Datasheet E32 Gateway

(ESP32 Ethernet + WiFi edition) V1.5

Product identification	
Product brand	BBQKees Electronics
Product name	Gateway E32 (ESP32 Ethernet + WiFi edition)
Product SKU	gw-kit-E32-1-5
GTIN	8719327747506
HS Code	84718000
Manufactured in	The Netherlands

Product features *(with EMS-ESP 3.5)*	
Circuit board version	V1.5 2022
Microcontroller	Wireless-tag WT32-S1 ESP32 with 4MB Flash
Firmware	EMS-ESP32 (currently version 3.5)
Bus interface	3.5mm EMS service jack, 2-pin screw terminal
Bus protocol	Bosch EMS and all derivatives like EMS2, EMS+, EMS Plus, Heatronic 3.
WiFi	2.4 GHz
Ethernet	RJ45 with 10/100mbit (no POE)
Communication protocols	Web interface, MQTT, HTTP RestAPI
MQTT features	Receive data and send commands. MQTT discovery for Home Assistant, Domoticz and OpenHAB.
HTTP RestAPI	Receive data and send commands via secure interface.

Temperature sensors	Possible to add Dallas temperature sensors. Number of sensors depending on wire length. Usually about 10 sensors. Firmware has no upper limit.

Electrical specifications	
Power supply	7-3VDC via 5.5/2.1mm barrel jack plug or 3.5mm EMS service jack
EMS bus	14-16V (14.5 VDC nominal)
Power	<1W
Temperature sensors	All Dallas DS18B20 types, parasitic and non-parasitic mode. 3,3V DC.
USB	CH340 chip, Internal micro-USB header only for programming

Mechanical specifications	
Enclosure dimensions (LxWxH)	90 x 50 x 24 mm
Enclosure color	dark grey
Enclosure material	ABS plastic, Fire class UL 94 V-0
Weight	0,1kg

Included accessories	3-pin JST ZH plug with 10cm cable, 30x30mm double sided tape, getting started card.
Optional accessories	EMS service jack cable 50cm and 110cm, wall mount bracket, 12V DC 1A power supply with 5.5/2.1mm barrel jack plug.