GPO.tech

Smart electronic thermostat

Features

WIFI and BLE remote control
230VAC power
Load up to 3kW
Noiseless
0.96’ OLED display
Connector for 2x3 or 5x1 keyboard
On-board RTC clock with a battery
On-bard alarm zoomer
External NTC sensors for heater temperature and ambient air temperature
Firmware updating over the air
The low-voltage side is fully galvanically isolated

Application

Electrical heaters
Electrical water boilers
Electrical floor warming

Operating conditions

		Min	Max	Unit
AC supply voltage		70	260	VAC
Resistive load resistance		15	1000	Ohm
Resistive load power		50	3000	W
WIFI/BLE band		2.4		GHz
Ambient air temperature		-20	70	**°C**
External NTC temperature sensors	Beta	3950		
	Resistance	10@25**°C**		kOhm

Detailed description

The electronic device (thermostat) is a complete solution for building a remotely controlled heating device. It possesses BLE and Wi-Fi (2.4GHz) modules which allows it to be controlled distantly from mobile smart devices over BLE or the Internet. Being connected to a Wi-Fi it keeps a connection with the server allowing its owner to monitor and control it from anywhere.

Mobile Apps

Dedicated Apps for Android and iOS are available for users of ,the thermostat. From the App, the user can add several thermostats to its account, organize them into groups, and buildings, or manage as separate devices. User can configure a single thermostat or a group of the devices to work according to own or one of the standard schedules, switch between the schedules banch organised into modes. As well, user can specify auto switching between the modes, or schedule switching on/off using “Timer” feature.
Enhenced statistics available in the Apps for each thermostat or group allows to user monitor electric consumption, money spending.

Direct control and standalone operation

Thermostat has bilt-in 0.96’’ 64x128 monochrome display providing basic information on the device operation. Connecting a keyboard allows to walk through a menu, checking or setting device settings, monitor basic statistics.
For alarm cases a zoomer is installed in the device to attract user’s attention when it is required.
To ensure uninterrupted operation according to the schedule while being offline it is equipped with realtime clock (RTC) with a battery, which allows to store time for several years.

Assembly drawing