TC9 Book of Intelligent Communication

一、Technical data

　1.It can communicate with the server through the network or Wi-Fi.

　2.It can acquire and control the Intelligent Electronic DZ LE Switch and Intelligent Electronic DZ Switch through UART.

二、Main function introduction

Module	Functions
Toggle Switch	supply power to the communication board
Key	Resting the Configure Network ;Cleaning the data of the Intelligent Communication Module reserved
Wi-Fi	Connect the Intelligent Communication Module to the Network through wireless signal
Ethernet	Connect the Intelligent Communication Module to the Network through Cable
Clock	Provide system time to the Intelligent Communication Module
Main Control IC	Control to each module
Power	Reduce the input voltage of 12V to the voltage required by each module
Memory	Save electricity quantity data

三、 Operational function definition

3.1 The Key operation and definition

Short press to enter the distribution network:it means fails if the Wi-Fi connect the network within 2 minutes and 30 seconds, which the saved Wi-Fi network will be reconnected.If there is no saved Wi-Fi network, the network will be in the ready state of distribution network.

Long press reset key to zero: long press above 10s to clean the electricity quantity data saved.

3.2 LED Display definition

Display	Status
Green light Stays lit.	The server is connected.
Green light flashes quickly.	The process of data transmitting with the server.
Red light flashes twice.	Without Wi-Fi Network.
Red light flashes four times.	There is no network with Wi-Fi or cable.
Red light flashes eight times.	Successful network configuration.

3.3 Save the Intelligent Electronic DZ LE Switch and Intelligent Electronic DZ Switch's electricity quantity data in the storage when it crosses the month or day.

四、 Product performance

Name	Description	Remark
Charging way	DC	
Working voltage	12V	
Control panel static current	TBD	
Control panel dynamic current	TBD	

Wi-Fi	Standard Authentication	FCC/CE/TELEC/SRRC	
	Wireless Standards	802.11 b/g/n	
	frequency range	2.4G~2.5G(2400M~2483.5M)	
	frequency range	802.11 b:+17dBm	
		802.11 g:+16dBm	
		802.11 n:+14dBm	
	receive sensitivity	802.11 b:-91dBm(11Mbps)	
		802.11 g:-75dBm(54Mbps)	
		802.11 n:-72dBm(11Mbps)	

Frequency Channel			
UARFCN	Frequency(MHz)	UARFCN	Frequency(MHz)
1	2412	8	2447
2	2417	9	2452
3	2422	10	2457
4	2427	11	2462
5	2432		
6	2437		
7	2422		

Insulation Resistance	DC500V t=5s; **main contact**：≮2MΩ, others：≮5MΩ	
UART Port	Reserve UART interface for external display, etc	
	Report and query the working	

Data reporting and query	status and parameters of each module to the server.	
long-range control	APP and background can be controlled by communication module.	
timing switch	The timing switching time of each switch is recorded and controlled by data interface protocol.	
Firmware upgrade	Remote firmware upgrades are supported.	

Federal Communications Commission (FCC) Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

●Reorient or relocate the receiving antenna.
●Increase the separation between the equipment and receiver.
●Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
●Consult the dealer or an experienced radio/TV technician for help.

Warning: Changes or modifications made to this device not expressly approved by Shenzhen Tosee Intelligent Electric Co., Ltd. may void the FCC authorization to operate this device.
Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.
The distance between user and products should be no less than 20cm.