



# Network Central Controller

Embedded software: Network central control system logic processing embedded software V2.15

## TS-9100N



### Description:

With full compatibility and traditional programming mode, it can realize intelligent network control. It supports IOS/Android mobile devices for centralized control. The product adopts industrial grade design, which is safe and reliable.

### Feature:

1. Adopting SMT full patch production process, highly integrated processing chip, the system runs stably and smoothly. Built-in 32-bit Cortex-A8 ARM architecture embedded processor, processing speed up to 720MHz.
2. C language programming architecture, statement programming, support complex logical operations and loop counting, CRC check, API protocol docking, text feedback and other functions, interactive control structure, Chinese and English programming interface.
3. The host has rich control interfaces such as serial control, IR infrared control, I/O control, weak relay, etc., supports access to various types of peripheral devices, making user operation easier.
4. Supports infrared control, RS-232, RS-422, RS-485, UDP, TCP, telnet, http, MQTT and SNMP and other protocols, strong compatibility, can be connected to third-party devices.
5. Supports wired touch tablets, Android mobile terminals and IOS mobile terminals and other smart hardware to send network control instructions to the host through network cables or WIFI.
6. The host adopts a standard 19-inch cabinet design, and the front panel adopts black oxidation brushed process, which is beautiful and generous.
7. The host has a 4.3-inch LCD touch color screen, which can view and modify the IP address. The panel has indicator lights, which can intuitively feedback the working status of the serial port, infrared, and equipment. Supports all-standard environmentally friendly power supplies (110V-240V), suitable for any region.
8. The host has 8 independent programmable serial ports, which can send and receive RS-232, RS-485 and RS-422 signals. Supports the serial port loop-out function, and the host's 8 serial ports can realize that any input can be looped out from another serial port.
9. The host has 8 independent programmable IR infrared transmission ports to realize infrared control of equipment such as TVs and air conditioners. Supports the import of infrared code libraries of various commonly used electrical equipment into the host, so as to realize the control of the corresponding equipment.
10. The host has 8 digital I/O control ports with protection circuits.
11. The host has 8 weak current relay control interfaces.
12. The host has 1 NET network control interface, which can be used for external function expansion and can connect 256 network devices in parallel.
13. The host has a TF card interface to import or export programs in the project.
14. The host has an embedded intelligent infrared learning function module, and there is no need to configure a professional learner to realize the infrared code learning function.
15. Support audio management. The central control host can realize the volume control of the sound reinforcement system and scene call by connecting to the audio processor, audio control module or a third-party device that supports the host protocol.
16. Support video management. The central control host can realize camera control, video signal switching and scene call by connecting to the matrix system, pan-tilt camera or a third-party video device that supports the host protocol.
17. Support power management. The central control host can realize power control of electric curtains, air conditioners, projectors, projection screens, TVs, LED displays and other equipment by connecting to the power sequencer, power controller or a third-party device that supports the host protocol.
18. Support lighting management. The central control host can realize the control of incandescent lamps, LEDs and other equipment by connecting to the lighting controller, power controller or a third-party device that supports the host protocol.
19. Support scene call. The central control host can pre-set multiple scene modes such as conference mode, viewing mode, and unmanned mode. The control end only needs one button operation to complete the linkage startup or switching of all devices in the scene, avoiding cumbersome operation steps.
20. Support cascade mutual control. The central control host can be cascaded through the network to achieve the effect of interconnection, mutual control, and linkage switching. One control end can operate multiple central control hosts.
21. Support status feedback. The operator can view the switch status of all devices at the control end, and the control status of the equipment is clear at a glance, which greatly reduces the workload of the operator and makes the use more humane.
22. Support signal preview. Users can view the conference camera screen through the control end and adjust the device according to the conference screen, and can view multiple screens at the same time.
23. Support dual-machine hot backup. When the central control host fails, the backup central control host automatically assumes the service, and the switching time is  $\leq 1.2s$ , thereby ensuring that the system can operate normally without manual intervention.
24. Support trigger linkage. The central control host can compare the data collected by the sensor with the preset data, so as to automatically control the air conditioner or humidifier and other equipment to keep the environment within a comfortable temperature and humidity range.
25. Support data backup. The host has a built-in TF card slot. Inserting a TF card can backup and import program data.
26. Support Internet control. When the central control host is connected to the Internet, users can use mobile phones or tablets to remotely control the central control host through the Internet and manage the equipment anytime and anywhere.
27. Support voice control. The central control host can be equipped with voice control software or a third-party voice speaker that supports docking with the host. By converting voice into central control commands, it can control peripheral devices or call scenes.
28. Support scanning QR code control. When the central control host is connected to the Internet, a QR code will be automatically generated on the cloud platform. Scan the QR code through WeChat or a browser to enter the control interface and control the central control host. Support password permission setting.
29. Support timing control. Users can set timing control tasks in advance. When the specified time is reached, the central control host automatically executes the control task.
30. Support video matrix visualization control. Users can preview, drag and switch matrix video signals in real time through the control terminal, and support setting touch and delivery trigger switching methods.
31. Support visual control of splicing matrix. Users can preview, zoom in, zoom out, drag and switch splicing matrix video signals in real time through the control terminal, and can set the input signal source to the bottom, top and one-click screen clearing, etc., and support setting touch and delivery trigger switching methods.
32. Support computer remote control. When the central control host and the computer are in the same local area network, users can control the computer remote desktop in real time and view the computer working status through the control terminal APP.
33. Connect to the cloud conference system. When users reserve a meeting room through a mobile APP or WEB terminal, they can set the scene type and start/end time. Before the meeting starts, the system will automatically call the scene, and all devices in the scene will start or switch in conjunction; after the meeting, the device will automatically shut down, which is greatly convenient for users to use and more energy-saving and environmentally friendly.
34. Graphical programming and statement programming are supported for users to choose; the graphical programming method has a drag-and-drop operation interface, and users can use the signal connection method to build program logic through the modules in the graphical programming software; the statement programming method provides function functions for custom programming, and users can write control codes through the programming interface.

### Specifications:

Model	TS-9100N
Processor	32-bit Cortex-A8 ARM architecture microprocessor, the clock speed is up to 720MHZ
Memory	256MByte DDR3 RAM, 8 GByte EMMC Flash
Serial port	8 terminal modules, each module has 7PIN headers; support RS-232, RS-485 and RS-422 signals
Infrared IR port	8 terminal modules, 16PIN pin headers
I/O port	8 terminal modules, 9PIN header, with protection circuit, support 0-5V digital input signal
Weak current relay port	8 terminal modules, 16PIN pin header, normally open independent relay, rated 1A/5V digital signal
NET port	1 terminal module, 4PIN pin header, support NET control bus, provide DC24V/2A output power
Packaging method	Metal cabinet, rack mounted installation
Input power	110~240V 50~60Hz
Software	Control System Builder, Chinese and English interface
Dimension(W×D×H)	484×302.5×88mm
Weight	4.3Kg
Power consumption	12W