modbus

### Scope of application:

- Agricultural applications
- Mobile "off-highway" applications
- Floorsweeper and scrubber
- All kinds of industrial equipments
- Solar tracking

### Facts:

- Heavy-duty aluminium housing for harsh conditions
- Easy to use interface – with integrated power electronics for direct connection to control system
- Hall sensors or potentiometer for relative or absolute feedback, regardless of the stroke length
- Designed for outdoor use

## LA34

The actuator LA34 is an advanced actuator, which can push up to 10,000 N. Its compact design, outstanding performance and range of safety options makes the LA34 the ideal choice for a variety of medical and industrial applications.



### Features:

Thrust: Max. 10,000 N in push and 6,000 N in pull  
Speed: 5 - 18 mm/s  
Stroke length: 100 - 400 mm  
Duty Cycle: 10 %  
Voltage: 12 or 24 V DC  
Endstop: Built-in limit switches

### Options:

- Potentiometer
- Reed switch
- IP66 housing
- Compact housing
- Safety nut

### Scope of application:

- Factory automation
- Scissor lift
- Various numbers of indoor applications

### Facts:

- Compact housing for harsh conditions
- Outstanding performance
- Low noise level

# Actuators

## LA32

The actuator LA32 is a powerful actuator that can be supplied with a ball screw spindle to give outstanding performance. The ideal choice for a wide range of applications.



**Features:**  
Thrust: Max. 6,000 N  
Speed: 5,5 - 15 mm/s  
Stroke length: 100 - 400 mm  
Duty Cycle: Max. 10 %  
Voltage: 12, 24 V DC  
Endstop: Current cut-off

**Options:**

- Powerful strong motor
- Potentiometer
- Reed switch
- IP66 housing
- Ball screw spindle
- Safety nut

**Scope of application:**

- Agricultural applications
- Lawn and garden equipment
- Floor sweepers
- Factory automation

**Facts:**

- Powerful and quiet operation
- Only for "push" applications

## LA30

The actuator LA30 is a powerful actuator yet small enough to fit to most applications. The actuator can be supplied with options such as built-in potentiometer for servo operation or an extra powerful motor for increased speed and strength (S-motor).



**Features:**  
Thrust: Max. 6,000 N  
Speed: Up to 65 mm/s  
Stroke length: 50 - 500 mm  
Duty Cycle: Up to 20 %  
Voltage: 12, 24 or 36 V DC  
Endstop: LS/LSD or current cut-off

**Options:**

- Powerful strong motor
- Potentiometer
- Reed switch
- IP66 housing
- Ball screw spindle
- Safety nut

**Scope of application:**

- Agricultural applications
- Lawn and garden equipments
- Floor sweepers
- All kinds of industrial applications

**Facts:**

- Solid metal construction
- Compact and powerful
- Suitable for harsh conditions
- Stainless steel piston rod
- Self-locking ability

## LA28

The actuator LA28 (with standard or fast motor) is a very quiet and powerful actuator, designed for use in furniture, rehabilitation, and hospital bed industries. Agricultural machinery and other outdoor equipment are also other main areas of application.



### Features:

Thrust: Max. 3,500 N  
 Speed: 3 - 46 mm/s  
 Stroke length: 100 - 500 mm  
 Duty Cycle: 10 %  
 Voltage: 12, 24 V DC  
 Endstop: Current cut-off

### Options:

- Powerful strong motor
- Reed switch
- IP66 housing
- Safety nut

### Scope of application:

- Agricultural applications
- Lawn and garden equipment
- Floor sweepers
- Factory automation

### Facts:

- Powerful and quiet operation
- Reinforced glass fibre
- Only for "push" applications

## LA25

With its robust design, high IP degree and aluminium housing, the actuator LA25 is ideal for harsh environments where operation under extreme conditions is required. Furthermore, the compact dimensions of the LA25 make it applicable for confined spaces.



The LA25 is also available with:

**IC** INTEGRATED CONTROLLER



### Features:

Thrust: Max. 2,500 N in push and pull  
 Speed: Max. 13 mm/s  
 Stroke length: 20 - 300 mm  
 Duty Cycle: 20 %  
 Voltage: 12 or 24 V DC  
 Endstop: Built-in endstop switches

### Options:

- Hall sensor
- End Of Stroke (EOS)
- Safety nut in push or pull
- Possible IC options for LA25: IC Basic, IC Advanced and Parallel
- IECEx/ATEX certification

### Scope of application:

- Agricultural applications
- Outdoor Power Equipment
- Pergola and louvre
- Marine
- Trucks
- Industrial automation
- Ventilation and farming solutions

### Facts:

- Heavy duty aluminium housing for harsh conditions
- Compact design
- Small and strong

# Actuators

## LA23

The actuator LA23 is a small and strong push or pull actuator with a high lifting force up to 2500N. The LA23 can be used in various applications where size is important.

The LA23 is also available with:



### Features:

Thrust: Max. 2,500 N  
Speed: 9.4 mm/s  
Stroke length: 20 - 300 mm  
Duty Cycle: 10 %  
Voltage: 12, 24 V DC  
Endstop: Electrical and mechanical end-stop

### Options:

- Exchangeable cable
- Safety nut
- Mechanical spline
- IPX6
- Possible IC option for LA23: IC Basic

### Scope of application:

- Agricultural applications
- Ventilation and farming solutions
- Industrial automation
- Wind turbines

### Facts:

- Small and strong
- Compact design
- High lifting force
- Designed for outdoor use

## LA22

The actuator LA22 is an inline actuator specially designed with a small overall dimension for easy use in Industrial automation, agricultural machinery and rehabilitation applications. Thanks to its small outer dimensions and linear design, the LA22 is well suited for applications where installation space is limited, such as on wheelchairs.



### Features:

Thrust: Up to 400 N  
Speed: 13 - 37 mm/s  
Stroke length: Max. 200 mm  
Duty Cycle: 10 %  
Voltage: 12 or 24 V DC  
Endstop: LS/LSD or current cut-off

### Options:

- IP65 housing
- Different back fixtures
- Various piston rod eyes

### Scope of application:

- Agricultural applications
- Wheelchairs
- All kinds of industrial applications

### Facts:

- Solid metal construction
- Unique space saving design
- Low noise level

## LA14

The actuator LA14 is a very tough actuator with a high IP degree and aluminium housing, making it ideal for use in harsh and demanding environments.

The LA14 offers top quality in every detail and ensures reliable performance in temperatures ranging from -40° to +85 °C. With its small size the LA14 is well suited for applications that require short linear movements.

The LA14 is also available with:



### Features:

Thrust: Max. 750 N  
Speed: Max. 45 mm/s  
Stroke length: 20 - 130 mm  
Duty Cycle: Up to 20 %  
Voltage: 12 or 24 V DC  
Endstop: Built-in limit switches

### Options:

- Potentiometer
- Reed switch
- IP66 dynamic and IP69 K static
- Possible IC options for LA14: IC Basic, IC Advanced and Parallel
- IECEX/ATEX certification

### Scope of application:

- All kinds of mobile applications, especially fertiliser spreaders and salt gritters
- Factory automation
- Ventilation
- Valves
- Dosage

### Facts:

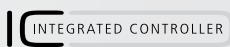
- Heavy-duty aluminium housing for harsh conditions
- Stainless steel inner tube and piston rod
- Designed for outdoor use

## LA12

Thanks to its small size and outstanding performance, the actuator LA12 provides a practical and cost-effective alternative to small-scale traditional hydraulic and pneumatic systems. The LA12 is ideal for applications requiring short linear movements.

After many years on the market, the actuator LA12 demonstrated that it is a very reliable and robust actuator that can handle almost any situation and challenge.

The LA12 is also available with:



### Features:

Thrust: Max. 750 N  
Speed: Max. 40 mm/s  
Stroke length: 40 - 130 mm  
Duty Cycle: Up to 20 %  
Voltage: 12 or 24 V DC  
Endstop: Built-in limit switches

### Options:

- Potentiometer
- Reed switch
- IP66 housing
- Possible IC option for LA12: IC Basic

### Scope of application:

- All kinds of mobile applications
- Factory automation
- Ventilation
- Valves
- Dosage

### Facts:

- Compact and lightweight
- Reinforced glass fibre piston rod
- Designed for outdoor use



For further information about the  
TECHLINE product programme:  
[www.linak.com/techline](http://www.linak.com/techline)





# Lifting columns

## DL2

The lifting column DL2 is designed for workstations and is the ideal choice for duties such as height adjustment on computer workstations, work benches or a wide selection of other duties. Inside each column is a modified LA31 actuator.



### Features:

Thrust: Max. 2,500 N  
Speed: 43 mm/s  
Stroke length: 500 mm  
Duty Cycle: 5 %

### Options:

- Mounting bracket (order number 0578006)
- Hall sensors to ensure memory drive and parallel drive with CBD4/CBD5/CBD6
- CBD2 or CBD5 mounted in the DL2

### Scope of application:

- Computer workstations
- Work benches
- Platforms

### Facts:

- Low noise level
- Compact and mounting friendly design
- Single drive (CBD2 and CBD4)
- Parallel drive (only CBD4)

## BL1

The 3-part lifting column BL1 is specially designed for applications where compact lifting is necessary in connection with a long stroke length. With its strong stability it is suited for boat applications and recreational vehicles.



### Features:

Thrust: Max. 2,000 N  
Speed: Max. 18 mm/s  
Duty Cycle: 10 %

### Options:

- Dual Hall for positioning
- Safety nut

### Scope of application:

- Recreational vehicles (RV)
- Boats
- Pet/Veterinary equipment

### Facts:

- High degree of stability
- Esthetic and compact design
- Synchronised movement of profiles in column
- Easy cleaning and low maintenance
- Low noise level, increased comfort



## LP2

The lifting column LP2 is the ideal choice for height adjustment of examination tables, work benches and industrial applications. It can be operated with two, three or four columns in parallel.



### Features:

Thrust: Max. 6,300 N  
Stroke length: 100 - 400 mm  
Duty Cycle: 10 %

### Options:

- Reed switch
- Safety nut
- Mounting bracket
- Gas spring for increased lifting capacity (only LP2-5)

### Scope of application:

- Height adjustment on computer workstations
- Work benches

### Facts:

- Advanced design
- High quality design
- Ideal for operation with up to a max. of 4 units

## LP3

The lifting column LP3 is ideal for applications where there is a demand for both lifting height and small installation dimensions. The telescopic column is compatible with LINAK's control units and can operate individually or in parallel.



### Features:

Thrust: Max. 2,400 N  
Stroke length: 300 - 600 mm  
Duty Cycle: 10 %

### Options:

- Reed switch
- Mounting bracket
- Safety nut

### Scope of application:

- Height adjustable conveyors
- Factory automation
- Ergonomic work spaces
- Workstations

### Facts:

- Very compact 3-stage column
- Robust anodised aluminium surface
- Compatible with CB8 and CB12
- Extremely low noise level

# Accessories

## SMPS-T160

The SMPS-T160 is a powerful Switch Mode Power Supply typically used for outdoor applications within the TECHLINE® segments. SMPS-T160 is an eco-friendly solution due to a low standby power consumption compared to traditional transformer solutions. The universal input voltage makes the SMPS adaptable to the worldwide market irrespective of the input voltage.



### Features:

- Nominal input voltage (mains voltage): 100VAC - 240VAC +10/-15%
- Nominal input frequency: 50 Hz/60 Hz
- Typical standby power consumption: Approx. 0.1 W
- Protection: IP66
- Compatible with: LA14 IC™, LA25 IC™

### Scope of application:

- Pergola
- Farming solutions
- Food and beverage
- Valves
- Traffic management
- Energy solutions

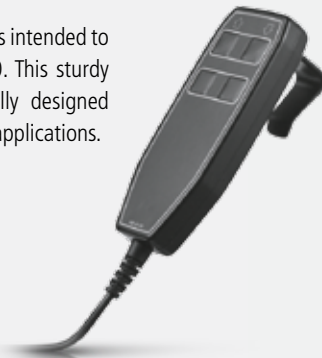
### Facts:

- Exchangeable mains and output cables
- Light weight and compact design
- Plug & Play solution

# Controls

## HB40

The TECHLINE HB40 handset is intended to be used with the SMPS-T160. This sturdy compact unit is ergonomically designed and ideal for a vast range of applications.



### Facts:

- Ergonomic, compact design
- Robust plastic housing
- Protection class up to IP66
- Compatible with:
  - LA14 IC™ via SMPS-T160
  - LA25 IC™ via SMPS-T160
  - LA36 IC™
  - LA37 IC™

## DP

The DP has a compact design and can control up to three actuators independently.



### Facts:

- Protection class IP30
- Compatible with:
  - LA14 IC™ via SMPS-T160
  - LA25 IC™ via SMPS-T160
  - LA36 IC™
  - LA37 IC™

## Bluetooth Receiver

The small and compact TECHLINE® Bluetooth receiver enables easy control of the actuator with an iPhone 4s and up or Android. Its small form factor makes this device easy to implement into your application.



## RF Receiver

The small and compact RF receiver enables easy control of the actuator with the two below remote controls. Its small form factor makes this device easy to implement into your application.



### Features:

- Power supply: 24V DC
- Operation current: 20 mA
- Range in open space: up to 12 metres
- Protection class: IP66
- Housing: ABS
- Cables: integrated
- Cable length: 150 mm
- Compatible with:
  - LA14 IC™ via SMPS-T160
  - LA25 IC™ via SMPS-T160
  - LA36 IC™
  - LA37 IC™

### Features:

- Operating temperature: -20° C +45° C
- Working frequency: 868.3 Mhz
- Range in open space: up to 80 metres
- Protection Class: IP66
- Housing material: polycarbonate
- Cables: integrated
- Cable length: 1500mm
- Compatible with:
  - LA14 IC™ via SMPS-T160
  - LA25 IC™ via SMPS-T160
  - LA36 IC™
  - LA37 IC™

## RF Controls



### EVO

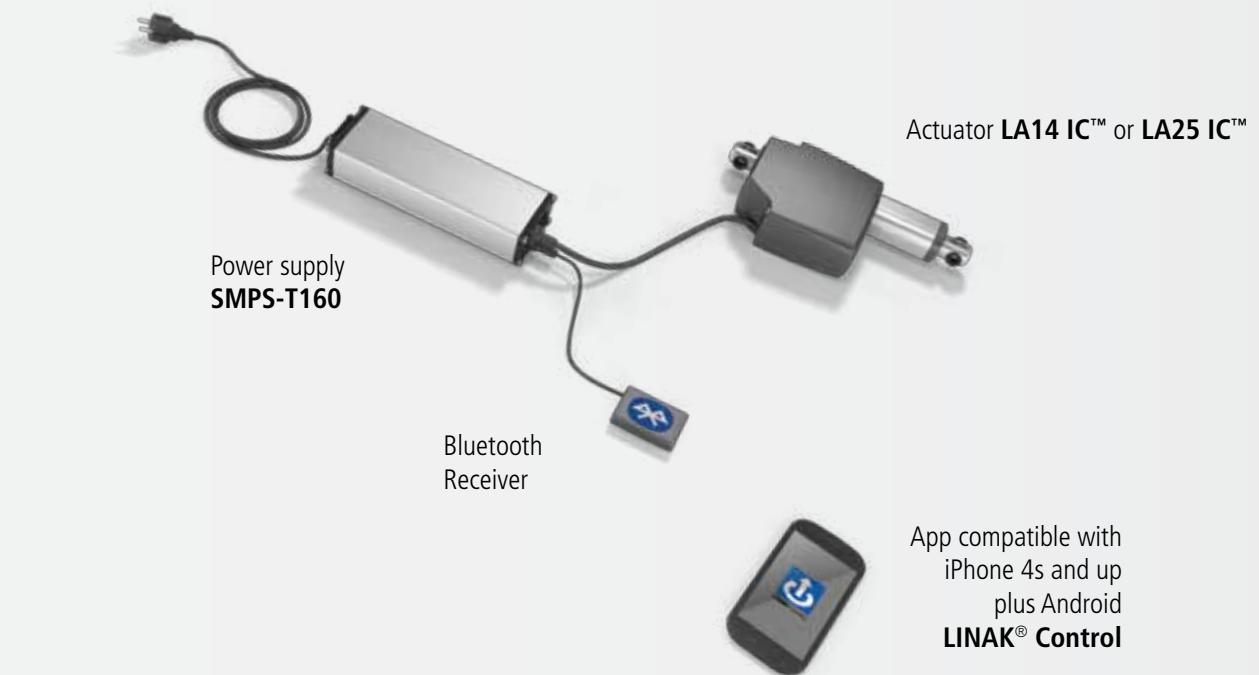
- Dimensions: 125 x 40 x 10 mm
- Compatible with RF receiver

### TXP

- Dimensions: 60 x 30 x 10 mm
- Compatible with RF receiver

# TECHLINE® system solution examples

## Bluetooth Solution



## Actuator **LA36 IC™** or **LA37 IC™**

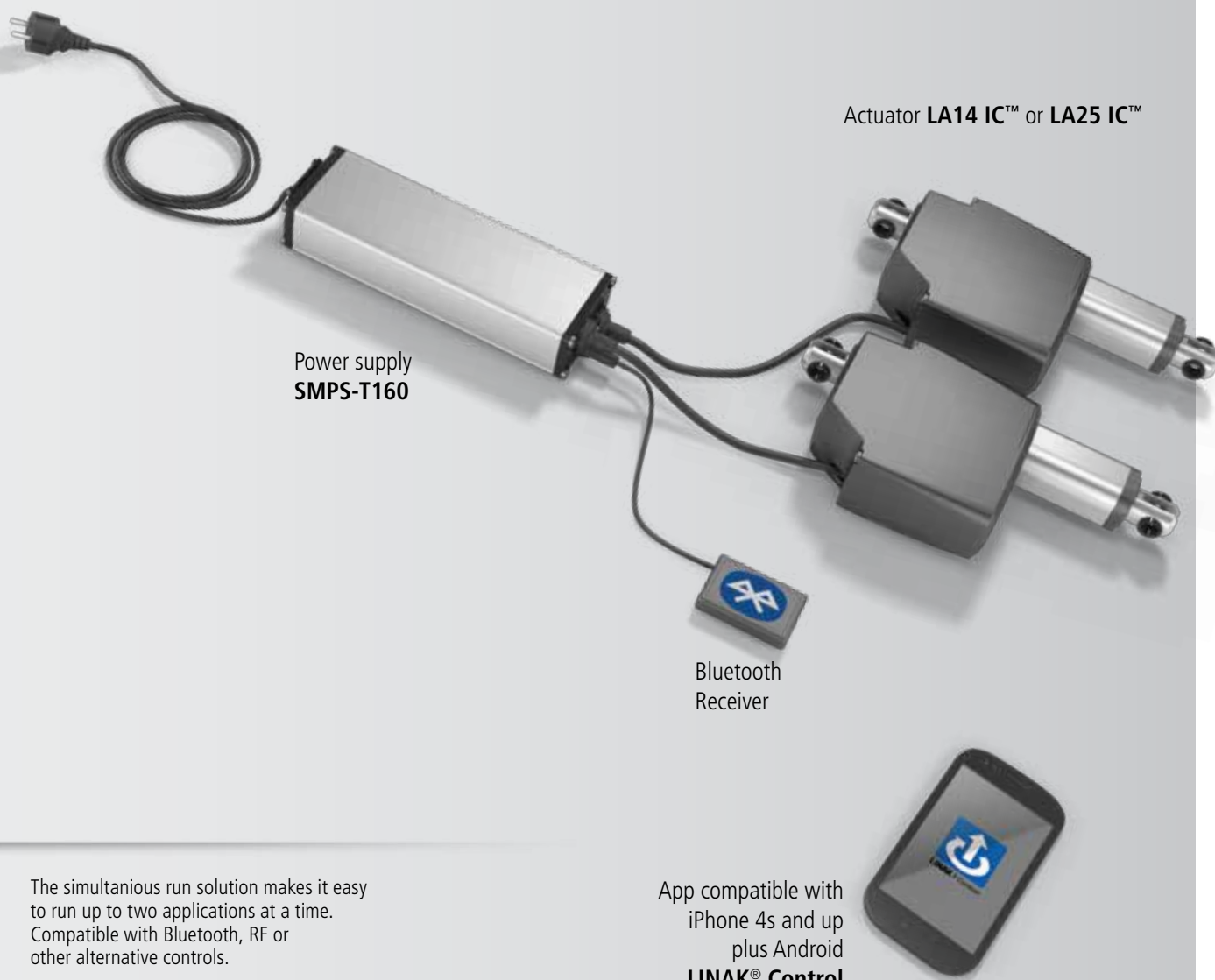


TECHLINE® system solutions improve functionality and add value to your application. Our systems offer:

- Simple Plug & Play functionality
- Easy integration into your application
- Time saving installation
- Significant minimisation of installation failures
- The possibility of simultaneous run with up to two actuators at a time

The cable(s) between the SMPS-T160 and the actuators LA14 and LA25 can be either 300mm or 1500mm

## Simultaneous run Solution



Power supply  
**SMP5-T160**

Actuator **LA14 IC™** or **LA25 IC™**

Bluetooth  
Receiver

The simultaneous run solution makes it easy to run up to two applications at a time. Compatible with Bluetooth, RF or other alternative controls.

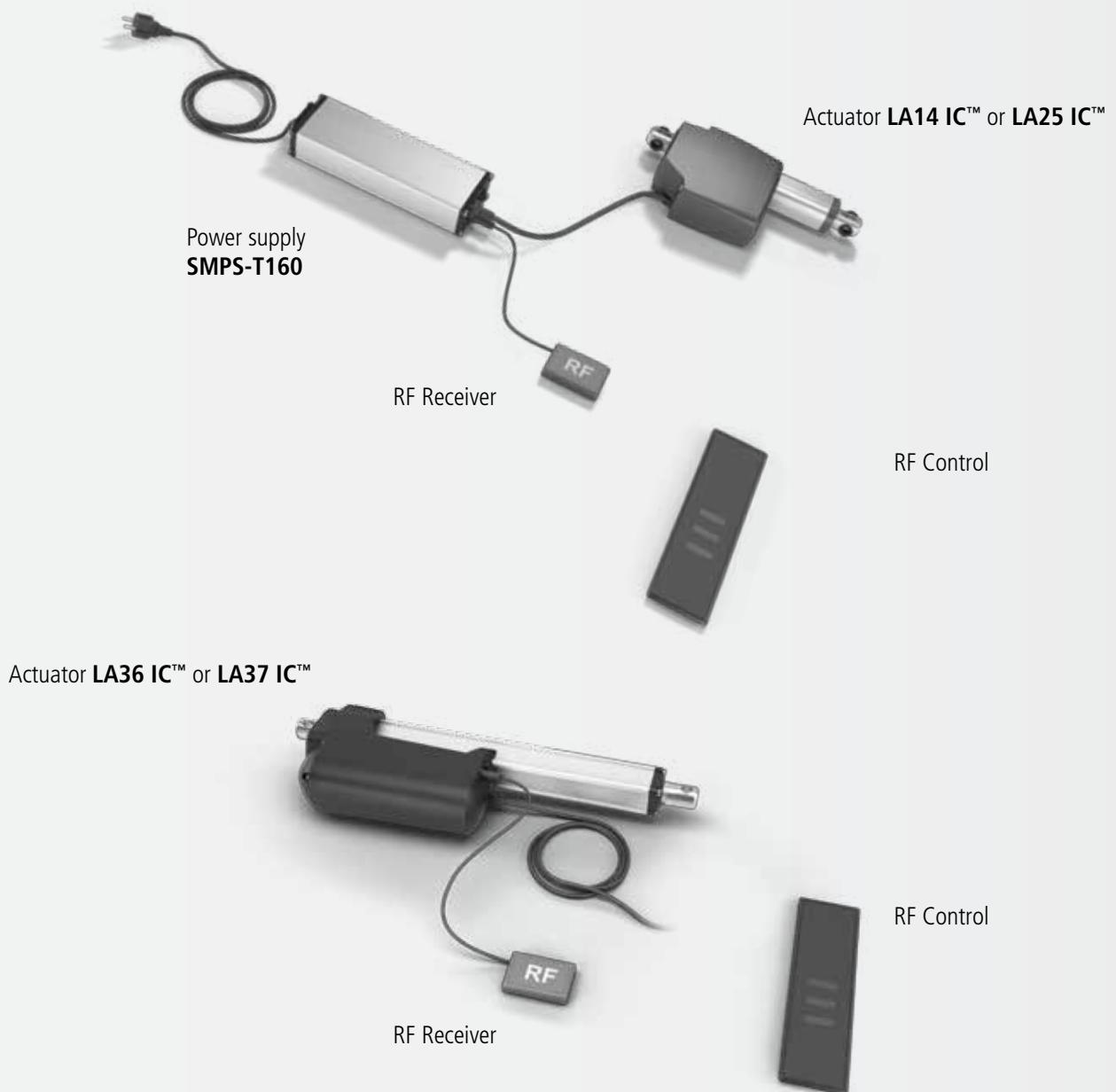
App compatible with  
iPhone 4s and up  
plus Android  
**LINAK® Control**

The TECHLINE® Bluetooth solutions run via a **LINAK® Bluetooth control app**. Download it on:



# TECHLINE® system solution examples

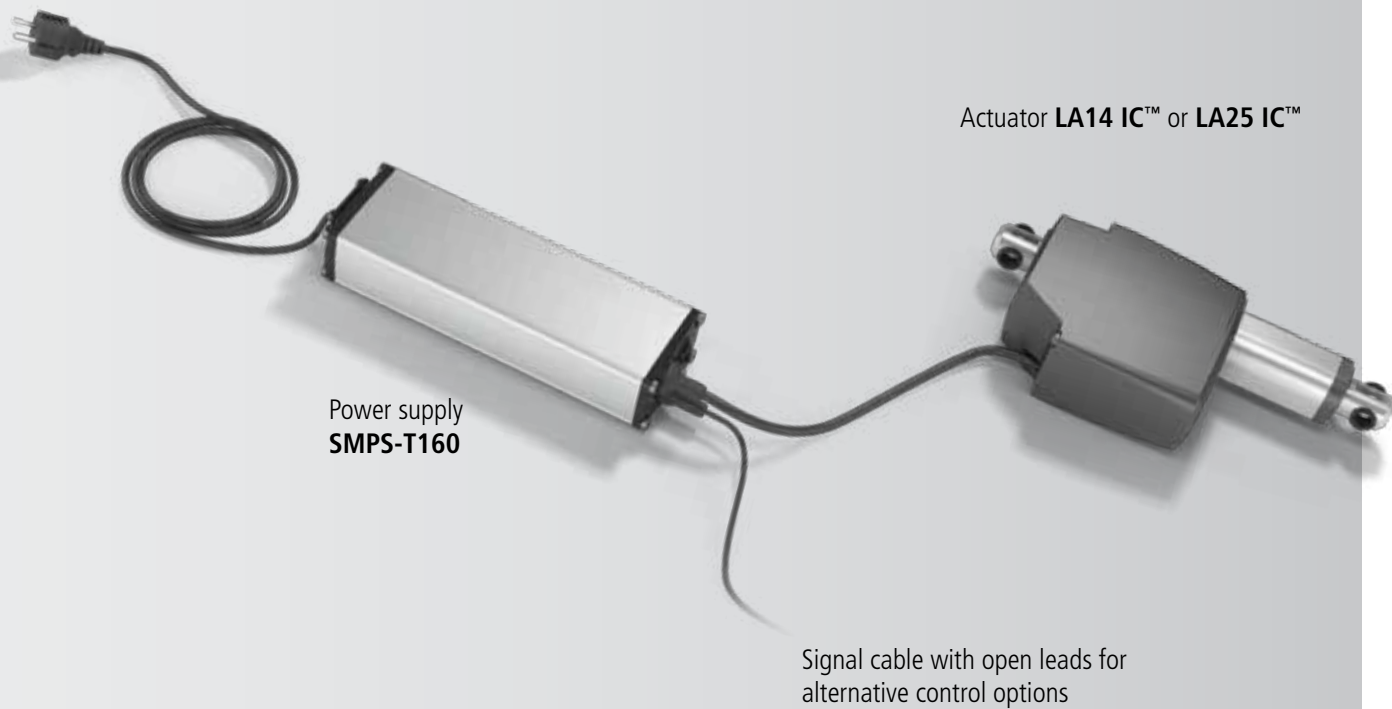
## RF Solution



TECHLINE® system solutions improve functionality and add value to your application. Our systems offer:

- Simple Plug & Play functionality
- Easy integration into your application
- Time saving installation
- Significant minimisation of installation failures
- Signal cable with open leads enables you to connect your own control along with an RF or Bluetooth solution. These can be run at the same time

## Flying wire Solution



Power supply  
**SMPS-T160**

Actuator **LA14 IC™** or **LA25 IC™**

Signal cable with open leads for  
alternative control options

With TECHLINE® signal cables you can easily connect the SMPS-T160 and actuator to your own controller/switch. Our cables are available in the following lengths:

- 1.5 meters
- 5 meters





Enhance your competitive edge and step into the future world of movement.

### **Cost-effective performance**

When we claim that we can make your application more cost-effective, we base it on our ability to help you ensure less downtime, less time spent on maintenance, easier and faster set-up, more intelligent control and more accuracy in your application. All in all this can ensure a more cost-effective use of your application.

### **Ready for the future**

To be ready for the future can mean different things. In our terminology it means being able to ensure that your application has the most convenient, up-to-date and clever features for performing at its best in regards to control, accuracy and speed.

### **Competitive edge**

Cost-effective performance and innovative technology is exactly what you need in your application to make sure that you always keep your competitive edge and your ability to survive as a company in a highly competitive world.

Do you want cost-effective performance, innovative technology and a competitive edge? Go for LINAK actuators with integrated controller, and Move for the Future.



## IC - Integrated Controller

IC is the range of integrated control options for TECHLINE® actuators that present you with almost unlimited possibilities for superior control and monitoring, to enhance the value and performance of your application.

Choose between four IC variants:

### IC BASIC

The plug and play option that comes pre-configured to meet your exact requirements.

### IC ADVANCED

The customisable option with enhanced monitoring and read-out of actuator information.

### PARALLEL

The smart and self-configurable option that allows for parallel drive of up to 8 actuators.

### BUS

The BUS communication option with either Modbus RTU RS485 or Linbus.

*For more information about the possibilities with an integrated controller (IC), please contact LINAK TECHLINE, or go to [linak.com/techline/moveforthefuture](https://linak.com/techline/moveforthefuture)*



# 100% function tests

In each application, the actuator is just one component of many, but at TECHLINE® we fully appreciate that it is of utmost importance to you and your customers. Not a single actuator leaves LINAK until it has undergone a 100% function test.

Depending on the actuator type, various tests have been carried through. Please consult your local LINAK office or take a look at the actuator data sheet in question to get a thorough test overview.

This is your guarantee that a solution based on LINAK TECHLINE electric actuator systems is a solution that will work reliably for years and years.

## Electrical tests:

All electrical parts are tested i.e. power supply, power and signals cables, control signals etc. Electrical immunity is tested according to industrial standards i.e. for radio noise, electrical discharge and burst.\*

(\*) These tests do not apply to third party products!

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## Climatic tests:

In the climatic test the actuators are tested to operate in extreme temperatures as well as to endure rapid changes in temperature. In some tests, the actuator has to withstand going from a +100°C environment to -30°C repeatedly and still maintain full functionality.

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## Mechanical tests:

**Vibration:** The actuator must withstand continuous vibration in three directions.

**Shock:** The shock test puts the actuator through 3 shocks of up to 100 G in each of 6 directions.

**Bump:** The actuator receives bumps of up to 40 G in each of six directions several hundred times.

<b>EN/IEC 61000-6-4</b>	- Generic standard emission industry
<b>EN/IEC 60204</b>	- Electrical equipment of machinery
<b>EN 50121-3-2</b>	- Railway applications - Rolling stock apparatus
<b>94/25/EC</b>	- Recreational crafts directive
<b>EN/ISO 13766</b>	- Earth moving machinery
<b>EN/IEC 61000-6-2</b>	- Generic standard immunity industry
<b>2004/104/EC</b>	- Automotive Directive
<b>EN/ISO 14982</b>	- Agricultural and forestry machines
<b>EN/ISO 13309</b>	- Construction machinery



<b>EN600068-2-1 (Ab)</b>	- Cold test
<b>EN60068-2-2 (Bb)</b>	- Dry heat:
<b>EN60068-2-14</b>	- Change of temperature
<b>EN60068-2-30</b>	- Damp heat
<b>EN60068-2-52</b>	- Salt spray
<b>EN60529-IP66</b>	- Degrees of protection
<b>BS7691/96 hours</b>	- Chemicals

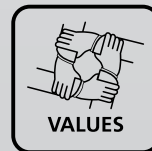


<b>EN60068-2-36 (Fdb)</b>	- Vibration
<b>EN60068-2-29 (Eb)</b>	- Bump
<b>EN60068-2-27 (Ea)</b>	- Shock





LINAK has a well-developed sales and service organisation in Europe, Americas, Asia and Australia. Therefore, we can assist you and your customers locally, under the global sales concept idea:  
**Be global, act local**



We add value to your products by offering innovative solutions, extensive knowledge, world-class production and global presence.



For further information about the **TECHLINE** product overview:  
[www.linak.com/techline](http://www.linak.com/techline)

#### Terms of use

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