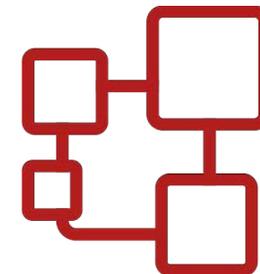


SMART TRAFFIC MANAGEMENT



unival
group

SECURITY MADE IN GERMANY

CONTENTS



- 1 SMART TRAFFIC MANAGEMENT PLATFORM
- 2 INTERSECTION CONTROLLERS
- 3 TRAFFIC LIGHTS TYPE FOR VEHICLE
- 4 TRAFFIC LIGHTS FOR PEDESTRIAN
- 5 OTHER SYSTEMS

MAIN SYSTEM MODULES

SYSTEM MANAGEMENT

Data processing related to platform login, user, role, and department operation logs

BASIC DATA

Configuration processing of controller, intersection, and channelization map base data

SCHEME MANAGEMENT

Basic data for intersection operations: phases, programs, annual day plans, controller parameter configuration module



ROUTE MANAGEMENT

Special duty service routes, green wave route, manual linkage control, route operation logs

INTERSECTION MANAGEMENT

Single and multi-intersection monitoring, operation

STATISTICAL REPORTING

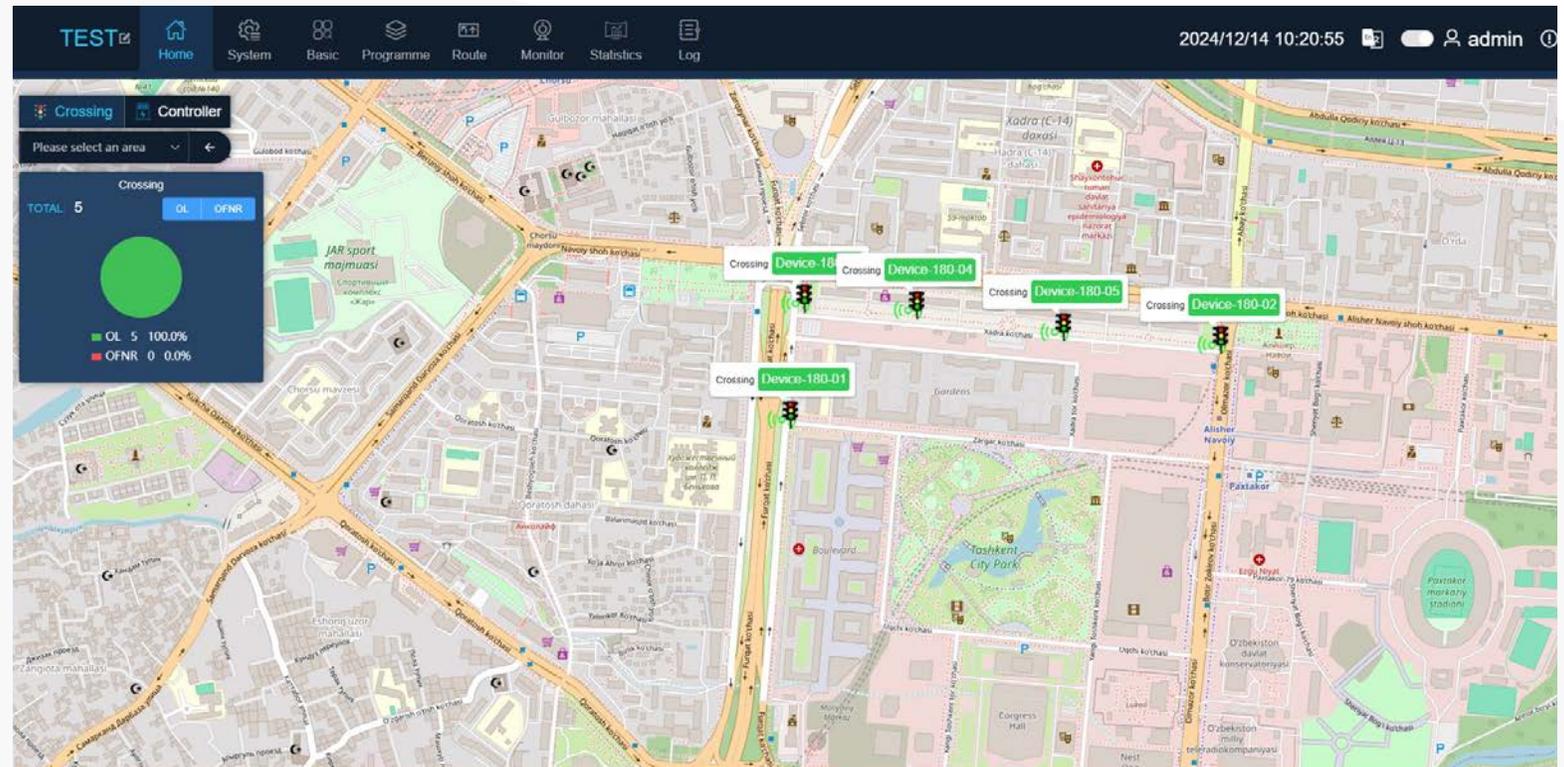
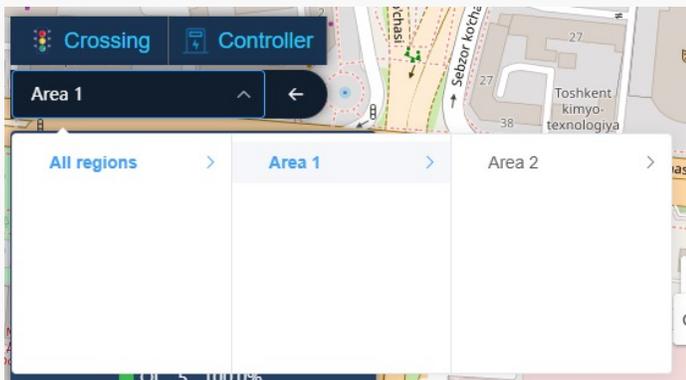
Intersection Traffic Flow
Detection Data Statistics,
Optimization Processing

SMART FUNCTIONS

- 1 INTERSECTION AREA AUTHORITY CONTROL
- 2 CONTROLLER AND INTERSECTION EQUIPMENT MANAGEMENT
- 3 ISOLATED SELF-ADAPTIVE
- 4 ROUTE MANAGEMENT
- 5 INTERSECTION FAULTS MONITORING AND CONFIGURATION BACKUP
- 6 CAMERA VIDEO VIEWING

INTERSECTION AREA AUTHORITY CONTROL

Regional control is achieved according to the intersections of traffic lights in different areas. Users can only control the traffic lights in the area to which they belong. If they need to control traffic lights in other areas, the area where the user is located must be one level above the intersection area.



The intersections i435n the home page area can be viewed and controlled.

CONTROLLER EQUIPMENT MANAGEMENT



The controller management menu supports single controller additions, as well as multiple controller in Excel table form.

Add New Device

Name:

Region:

IP:

Port:

Model:

Longitude:

Latitude:

Description:

Map:

TEST Home System Basic Programme Route Monitor Statistics Log 2024/12/14 09:53:44 admin

Device Basic / Device

Device List Configure

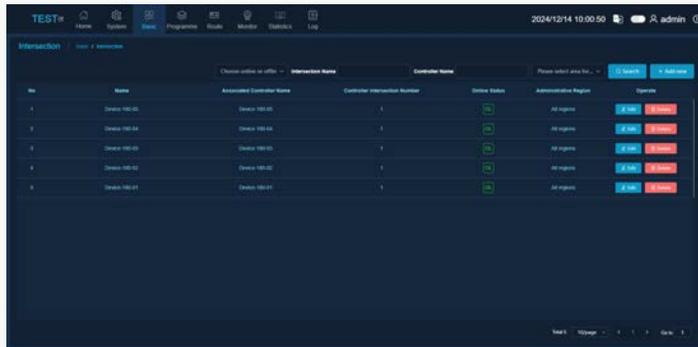
Choose online or offline

No	Device Name	Device IP Address	Online Status	Model	Region name	Longitude	Latitude	Port	Version	Description	Operate
1	Device-180-05	80.0.0.180	OL	Fama 20999	All regions	69.247141	41.321493	10004			<input type="button" value="Edit"/> <input type="button" value="Delete"/>
2	Device-180-04	80.0.0.180	OL	Fama 20999	All regions	69.246141	41.320493	10003	v.0.1.0.32		<input type="button" value="Edit"/> <input type="button" value="Delete"/>
3	Device-180-03	80.0.0.180	OL	Fama 20999	All regions	69.245141	41.319493	10002	v.0.1.0.32		<input type="button" value="Edit"/> <input type="button" value="Delete"/>
4	Device-180-02	80.0.0.180	OL	Fama 20999	All regions	69.244141	41.318493	10001	v.0.1.0.32		<input type="button" value="Edit"/> <input type="button" value="Delete"/>
5	Device-180-01	80.0.0.180	OL	Fama 20999	All regions	69.243140	41.318493	10000	v.0.1.0.32		<input type="button" value="Edit"/> <input type="button" value="Delete"/>

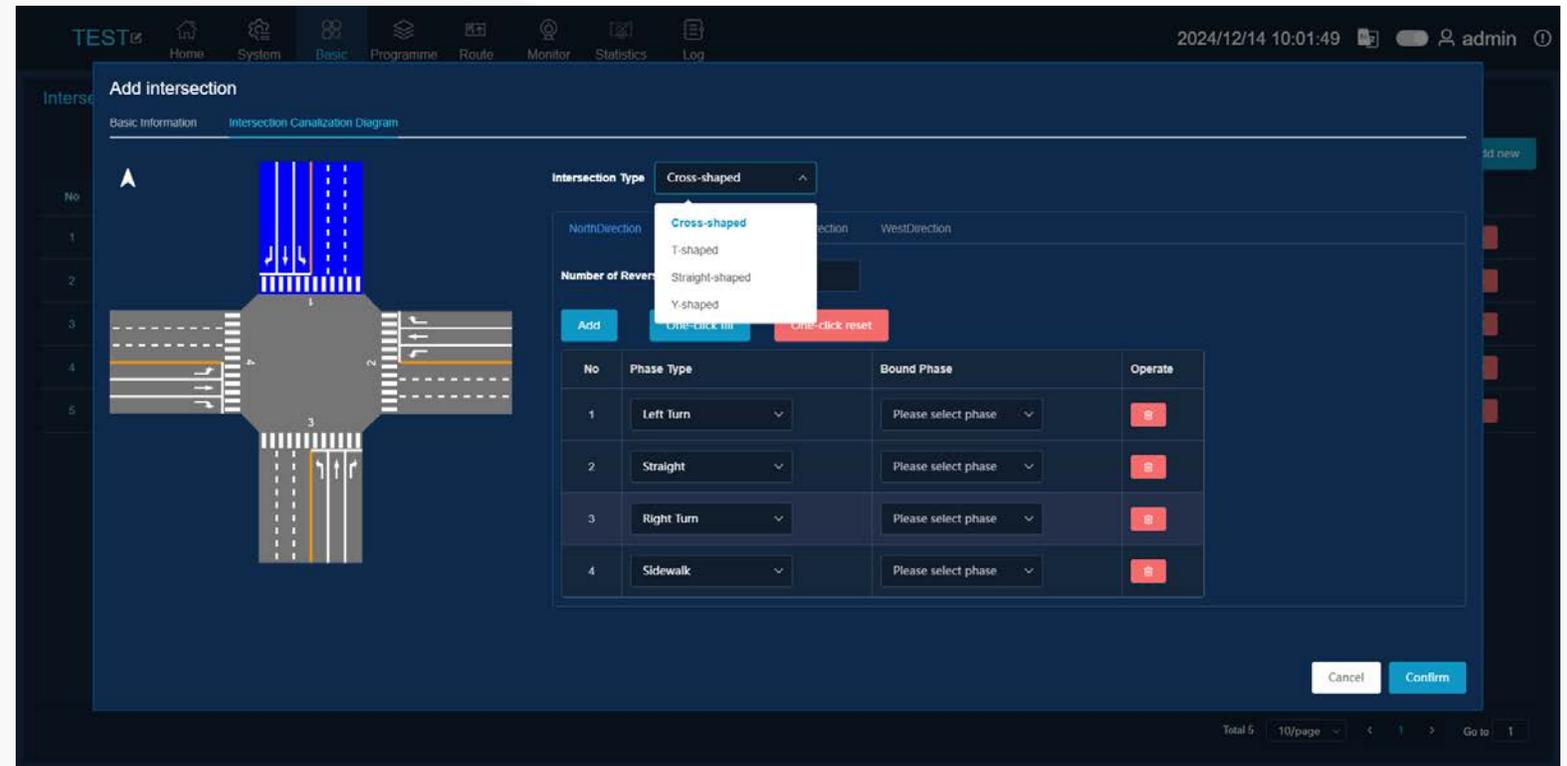
New pop-up window to enter key parameter name, IP, selected area, latitude and longitude.

INTERSECTION MANAGEMENT

Users can add different types of intersections according to the actual intersection and can configure the type of intersection lane phasing.



No	Name	Assigned Controller Name	Controller Intersection Number	Online Status	Administrative Region	Operate
1	Control 100-01	Control 100-01	1	Online	Wegmann	⊞ ⊞
2	Control 100-02	Control 100-02	1	Online	Wegmann	⊞ ⊞
3	Control 100-03	Control 100-03	1	Online	Wegmann	⊞ ⊞
4	Control 100-04	Control 100-04	1	Online	Wegmann	⊞ ⊞
5	Control 100-05	Control 100-05	1	Online	Wegmann	⊞ ⊞



Add intersection

Basic Information | Intersection Canalization Diagram

Intersection Type: **Cross-shaped**

NorthDirection: **Cross-shaped** | T-shaped | Straight-shaped | Y-shaped

Number of Revers: **One-click full** | One-click reset

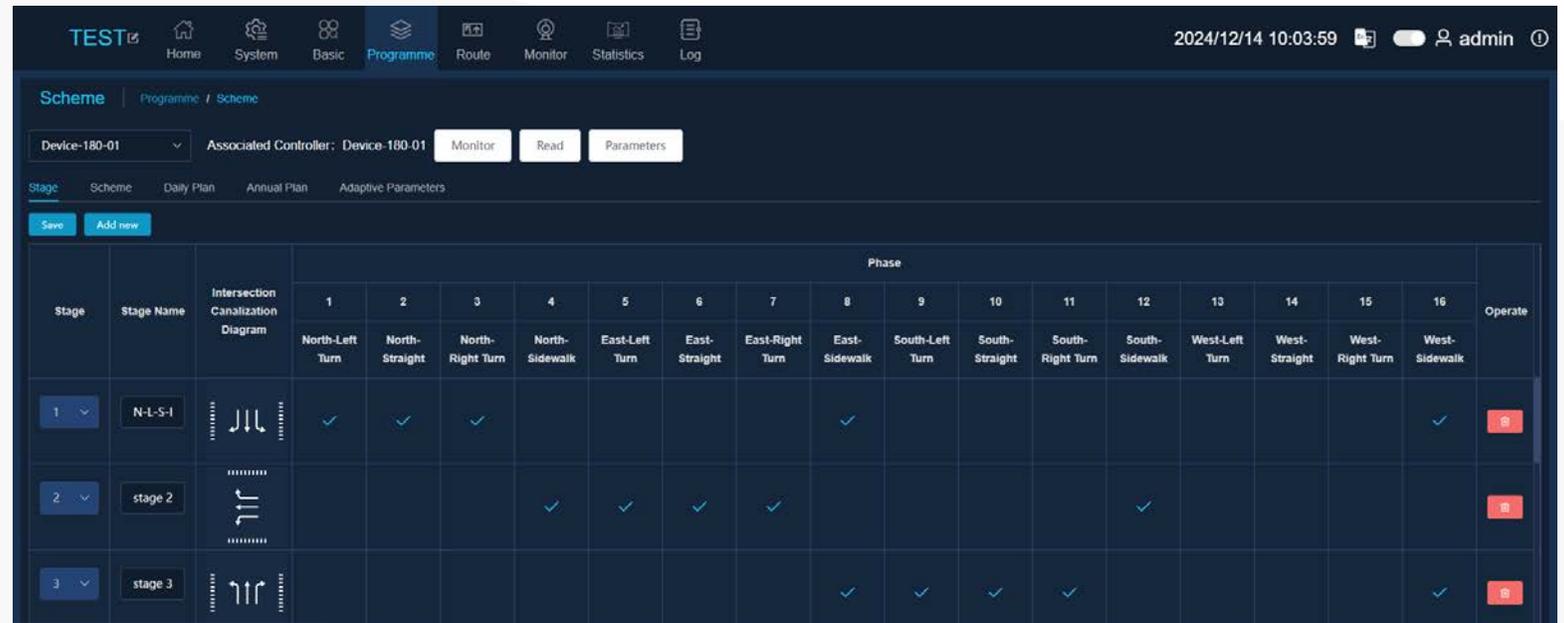
No	Phase Type	Bound Phase	Operate
1	Left Turn	Please select phase	⊞
2	Straight	Please select phase	⊞
3	Right Turn	Please select phase	⊞
4	Sidewalk	Please select phase	⊞

Cancel | Confirm

Total 5 | 10/page | Go to 1

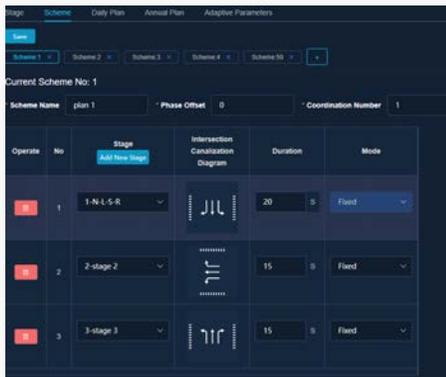
PROGRAMING MANAGEMENT

Program management module, user can set the intersection controller operation parameter configuration: phase setting, program configuration, annual and daily plan setting, intersection operation another parameter setting and so on.



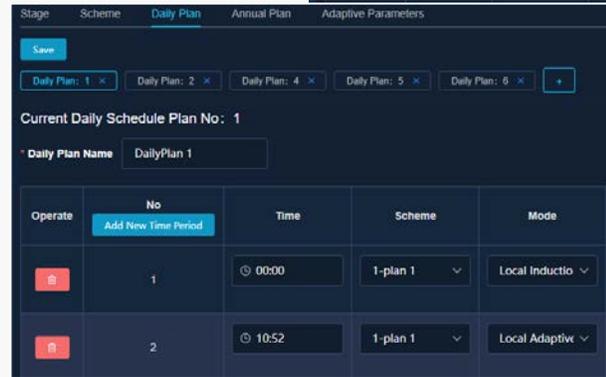
The main interface shows a navigation menu with options: Home, System, Basic, Programme (selected), Route, Monitor, Statistics, and Log. The current page is 'Scheme / Programme / Scheme'. It displays 'Device-180-01' and 'Associated Controller: Device-180-01' with buttons for 'Monitor', 'Read', and 'Parameters'. Below this, there are tabs for 'Stage', 'Scheme', 'Daily Plan', 'Annual Plan', and 'Adaptive Parameters'. A table lists stages and their phase configurations.

Stage	Stage Name	Intersection Canalization Diagram	Phase																Operate	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
1	N-L-S-1		✓	✓	✓							✓							✓	
2	stage 2					✓	✓	✓	✓					✓						
3	stage 3											✓	✓	✓	✓				✓	



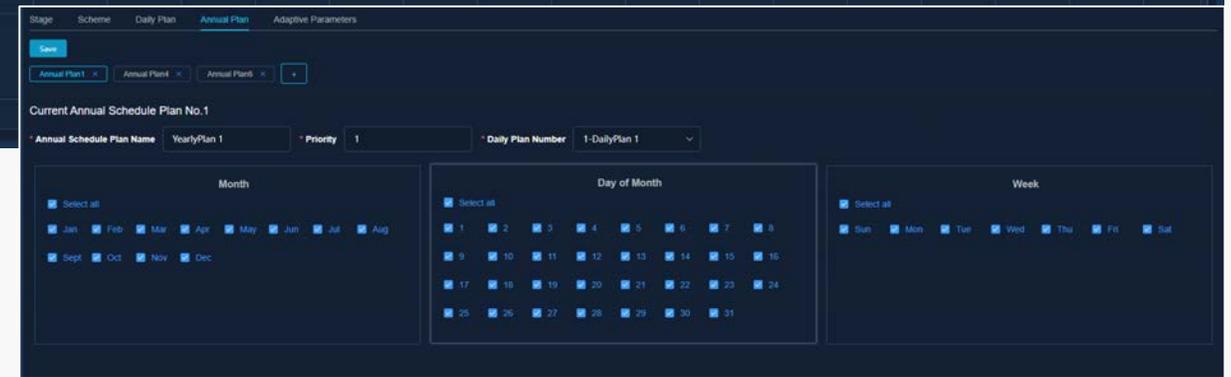
This page shows the configuration for a specific scheme. It includes fields for 'Scheme Name', 'Phase Offset', and 'Coordination Number'. A table lists stages with their respective configurations:

Operate	No	Stage	Intersection Canalization Diagram	Duration	Mode
	1	1-N-L-S-R		20	Fixed
	2	2-stage 2		15	Fixed
	3	3-stage 3		15	Fixed



This page shows the configuration for a daily plan. It includes a list of 'Daily Plan' items and a table for configuring individual plans:

Operate	No	Time	Scheme	Mode
	1	00:00	1-plan 1	Local Inductio
	2	10:52	1-plan 1	Local Adaptive



This page shows the configuration for an annual plan. It includes a list of 'Annual Plan' items and a calendar interface for selecting dates and weeks:

Month: [Select all] Jan Feb Mar Apr May Jun Jul Aug
Day of Month: [Select all] 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Week: [Select all] Sun Mon Tue Wed Thu Fri Sat

SMART TRAFFIC ENHANCING

SINGLE POINT OPTIMIZATION

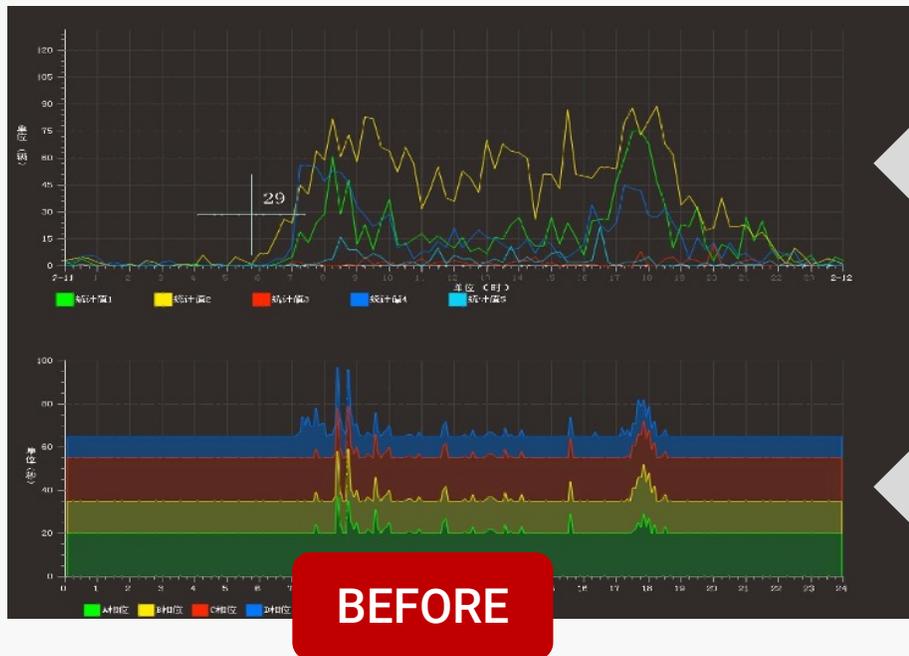
Single-point optimization can select different optimization parameters based on existing intersection data: traffic flow, occupancy, average vehicle speed for optimization.

After optimization, the optimized plan will be displayed, and users can choose whether to apply the optimization plan based on actual conditions.



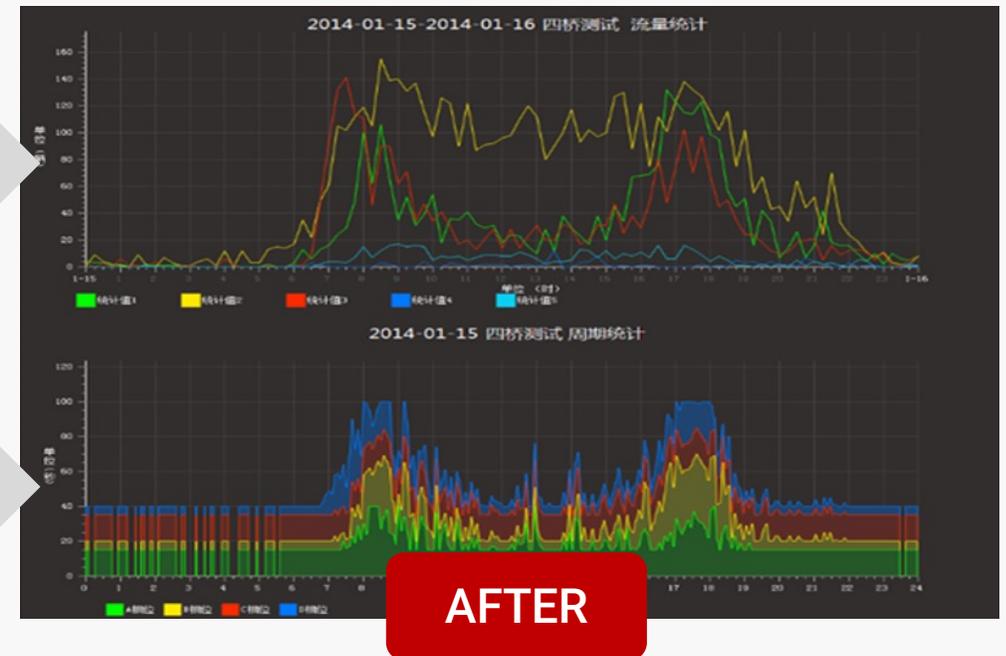
ISOLATED SELF-ADAPTIVE

- Automatically adjustment the signal control parameters online in real-time;
- Calculation based on historical data and real-time data
- Reduce stop waiting time and improve road traffic running efficiency.

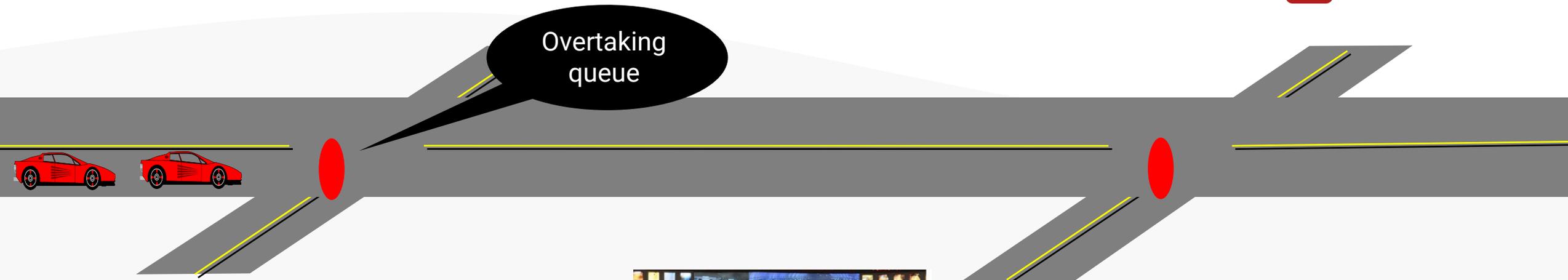


TRAFFIC FLOW

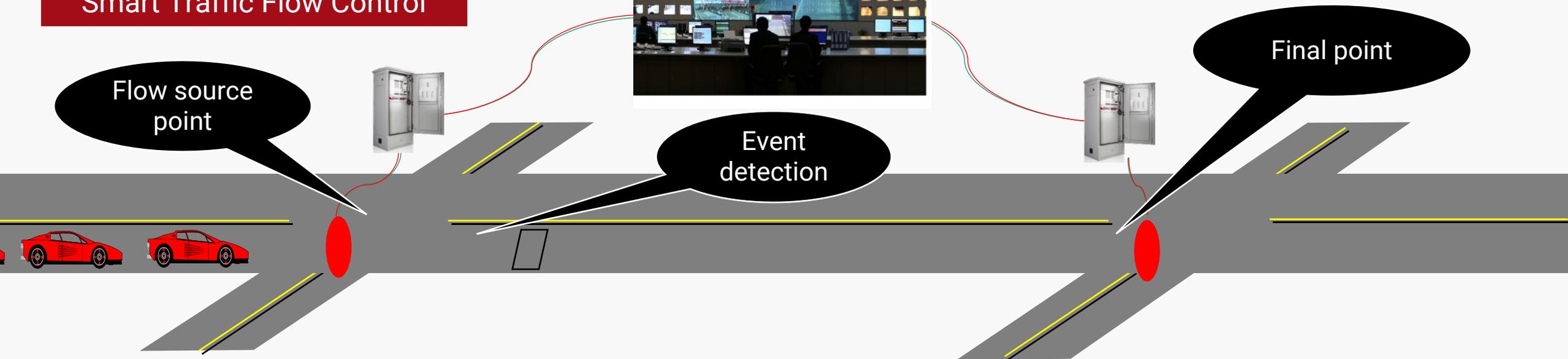
CYCLE

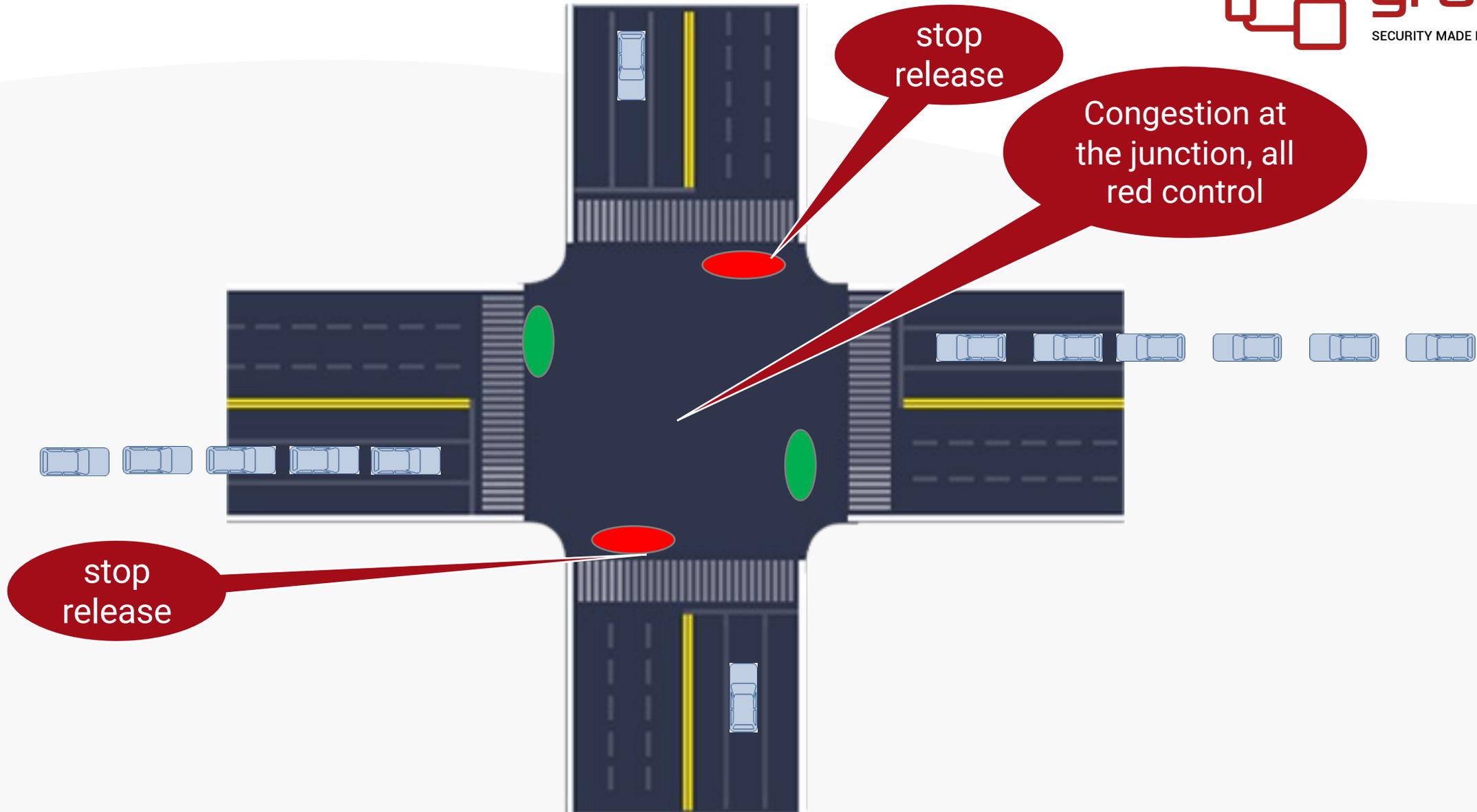


No smart management



Smart Traffic Flow Control



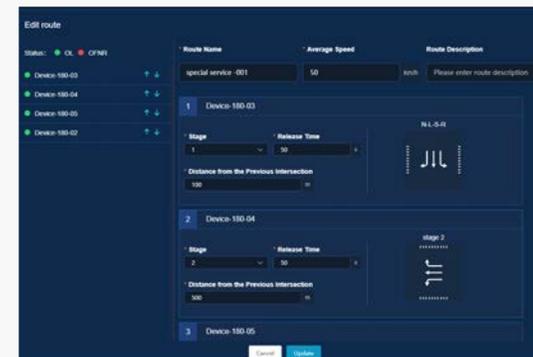
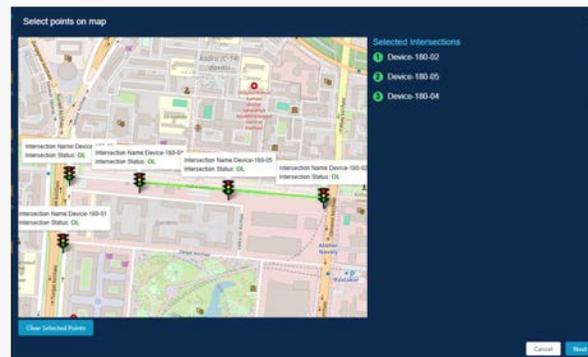
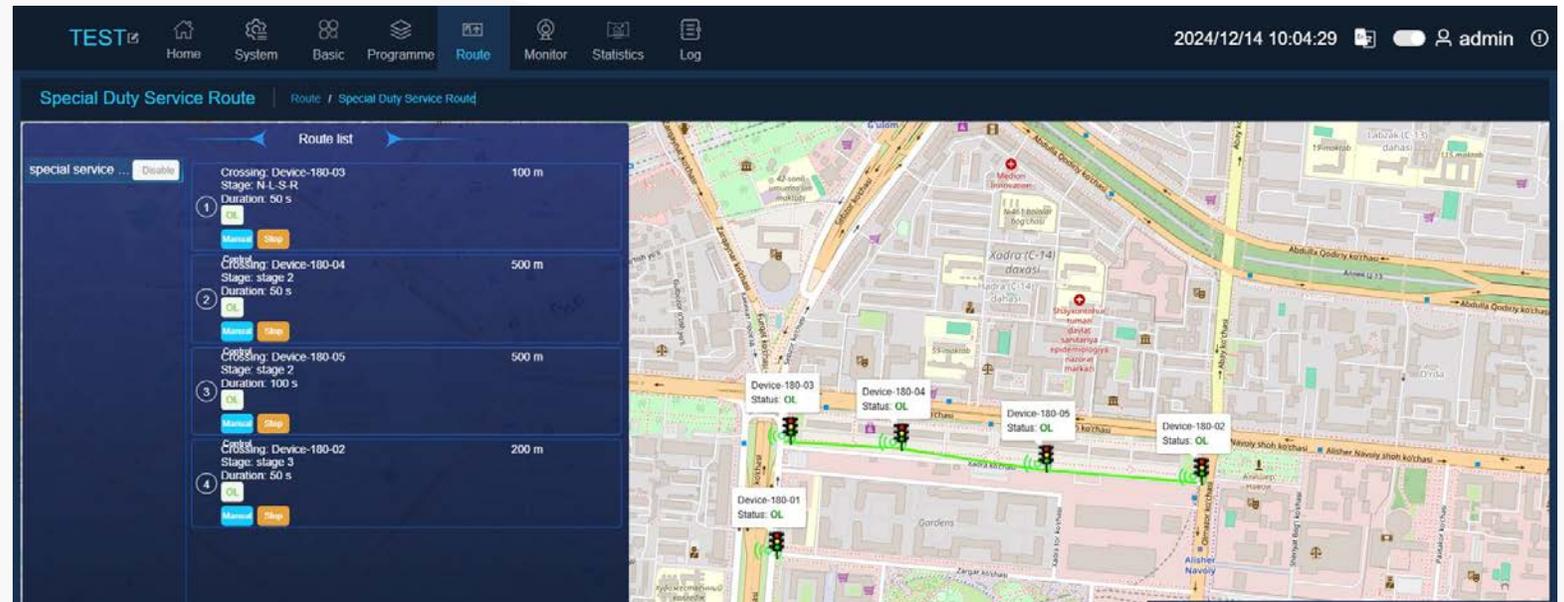


ROUTE MANAGEMENT

SPECIAL DUTY SERVICE ROUTE

Users can customize the route of the special duty, the special duty route can be turned on and off at any time, can also specify the time of the special duty or the immediate implementation of the route after the implementation of the route can still be flexibly adjusted to each intersection in advance or delayed time.

Add Route - Map to select the desired configuration of the special duty service route intersection with the green release direction.



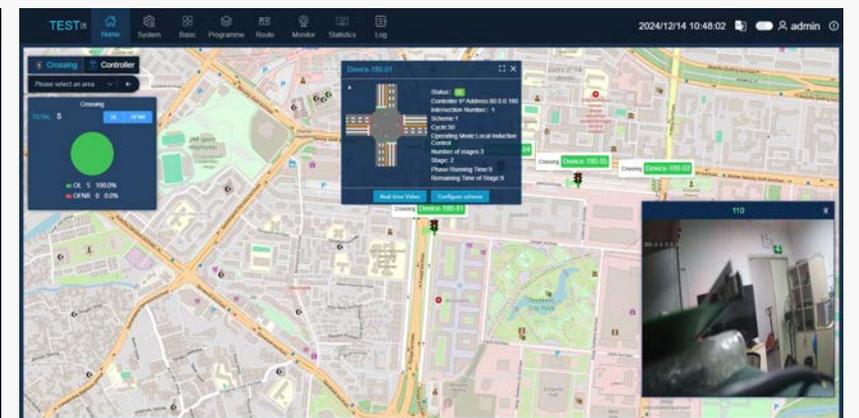
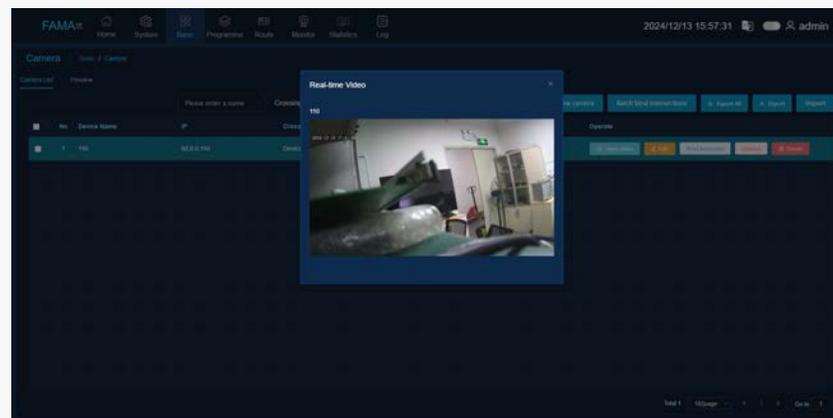
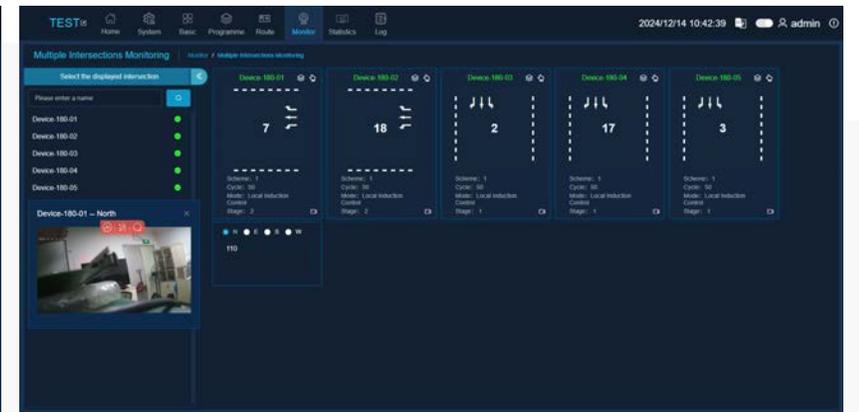
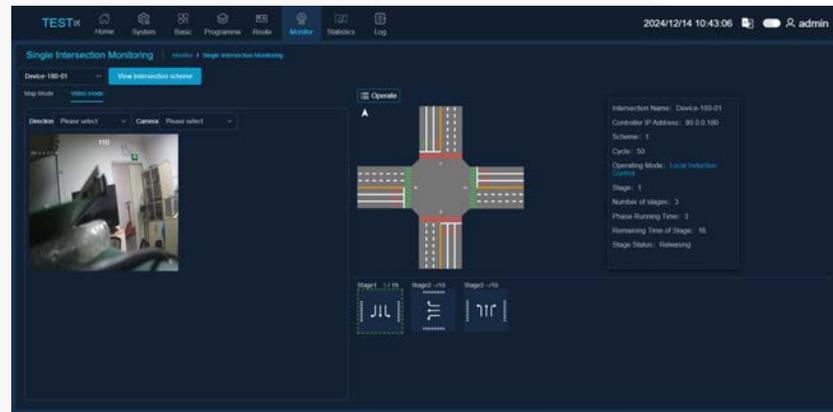
Configure the route speed, the distance to each intersection, and the stage of special duty to be performed at each intersection.



CAMERA VIDEO VIEWING



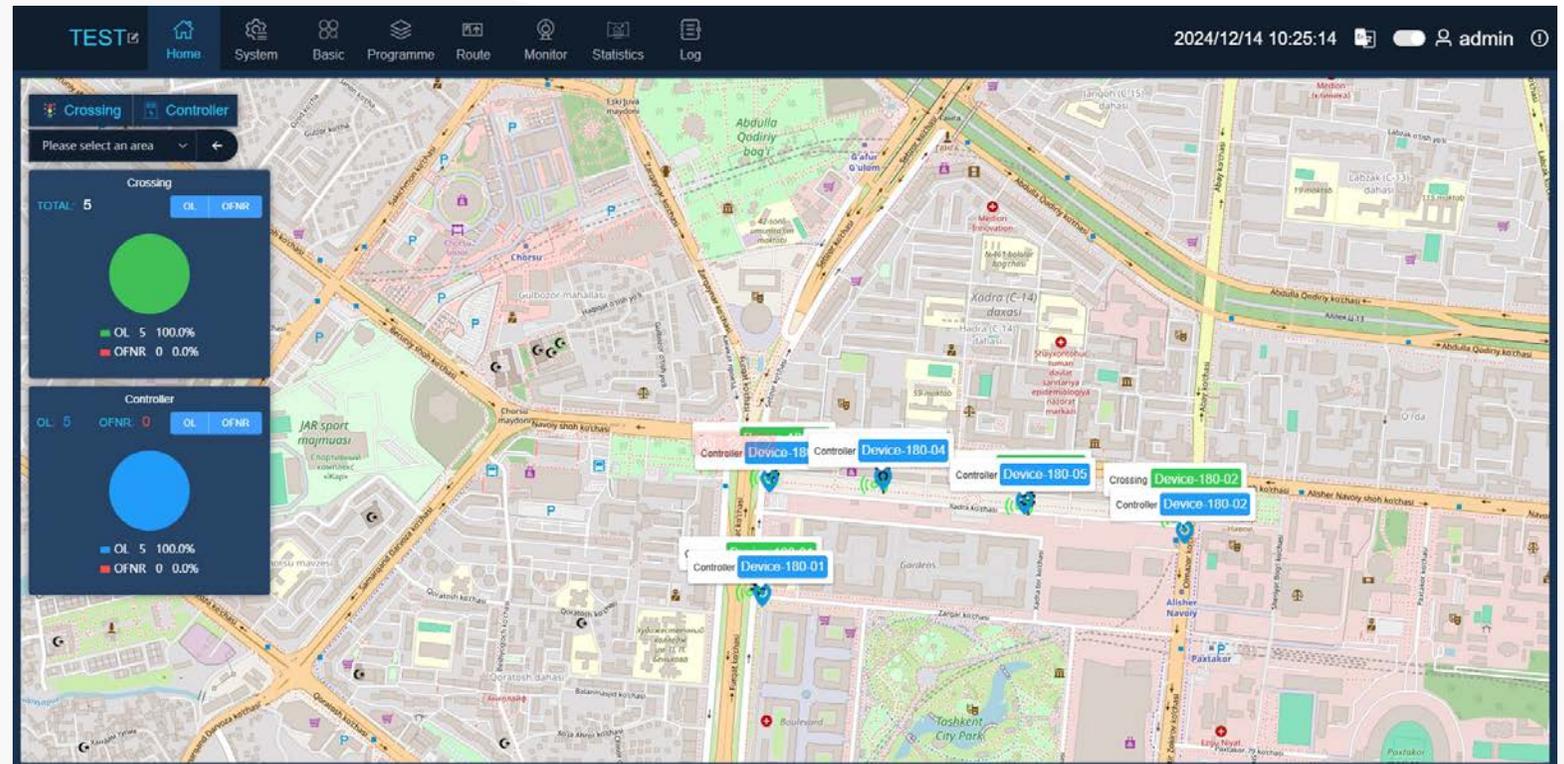
Camera monitoring function supports adding cameras using the general RTSP Onvif protocol. The rtsp stream address parameter definitions of different cameras are inconsistent, and different camera types need to be distinguished separately. Currently,



In order to facilitate users to easily check the status of intersections, camera viewing functions have been added to intersection monitoring, special duty service routes, and home page.

INTERSECTION FAULTS MONITORING

Traffic light failures, including green conflict failure, red-green conflict failure, red light failure, yellow light failure, green light failure, etc., will be reported to the platform, which will record, count and display the alarm.



CONFIGURATION BACKUP



Supports backing up all configuration data of added online controllers and restoring the backed-up data to the online devices.

The screenshot shows a web interface for "Configuration Parameter Backup". The top navigation bar includes "TEST", "Home", "System", "Basic", "Programme", "Route", "Monitor", "Statistics", and "Log". The current page is "Configuration Parameter Backup" under the "Basic" menu. The interface includes a search bar with the placeholder "Please enter a name", a "Search" button, and two buttons: "+ Add new backup" and "Import backup". Below this is a table with the following data:

No	Backup Name	Description	Creation Time	Operate
1	Device-180-01-Back up		2024-12-13 14:51:10	Edit Restore backup Download backup Delete

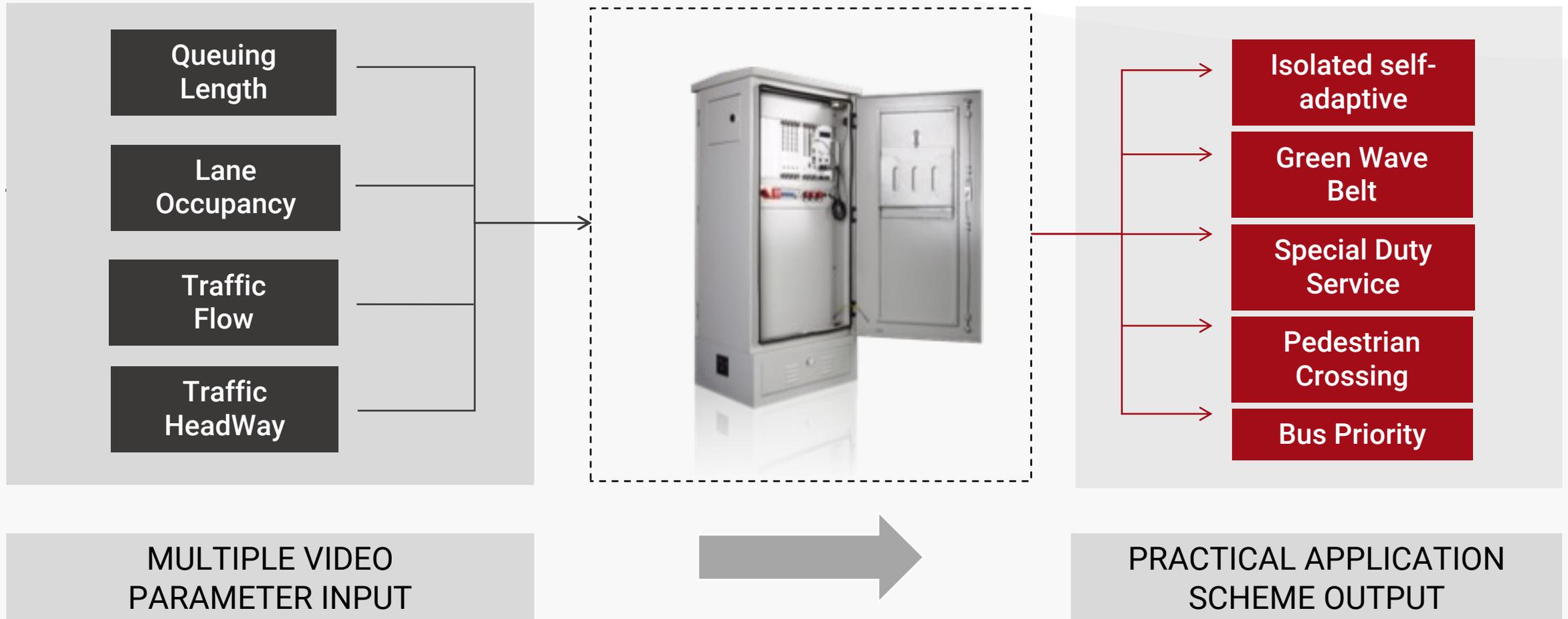
At the bottom right, there is a pagination control showing "Total 1", "10/page", and "Go to 1".

INTERSECTION CONTROLLER-TRAFFIC LIGHTS



- 1 ISOLATED SELF-ADAPTIVE
- 2 INTERSECTION AREA AUTHORITY CONTROL
- 3 CONTROLLER AND INTERSECTION EQUIPMENT MANAGEMENT
- 4 CAMERA VIDEO VIEWING
- 5 INTERSECTION FAULTS MONITORING AND CONFIGURATION BACKUP
- 6 ROUTE MANAGEMENT

INTERSECTION CONTROLLER

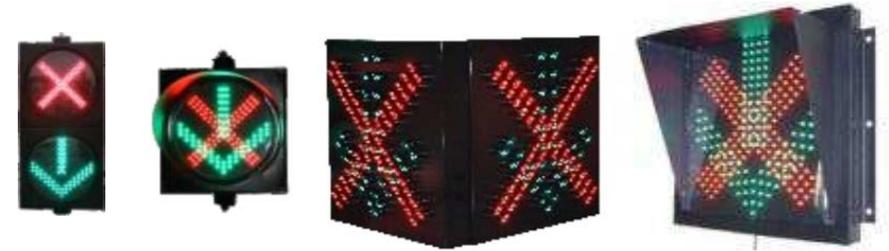


VEHICLE TRAFFIC LIGHTS

VEHICLE/ PEDESTRIAN LIGHT | 100/200/300/400mm



TOLL STATION LIGHT | 200/300/400mm



COUNTDOWN TIMER | 200/300/400/600/800/900/1100mm



WARNING SIGNALS | 200/300/400mm



VEHICLE TRAFFIC LIGHTS

HOUSING DESIGN



AMERICAN TYPE

EUROPEAN TYPE

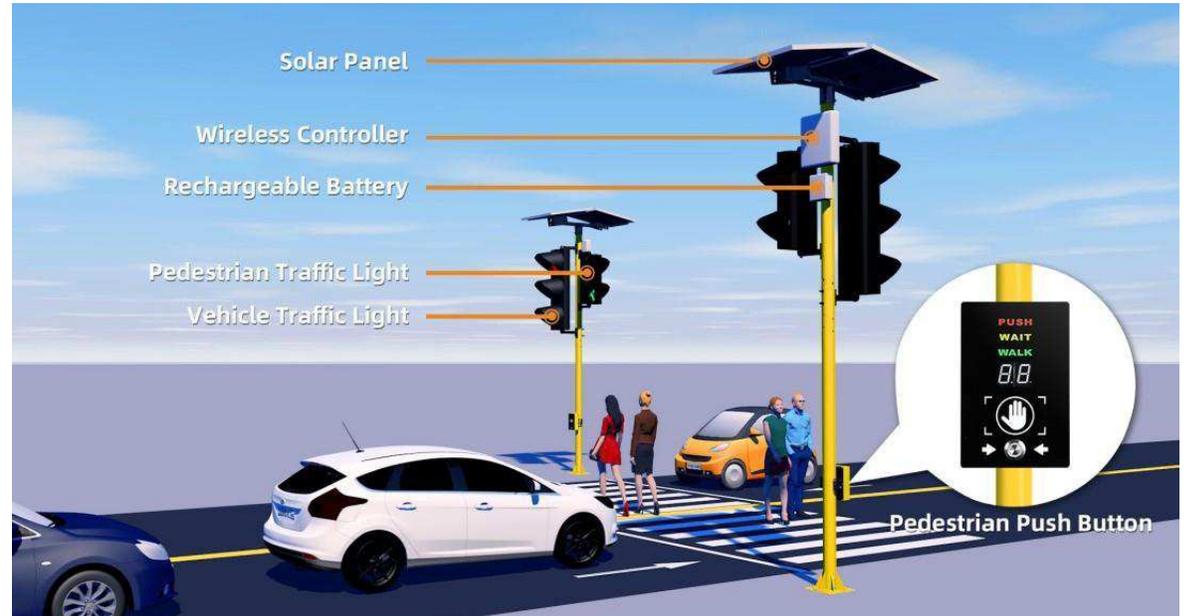
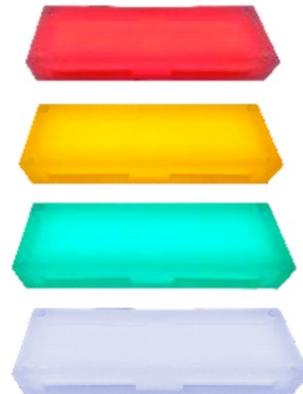
X TYPE

PEDESTRIAN LIGHTS

SMART PEDESTRIAN WARNING BOLLARDS



LED BRICK LIGHT



SOLAR WIRELESS PELICAN CONTROLLER SYSTEM

WARNING SIGNS



SOLAR POWERED
ROAD STUDS



TEMPORARY RELOCATABLE TRAFFIC SIGNS

They are used in temporary job sites In events, occasions and celebrations Operate as an independent system or link with several other units



CONTACT US



unival group® GmbH
Mildred-Scheel-Str. 2
53175 Bonn – Germany

FON: +49 228 926858-0
FAX: +49 228 926858-28

info@unival-group.com
www.unival-group.com

