



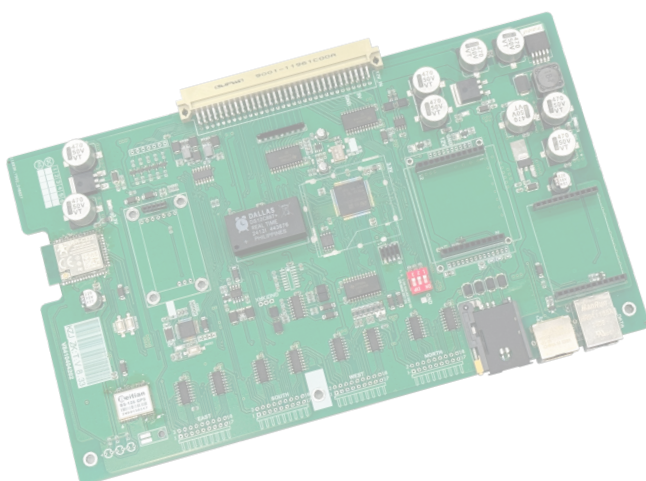
# NobTra<sup>®</sup>

## Intelligent Traffic Controller

NobTra<sup>®</sup> is a type of network centralized coordination traffic controller, which can realize network centralized coordination, regional coordination, main road green wave, and single-point adaptive automatic degradation function. The controller uses dual bus communication (CAN2.0, RS485) to ensure that the bus automatically switches when the bus fails, the bus is open to the outside, and the device can be connected to a variety of peripheral devices.

**Active short circuit protection on all outputs:** Often the most frequently damaged components within a traffic controller are the output drive switches, which are particularly vulnerable to cable faults and short circuits. The NBTSC-300-84 design incorporates an active short circuit protection system on all lamp outputs, ensuring that even under direct short circuit conditions, the outputs are protected from damage.

**Active residual current quench on all outputs:** The power requirements of LED-based street furniture are becoming ever lower. As this occurs, there is an increased risk that stray and residual voltages, remaining present after a signal is switched off, will cause the controller to register conflict or correspondence faults incorrectly. The NBTSC-300-84 is ready today to deal with the very low power signals expected in the future, as each output is equipped with an active circuit that eliminates these stray voltages, without wasting power when the signals are switched on.



### MAX CAPACITY

- 24 Phase
- 16 loops
- 32 plans
- 32 stages
- 24/0 lines



## GENERAL CHARACTERISTICS

- There are multiple communication ports of the controller( RS485、CAN2.0、ETHERNET、4G、RF(433M)
- 4G communication module, used for network connection and sending and receiving SMS function.
- WIFI hot spot function, used for user local wireless communication.
- GPS clock automatic setting function.
- Manual control function.
- Special vehicles priority function, when special vehicles arrive at the intersection, the controller automatically release special vehicles (police cars, ambulances) first.
- Signal light fault detection function, the controller detects the signal light working voltage and current in real time.
- Green conflict automatic detection, phase green light and red light are all off, automatic yellow flash.

## CONTROLLER CAPABILITIES

Traffic signal management function. The controller has 16 groups of vehicle input switch signals, each group contains vehicle signals and fault signals, with 8 groups of pedestrian buttons to apply for input, 16 groups of sensor loop input. It can also access infrared, microwave, camera and other vehicle acquisition equipment.

There are 96 channels SCR output, 16 phase, 32 plans, the number of output channels and phase number according to the actual situation, all interfaces can be extended, with powerful flexibility.

## CONTROLLER ADVANTAGE

GPS function, for real-time clock automatic set up and the automatic positioning function to the controller, has the backup power input function, automatically detects the power supply fault, the controller has any fault, the card automatically notifies the maintenance personnel in time and quickly by the way of short message and network communication.

Multi-channel timing output function, can be used for special functions such as street lamp management, signal light dimming, timing yellow flash and so on.

The controller can automatically adjust the traffic time of the phase according to the traffic flow, effectively improve the traffic efficiency. At the same time, the collected traffic flow information can be saved, and the user can download the data to analyze the traffic flow information. The user can adjust the relevant parameters, such as: each vehicle increase time, minimum passage time, maximum passage time, vehicle waiting time out and other related parameters.



## Applications

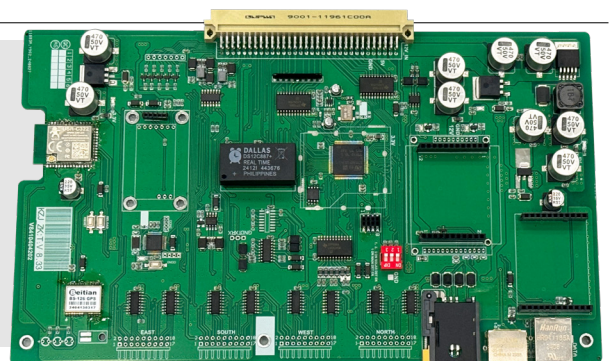
NobTra can be used in many applications:

- Stand alone unit capable to manage independently up to 4 junctions.
- Master of a Controller network.
- Variable Green Wave cycle, connecting an indefinite number of controllers via a serial line (star system).
- Green Wave, with synchronisation granted by GPS communication set up.
- Dynamic plan generation for a local intersection network.



## CPU Card --6U

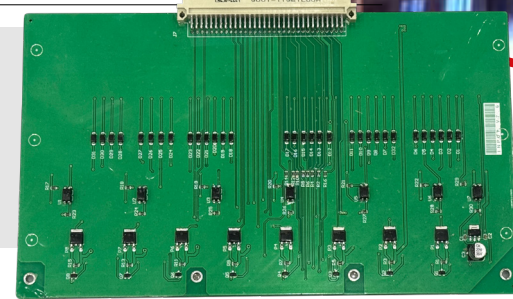
- Communication interface:RJ45/RS485、4G.
- Dual wireless communication(433MHZ).
- 4-way manual remote input.
- 4-way manual remote switch input.
- APP program.





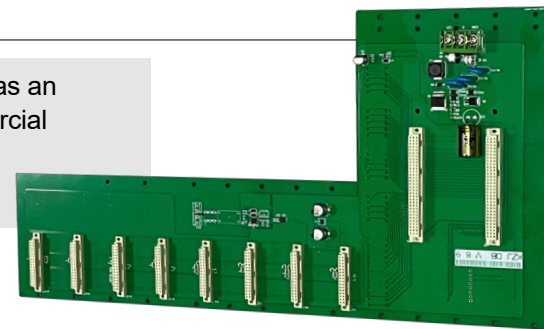
## Input/Output Card

- 16 signal group vehicle switching input, 8 signal group pedestrian application input.



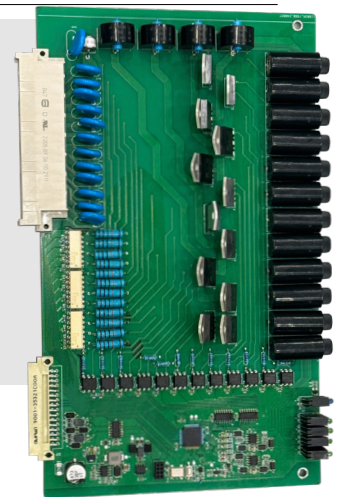
## Power Supply Card

The power supply adopts Mingwei switching power supply module, which has an external power input function, which automatically switches between commercial power and standby power. Each board can be powered separately.



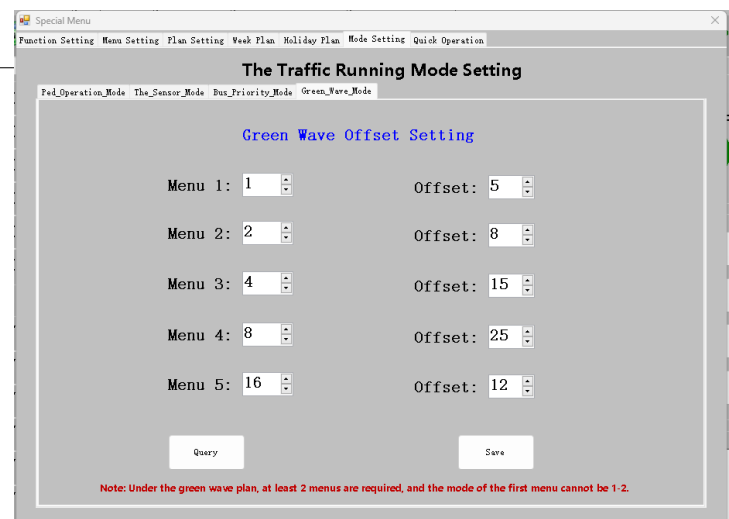
## Output Card 6U

- Card Address: The communication address of the card is automatically set according to the location
- COM Ports: CAN2.0 and RS485 dual communication interface.
- 4 Outputs: 12 channels SCR output, each equipped with 2A glass fuse.
- Detect Function: voltage and current detection function.
- Fault Protection: If the communication fails, it will flash yellow or turn off automatically. If the red or green light is not controlled, it will automatically enter the protection mode (yellow flash or turn off the light).
- Fault Indication: If any fault occurs, the panel has LED indication, which is convenient to check the fault location quickly.



## Software Interface

- Communication interface:RJ45/4G/WIFI/
- Dual wireless communication(433MHZ
- 4-way manual remote input.
- 4-way manual remote switch input.
- 16 signal group vehicle switching input, 8 signal group pedestrian application input.





Main Form

Intelligent Traffic Management Client

Online Intersection List  
00012-->(CID:00012 Junction\_12)

Refresh

Current Target Information  
ID:   
Name:

2024-09-13 19:15:16 Successfully connect to the Ethernet Data Transfer Center

Finished! Database is connected! CPU: 3% RAM:25% 9/13/2024 7:15:43 PM

Special Menu

Function Setting Menu Setting Plan Setting Week Plan Holiday Plan Mode Setting Quick Operation

## Green Wave Data OneKey Setting

Members:  Green Wave Plan:

```

##### Green Wave Data #####
Plan 1 Total Period :1
1 1 [00:00:00->23:59:59]_Menu:1_Mode:1-1:
Menu 1 Total Step :4           E           S           W           N
1 1 Green Time:10 Disp: ●●●○○○_○○○○●●_○○○○○_○○○○○:
1 2 Green Time:10 Disp: ○○○○○○_○●●○○○_○○○○●●_○○○○○:
1 3 Green Time:10 Disp: ○○○○○○_○○○○○○_○●●○○○_○○○○●●:
1 4 Green Time:10 Disp: ○○○○●●_○○○○○○_○○○○○○_○●●○○○:
Week Plan
__ Mon.1 Tue.1 Wed.1 Thu.1 Fri.1 Sat.1 Sun.1:
Traffic Parameter
__ Yellow light time:3 All red time:3.
#####
  
```

Query Import Export Save

Note: Under the green wave plan, at least 2 menus are required, and the mode of the first menu cannot be 1-2.



Special Menu

Function Setting | **Menu Setting** | Plan Setting | Week Plan | Holiday Plan | Mode Setting | Quick Operation

>>>

## Menu Setting

Menu No. :  Total Phase:

Green Conflict Detection  
 Right Wheel  Left Wheel  
 Customized Menu

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	---	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	---	---	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	---	---	---	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	---	---	---	---	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	---	---	---	---	---	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	---	---	---	---	---	---	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	---	---	---	---	---	---	---	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	---	---	---	---	---	---	---	---	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	---	---	---	---	---	---	---	---	---	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	---	---	---	---	---	---	---	---	---	---	---	0	0	0	0	0	0	0	0	0	0	0	0	0
12	---	---	---	---	---	---	---	---	---	---	---	---	0	0	0	0	0	0	0	0	0	0	0	0
13	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0	0	0	0	0	0	0	0	0	0
14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0	0	0	0	0	0	0	0	0
15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0	0	0	0	0	0	0	0	0

Note: The current version of user-defined green conflicts will only be reported when the signal machine runs to the menu where the conflict occurs. Please follow the order of setting green conflicts before proceeding with menu settings!

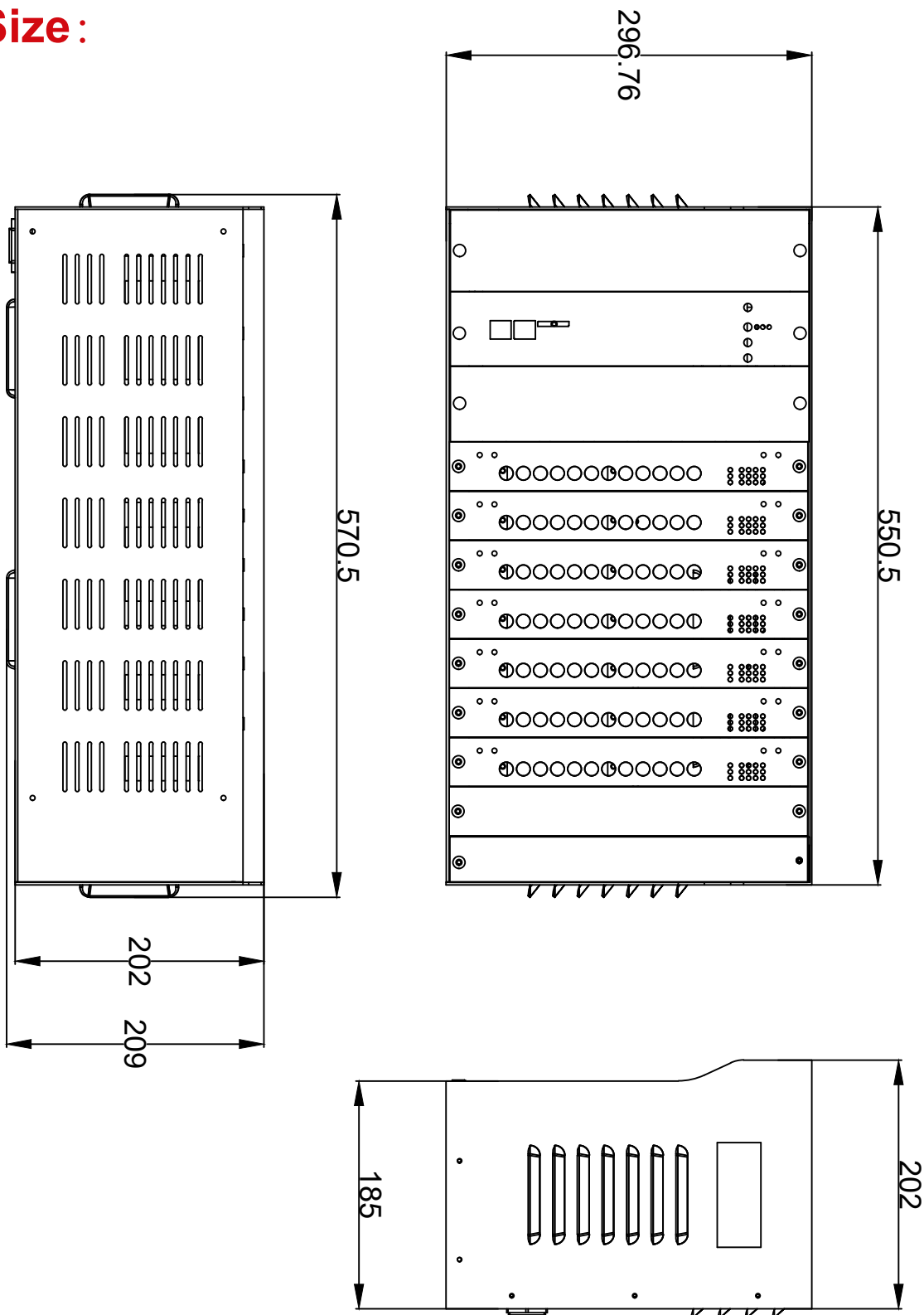


## TECHNICAL CHARACTERISTICS

- Main Supply: 85-265VAC (42 Vac available on request)
- Consumption (lamps excluded): 16 VA
- Maximum controller load: 6000 W
- Size: 570.5(width) \* 202 (depth) \* 296.76 (height)
- Output lamp switching: 800 W
- Output fuse: 2A type EF
- Hold-up time: 100 ms
- Operating temperature: -40°C +80°C.



**Size:**



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