Model： 003001.C590
C590 USB Rf-Bridge

Functions

▲ Connects a laptop and tablet with the AuVerte Rf mesh network.
▲ Infrared (IR) code capture for HVAC and A/V remote controls

The C590 is a companion product that is used in conjunction with the AvEWB software. The bridge performs as a transparent and bi-directional router that connects the PC application to actively participate in the AuVerte Rf mesh network.

C5xx Ondur Thermostat

GK101 Optical Door/Window Sensor

GK104 Aux. Temperature/Humidity Sensor

Specifications

User Interface

Display	OLED white, 128x64 pixels
Keys	Three capacitive touch sensors (up, mode, down)
Keypad backlight	LED, white
Temperature sensor	10 °C to 35 °C, accuracy +/- 1 °C
Light sensor	Measurement of environmental light level for automatic backlight control

Radio

Standard	IEEE 802.15.4
Frequency band	ISM 2.4 GHz
Interference immunity	DSSS (Direct sequence spread spectrum)
Data rate	250 kbps
Antenna	Build-in
Indoor range	Up to 50 m (150 ft)
Transmit power	+3 dBm
Receiver sensitivity	-95 dBm
Channels	16 (11 to 26, default 25)
Protocol	AuVerte mesh, IPv6 over 802.15.4 with forward error correction (FEC-ECC)

Software

IPv4	ICMP, IP, UDP, DHCP
IPv6	ICMPv6, IP, UDP
Encryption	AES128
Hashing	SHA256, AES-CMAC
Key Exchange	ECDH
Routing	UDP – AuVerte mesh
	IPv6 – IPv6 over 802.15.4
App Security	DTLS
Cyber security	Packet authentication, packet inspection, certificate-based access control, configurable encryption keys with no backdoors

Device

Power	5VDC from USB port
USB connect	USB Type-C

Environmental and Physical Specification

Dimensions	48.8mm x 28.5mm x 19mm
Weight	0.060 kg (2.1 oz)
Operating temperature	10 °C to 40 °C (50 °F to 104 °F)
Storage temperature	-20 °C to 70 °C (--4 °F to 158 °F)
Operating humidity	10 % to 95 %RH, non-condensing
Storage humidity	5 % to 90 %RH, non-condensing
Electromagnetic emissions	FCC Part 15 Class A
	EN 62311 (EMR)
	ETSI EN 300 328 (2.5GHz ISM Band)
	ETSI EN 301489 (EMC)
Safety approvals	EN 60950
Environmental	RoHS
Cleaning	Mild cleaning liquid, soft towel
Recycling	32g ABS, 7g polycarbonate, 21g electronics

Ordering Information

Part numbers	003090.C590 USB Rf-Bridge
Package content	USB Rf-Bridge
Color Options	■ Default
Options	None

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.
Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

RF warning statement:
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.