

EN

EcoTrafIX™ Controller 32 series.



The EcoTrafIX™ Controller is the high performing result of an evolved generation of traffic controllers for an efficient, safe and sustainable mobility. Our long-term experience in traffic projects and in manufacturing electronic equipment makes this product the optimal solution for any need. Reliable, efficient, modular and safe.

Features.

High performance controller.

EcoTrafIX™ Controller can be configured to control up to 32 groups, with a total of 128 digital inputs and 64 outputs. The Controller provides an advanced performance both under local and centralized control strategies, being capable to be adapted to the local regulations to prioritize the public transportation, emergency vehicles, bicycles or pedestrians, depending on the particular needs of the projects.

Capable to operate with different protocols (UNE, NTCIP), the controller adapts to any kind of operation, being therefore appropriate to operate in isolated mode, under centralized control strategy or with adaptive traffic control systems (EcoTrafIX™ Expert or others).

Controller's Architecture.

EcoTrafIX™ Controller is the most compact device on the market. The equipment includes space within the cabinet to host uninterrupted power supply systems, GPS sensors, communication equipment, etc.

Controller's cabinet can be customized to be adapted to any city's design regulations, offering a wide range of combinations, adapting the size, the colors, the materials, the protection levels, etc.

EcoTrafIX™ Controller has evolved to provide the most advanced and varied communication channels that enable the installation and maintenance tasks. Thus, series port, IP connections, Bluetooth for local accessing and the possibility of installing GPS antennas are available in the equipment. In addition to these elements, an internal screen that monitors the data can be installed, for making easier the verification of the status variables.

EcoTrafIX Controller. At a glance.

- Basic configuration to manage up to 32 groups, (can be extended to +64 groups with the extended cabinet), 128 digital inputs and 64 outputs.
- Up to 300 kgfCO2 savings per junction per year.
- Communication protocols:
 - UNE 135401-4 (Type M)
 - NTCIP 1201/1202
- Centralized or local control, including operation in adaptive mode
- Renewed software tool that enables and simplifies the configuration and maintenance tasks

Efficient and Sustainable.

The design of the EcoTrafIX™ Controller's electronic makes feasible reaching up to 300 kg CO₂ emissions savings per junction per year (using LED system). The controller has been designed to manage LED type lamps, providing very low nominal power consumption (15W). The controller has a low profile in greenhouse gas emissions.

Easy Installation and Maintenance.

EcoTrafIX™ Controller presents a modular architecture that enables the field tasks. Assembled on a self-supported chassis, it is possible to install it in existing cabinets (by replacement or equipment retrofit) with the option to reuse the existing wiring and cabinet.

In addition to the possibility of onsite configuring the controller through its Bluetooth connection (optional) the controller will have a remote configuration tool based on web access. That software tool has been designed to simplify the configuration tasks, commissioning and maintenance, making them easier and more intuitive, with the consequent time and money savings.

EcoTrafIX™ Controller uses only 1 model of groups' card for any type of lamp (LED, halogen) with the consequent save in spare parts. Electronic cards are modular.

The controller presents a simplified and innovative wiring system, based on simple "clicks" that one more time, brings simplicity during installation and maintenance, with the consequent money savings.

Safe.

The dual system of the controller's processor offers a higher level of security in the equipment's performance. Its smart output cards allow controller's control unit to perform a check about its state, providing the equipment with an additional security level.

The new controller is able to detect and measure the electric current in each group of lamps.

Functional specifications.

- Automatic calibration of the static outputs for the control of lamps and changes in lighting intensity.
- Programmable access codes and events memory.
- Possibility of configuring communications.
- Synchronization by cable, clock (wireless) computer and GPS.
- Time system for plan selection control and assignment of special functions.
- Frontal visualization of states of: groups, digital inputs and exits.
- Manual control in the cabinet to move to intermittent status, as well as to control the phases ends.
- Alarms control microprocessors for the detections of blown lamp and broken down equipment.
- Test module of the integrated equipment and independent from the operation mode.



EcoTrafIX™ Controller is fully compatible with the EcoTrafIX™ Software Suite, as well as with the previous versions.

EcoTrafIX™ suit includes:

EcoTrafIX
Command

Command your city devices & signals.

EcoTrafIX
Expert

Optimize your city traffic.

EcoTrafIX
Mobility

Collaborate with multiple city agencies.

Challenge the conventional limits of the traffic controllers, with the lowest energy consumption and so far unknown benefits.



Technical features	
Groups	<ul style="list-style-type: none"> Group maximum capacity: 32 (64 ext. rack) Number of groups per card: 4 Number of outputs per groups card: 12 Type of exit for lamps control: Triac Maximum load: <ul style="list-style-type: none"> Per exit: 2 A Per group: 4 A Per card: 8 A Per module: 15 A Lamp voltage: power supply voltage, low power option Dimming option
Inputs and outputs	<ul style="list-style-type: none"> Optisolated digital inputs: up to 112 Digital outputs: up to 16
Communications and interface	<ul style="list-style-type: none"> Ethernet: IP communication to CC and for maintenance functions RS232 lines: Up to 5 Bluetooth: maintenance tasks and manual command functions (optional) Display: 7" TFT for visualization and control of the controller state (optional)
Environmental conditions	<ul style="list-style-type: none"> Designed to comply with: <ul style="list-style-type: none"> EN12675 EN50278 Temperature range: -40 °C to + 70 °C Humidity: 95%
Electric features	<ul style="list-style-type: none"> Internal consumption: 15W a SOW depending on capacity Power supply: 115 Vac - 230 Vac (-20%, +15%) Network frequency: 50/60Hz +/-5%
Mechanical features	<ul style="list-style-type: none"> Different options of metallic cabinet: <ul style="list-style-type: none"> Protection scale: IK10 / IPSS C4H level resistance against corrosion Dimensions 1200 x 700 x 300/345 mm (up to 32 groups) Dimensions 1500 x 700 x 300/345 mm (up to 64 groups) Self-supported chassis: 1100 x 580 x 250 mm Control rack: 270 x 250 x 170 mm
Security	<ul style="list-style-type: none"> Independent control and Supervision tasks Monitoring of all the exits: <ul style="list-style-type: none"> State of groups Consumption per exit Differential power supply Protections, in all the exits of lamps: <ul style="list-style-type: none"> Protection against electrical current and overvoltage Independent control of green and red/amber tension Automatic switch against residual power
Functionalities	<ul style="list-style-type: none"> Protocols <ul style="list-style-type: none"> NTCIP 1201 and 1202 UNE 135401-4 Operation mode: intermittent, manual, adaptive, centralized, acted, semi-acted, fixed times, autonomous, coordinated, micro-regulated, emergencies priority, tramway advanced management, bus priority system Other functionalities: <ul style="list-style-type: none"> State of exits configurable in repose and failure mode Independent intermittence in case of failure in control CPU User web interface and functions of integrated test Series port for maintenance terminal

About Kapsch Group.

Kapsch is one of Austria's most successful technology corporations to specialize in the future-oriented market segments of intelligent transport systems (ITS) and information and communications technology (ICT). Kapsch. Always one step ahead.