

Datasheet S3 Gateway
(Standard WiFi edition V3)



Product identification	
Product brand	BBQKees Electronics
Product name	Gateway S3 (Standard WiFi Edition V3)
Product SKU	gw-S3-1
GTIN	8719327747551
HS Code	84718000
Manufactured in	The Netherlands



Product features	
<i>(with EMS-ESP 3.6)</i>	
Circuit board version	S3 V1.1 2023
Microcontroller	Espressif ESP32-S3 with 8MB PSRAM 16MB Flash
Firmware	EMS-ESP32
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
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.
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Electrical specifications	
Power supply	7-13VDC 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	USB-C port 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.