



## eDaptiva<sup>®</sup>

**eDaptiva is a multi-featured urban traffic management center for intersections control. eDaptiva<sup>®</sup> provides monitoring, supervision and adaptive control as well as quality management and reporting features and meets different requirements of small, middle-sized or large urban areas.**

eDaptiva<sup>®</sup> is a sophisticated structural element of a municipal traffic light system. It is easy to control, and provides an overview of the whole traffic light system. The eDaptiva<sup>®</sup> control center offers features for traffic monitoring, supervising and control. Strategic adaptive control of intersections with eDaptiva<sup>®</sup> system makes travelling in the city easily and faster. eDaptiva<sup>®</sup> is an optimal platform for modern and efficient traffic control in urban areas, and it features modular and open architecture ready to interact with third-party systems and software. eDaptiva<sup>®</sup> was jointly developed by CROSS Zlín and AŽD Praha.

### GENERAL CHARACTERISTICS

- Possibility to connect controllers with communication protocol:  
CROSS, AŽD, OCIT<sup>®</sup>, SPEKTR
- Ready to implement other protocols
- eDaptiva topology: scalable n-tier multiserver - multiclient system
- eDaptiva web - web thin client for system monitoring

### KEY BENEFITS

- Modular architecture: single system for small and large implementations, cloud features
- Easily upgradeable and extensible
- SDK implementation of third-party systems
- Easy language localization
- Up to date technology
- Open API for third-party applications
- Unique design

## FUNCTIONAL PARAMETERS

### TRAFFIC MONITORING AND QUALITY MANAGEMENT

- Visualization of a detailed status of the city, with groups of controllers in the map cut-outs with details up to the signal groups and detectors
- Display of an interactive diagram of individual intersections with visualization of the real control procedure (signals, detectors, other inputs and outputs)
- Real-time monitoring of traffic controller's state by a bar diagram including record
- Real-time monitoring of traffic controller's hardware subsystems (detectors, signaling devices)
- History of events in the system (errors, control commands, state changes, etc.)
- Graphic monitoring of coordination effectiveness
- Automatic detector data validation (excess identification)
- Historical detector data visualization
- Traffic flow prediction
- Device quality operation reporting
- System quality operation reporting

### SUPERVISING AND CONTROL

- Multilevel, prioritized controlling
- Control based on data from individual controllers in the real time – either to switch road signaling system into the flashing yellow immediately or according to the timetable, switching of plans and changing their parameters
- Change of operation mode of intersections individually or in groups
- Public transportation preference
- Setup and starting routes of vehicles with right of way on isolated inter-sections and on coordinated traffic lines
- Manual operation stage control
- Availability of features for individual controllers or group of controllers
- eDaptiva Web - web thin client for basic system monitoring

### STRATEGIC AND ADAPTIVE CONTROL

- Automatic switching of signal plans or groups of signal plans
- Remote upload of the new traffic logic into the controller
- Adaptive control strategies and scenarios management
- API for integrating third party adaptive control systems (INES+)
- EDSA decision tree based logic