

# Shenzhen Tengda Intelligent Technology CO., Ltd

# **Ultrasonic Node Controller**Specification

Model: TD-FB-403



# **Basic Information.**

The node controller cyclically detects the status of the connected probes and uploads the relevant information to the central controller. It is recommended that each node controller control the maximum of 80 probes.

### Features.

- The node controller is used to connect the central controller and the parking space detector, LED display, etc., and adopts the mixed communication mechanism of RS485 and CAN bus to solve the problem of unreliable long-distance communication, the problem of network node number expansion, and group management problems.
- Using internationally imported 32-bit ARM processor, all industrial-grade design ensures stable and reliable products, and the entire system controller can be upgraded remotely to meet user needs at all times.
- ♦ Adopt CAN bus industrial grade communication interface design, signal communication is stable and reliable, and the transmission distance can reach 1.2 kilometers.
- ♦ The node controller uses RS485 industrial bus to communicate with terminal devices such as lower-level detectors and display screens.
- ♦ Adopt four RS485 communication interface design, the four channels are completely independent of each other, and each router can connect up to 31 RS485 devices, and the communication efficiency is high.



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- ♦ The overall industrial design, after strict static, lightning and surge, group pulse and other tests, effectively ensure the reliable use of equipment.
- ♦ The equipment has short-circuited, reverse connection and misconnection protection design to prevent electrical damage to related equipment caused by short circuit, reverse connection and misconnection caused by wiring errors during construction.
- ♦ The power supply adopts industrial grade design and has short circuit, overload and overvoltage protection functions.
- The communication bus adopts advanced anti-collision, fault-tolerant and troubleshooting algorithms to ensure the stability and reliability of communication.
- ❖ It can quickly and effectively detect various states of the device. After the installation is completed, the RS485 device communication status can be detected by one button, and the bus connection can be quickly diagnosed.

# **Technical parameters**

Product number:	TD-PB-403	Operating Voltage:	AC 110∼240V
Operating temperature:	-20 ∼ +65°C	Power consumption:	≤2W (Self power consumption, no detector)
Standard sizes:	350×300×150mm	net weight:	6KGS
Communication method:	1-way CAN @ 20kbps 4-way RS485 @ 9600bps	Communication distance:	CAN:≤1000m (RVSP 0.75*2) RS485:≤150m (RVSP2*0.5)
Installation height:	Vertical 2 ~ 3m (recommended 2.5m)	Housing material:	Gray cold steel (painted)
Horizontal position:	Level $0\sim1m$ (recommended $0.3\sim0.5m$ )	Single node capacity:	31 (including detector and guide split screen)

## **Node controller installation**

The node controller is usually mounted on a column or wall. It is recommended to install a height of 2 meters or more.

# **Pictures for Reference.**



