

Bridge-T

Device Data sheet

Version 1.0.0



Bridge-T Datasheet

Bridge-T is a Bluetooth to Wi-Fi gateway device that gathers temperature measurements from Stratosfy sensor devices via Bluetooth and sends data to Stratosfy cloud platform via Wi-Fi. The unit also contains a built-in surface temperature sensor (via temperature probe). This hardware unit is AC-powered with a backup battery to support a power outage.

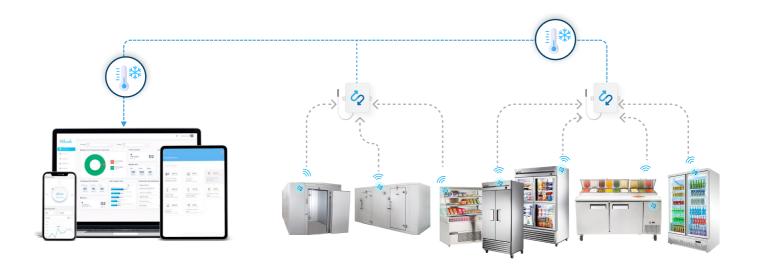
Bridge-T devices are Bluetooth 5 to Wifi gateways that relay signals between Stratosfy sensor devices and the Stratosfy's cloud Platform. In combination with the corresponding Stratosfy Cloud platform, Bridge-T devices enable Stratosfy sensor devices to be able to transfer temperature measurements and battery measurements to Stratosfy's cloud platform. The unit also contains a built-in surface temperature sensor (via temperature probe) and can transmit the surface temperature measurements autonomously to Stratosfy cloud platform. When Wi-Fi connection is down, then the gateway continues to function and stores sensor measurements. When Wi-Fi connection is resumed, gateway transmits these measurements to the cloud platform.

Technology Highlights

- Bluetooth 5 and Wi-Fi compliant.
- High accuracy temperature sensor based device.
- Fully factory calibrated device.
- Supports iBeacon and Stratosfy Telemetry(proprietary) packets concurrently.
- Backup battery to support power outage

Apart from functioning as a gateway, Bridge-T device has a built-in surface temperature sensor (via temperature probe). Hence, Bridge-T can function itself as a temperature measurement sensor that can transfer measurements to Stratosfy cloud platform via a Wi-Fi connection.Bridge-T devices have an operating range of 0°C to 60°C (32°F to 140°F), and a scanning range of 15 feet.

The Bridge-T device runs Stratosfy Bridgenius and Blugenius firmwares. Bridge-T devices are typically meant to be installed at exterior interfaces of different refrigeration equipment such as walk-in coolers and walk-in freezers.





For more information, contact hello@stratosfy.io Website: www.stratosfy.io

Technical Specifications

Features BLE Application Supported iBeacon, Stratosfy Telemetry (Scannable packet types) Processor Type 32-bit ARM Cortex-M4F @ 64MHz and Xtensa dual-core 32-bit LX6 microprocessor, operating at 160 MHz Memory 4 MB Flash Sensors surface temperature sensor probe Range: -55°C to+125°C, Accuracy: ±0.5°C: -10°C to +85°C; ±1°C: -30°C to +100°C; ±2°C: -55°C to +125°C Physical Dimensions in mm (Length x Width x Height) 110 × 100 × 42 Mounting Method Screw Wall Mounting Housing Material ABS Plastic Color White Weight 135 grams Battery Type Li-ion 18650 Rechargeable battery (backup battery) Nominal Voltage 3.7V	Model Number : STSFYG001	Part Number : STSFYBT004	
Rated Input 100-240V AC, 0.35A 50/60 Hz Output 5V, 2.1A RF Specifications Standard Protocol Bluetooth 5 / WiFt. 802.11 b/g/n Frequency band 2.4GHz (40 channels) 3 Primary, 37 Secondary Max Output Power Bluetooth 5 : <10 dBm (e.i.r.p.) / WiFt <20 dBm Modulation Bluetooth 5 : <6 FSK WiFt. 802.11b, DSSS 802.11g, OFDM 802.11n, OFDM Antenna / Gain Chip antenna, 1.1 dBi Mode of Operation Clip antenna, 1.1 dBi Mode of Operation Bluetooth Si F1 Mbit/s; Cellular: Cat M1- Max. 598 (Downlink) Max. 1119 (Uplink Features BLE Application Supported Bleacon, Stratosfy Telemetry (Scannable packet types) Processor Type Scannable packet types) Processor Type 32-bit ARM Cortex-M4F @ 64MHz and Xtensa dual-core 32-bit LX6 microprocessor, operating at 160 MHz Memory 4 MB Flash Entrace temperature sensor probe Range: -55°C to+125°C, Accuracy: =0.5 °C: -10 °C to +85 °C; =1 °C: -50 °C to +125 °C Physical Dimensions in mm (Length x Width x Height) 110 × 100 × 42 Mounting Method Screw Wall Mounting Housing Material ABS Plastic Color White Weight Battery Type Li-ion 18650 Rechargeable battery (backup battery) Neminal Voltage 3,77V	Electrical		
RF Specifications Standard Protocol Bluetooth 5 / WiFi: 802.11 b/g/n Frequency band 2.4GHz (40 channels) Number of Channels Max Output Power Bluetooth 5: 4To dBm (e.i.r.p.) / WiFi: 420 dBm Modulation Bluetooth 5: 4FSK WiFi: 802.11b, DSSS 802.11g, OFDM 802.11n, OFDM Antenna / Gain Mode of Operation Ohip antenna, 11.dBi, WiFi- integral PCB trace antenna/ Mode of Operation Bluetooth 5: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1118 (Uprink Features BLE Application Supported Bluetooth 5: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1118 (Uprink Features BLE Application Supported Bluetooth S: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1118 (Uprink Features BLE Application Supported Bluetooth S: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1118 (Uprink Features BLE Application Supported Bluetooth S: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1118 (Uprink Features BLE Application Supported Bluetooth S: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1118 (Uprink Features BLE Application Supported Bluetooth S: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1118 (Uprink Features BLE Application Supported Bluetooth S: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1118 (Uprink Features BLE Application Supported Bluetooth S: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1118 (Uprink Features BLE Application Supported Bluetooth S: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1118 (Uprink Features BLE Application Supported Bluetooth S: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1118 (Uprink Features BLE Application Supported Bluetooth S: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1118 (Uprink Features BLE Application Supported Bluetooth S: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1118 (Uprink Features BLE Application Supported Bluetooth S: 4 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1118 (Uprink Features BLE Application Supported Bluetooth S: 4 Mbit/s;	AC Plugs / Charge Plug	USB-C	
RF Specifications Standard Protocol Bluetooth 5 / WiFi: 802.11 b/g/n Frequency band 2.4GHz (40 channels) Number of Channels (40 channels) 3 Primary, 37 Secondary Max Output Power Bluetooth 5: <10 dBm (e.i.r.p.) / WiFi: <20 dBm Modulation Bluetooth 5: <6FSK WiFi: 802.11b, DSSS 802.11g, 0FDM 802.11n, 0FDM Antenna / Gain Mode of Operation Ohip antenna, 1.1 dBl Mode of Operation Bluetooth - Chip antenna/ 1.1 dBl, WiFi- Integral PCB trace antenna/ Mode of Operation half-duplex Bluetooth 5: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1118 (Uplink Features BLE Application Supported Bleacon, Stratosfy Telemetry (Scannable packet types) Processor Type Memory 4 MB Flash Sensors Accuracy: x0,5 * C:-10 * C to + 185 * C; ±1 * C:-30 * C to + 100 * C; ±2 * C:-55 * C to + 125 * C Physical Mounting Method ASS Plastic Color White Weight Battery Type Li-ion 18650 Rechargeable battery (backup battery) Nominal Voltage 3.7V	Rated Input	100-240V AC, 0.35A 50/60 Hz	
Standard Protocol Frequency band 2.4GHz (40 channels) Number of Channels (40 channels) 3 Primary, 37 Secondary Max Output Power Bluetooth 5 : <10 dBm (e.i.r.p) / WiFi: <20 dBm Modulation Bluetooth 5 : <10 dBm (e.i.r.p) / WiFi: <20 dBm Modulation Antenna / Gain Mode of Operation Bluetooth 5: I Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1119 (Uplink of Operation: half-duplex Data Rates Bluetooth 5: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1119 (Uplink of Operation: half-duplex BLE Application Supported Bleacon, Stratosfy Telemetry (Scannable packet types) Processor Type BLE Application Supported Bleacon, Stratosfy Telemetry (Scannable packet types) Processor Type 4 MB Flash Sensors surface temperature sensor probe Range: -55°C to +125°C, Accuracy: +0.5°C: -10°C to +185°C; +2°C: -55°C to +125°C, Accuracy: +0.5°C: -10°C to +10°C; +2°C: -55°C to +125°C, Accuracy: +0.5°C: -10°C to +10°C; +2°C: -55°C to +125°C Mounting Method Screw Wall Mounting Housing Material ABS Plastic Color White Weight Bluetooth 5: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1119 (Uplink of Operation: half-duplex White Weight Li-ion 18650 Rechargeable battery (backup battery) Nominal Votage 3.27V	Output	5V, 2.1A	
Prequency band 2.4GHz (40 channels)	RF Specifications		
Mumber of Channels (40 channels) 3 Primary, 37 Secondary Max Output Power Bluetooth 5 : <10 dBm (e.i.r.p.) / WIFI: <20 dBm Modulation Bluetooth 5 : <10 dBm (e.i.r.p.) / WIFI: <20 dBm Modulation Chip antenna, 1.1 dBi Bluetooth 5: GFSK WIFI 802.11b, DSSS 802.11g, OFDM 802.11n, OFDM Antenna / Gain Chip antenna, 1.1 dBi WiFI- integral PCB trace antenna/ Mode of Operation Bluetooth - Chip antenna/ 1.1 dBi, WiFI- integral PCB trace antenna/ Mode of Operation half-duplex Data Rates Bluetooth 5: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1119 (Uplink Features BLE Application Supported IBeacon, Stratosfy Telemetry (Scannable packet types) Processor Type 32-bit ARM Cortex-M4F @ 64MHz and Xtensa dual-core 32-bit LX6 microprocessor, operating at 160 MHz Memory 4 MB Flash Sensors surface temperature sensor probe Range: -55°C to+125°C, Accuracy: +0.5°C; -10°C to +85°C; -1°C: -55°C to+125°C Accuracy: +0.5°C: -10°C to +85°C; -1°C: -55°C to+125°C Accuracy: +0.5°C: -10°C to +85°C; -1°C: -55°C to+125°C Accuracy: +0.5°C: -10°C to +85°C; -1°C: -55°C to+125°C Mounting Method Screw Wall Mounting Housing Material ABS Plastic Color White Weight 135 grams Battery Type Li-ion 18650 Rechargeable battery (backup battery) Nominal Voltage 3.7V	Standard Protocol	Bluetooth 5 / WiFi: 802.11 b/g/n	
Max Output Power Modulation Bluetooth 5: <10 dBm (e.i.r.p.) / WiFi: <20 dBm Modulation Antenna / Gain Chip antenna, 11 dBi Mode of Operation Bluetooth - Chip antenna / 11 dBi, WiFi- integral PCB trace antenna/ Mode of Operation: nalf-duplex Data Rates Bluetooth 5: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1119 (Uplink Features BLE Application Supported Bleacon, Stratosfy Telemetry (Scannable packet types) Processor Type 32-bit ARM Cortex-M4F @ 64MHz and Xtensa dual-core 32-bit LX6 microprocessor, operating at 160 MHz Memory 4 MB Flash Sensors surface temperature sensor probe Range: -55°C to+125°C, Accuracy: ±0.5°C: -10°C to +85°C; ±1°C: -30°C to +100°C; ±2°C: -55°C to +125°C Physical Dimensions in mm (Length x Width x Height) Mounting Method ABS Plastic Color White Weight 10 × 100 × 42 Multing Meterial ABS Plastic Color White Weight 135 grams Battery Type Li-ion 18650 Rechargeable battery (backup battery) Nominal Voltage 3.7V	Frequency band	2.4GHz (40 channels)	
Modulation Bluetooth 5: GFSK WIFI: 802.11b, DSSS 802.11g, OFDM 802.11n, OFDM Antenna / Gain Chip antenna, 11 dBi Bluetooth - Chip antenna/ 1.1dBi, WiFI- integral PCB trace antenna/ Mode of Operation Bluetooth - Chip antenna/ 1.1dBi, WiFI- integral PCB trace antenna/ Mode of Operation: half-duplex of Ope	Number of Channels	(40 channels) 3 Primary, 37 Secondary	
Antenna / Gain Mode of Operation Bluetooth - Chip antenna, 1.1 dBi Mode of Operation Bluetooth - Chip antenna/ 1.1 dBi, WiFi- integral PCB trace antenna/ Mode of Operation: half-duplex Bluetooth 5: 1 Mbit/s; Cellular: Cat M1- Max. 588 (Downlink) Max. 1119 (Uplink Features BLE Application Supported Bleacon, Stratosfy Telemetry (Scannable packet types) Processor Type Bleacon, Stratosfy Telemetry (Scannable packet types) 32-bit ARM Cortex-MAF @ 64MHz and Xtensa dual-core 32-bit LX6 microprocessor, operating at 160 MHz Memory 4 MB Flash Sensors surface temperature sensor probe Range: -55°C to+125°C, Accuracy: ±0.5°C: -10°C to +85°C; ±1°C: -30°C to+100°C; ±2°C: -55°C to+125°C Physical Dimensions in mm (Length x Width x Height) 110 × 100 × 42 Mounting Method ABS Plastic Color White Weight 135 grams Battery Type Li-ion 18650 Rechargeable battery (backup battery) Nominal Voltage 3.7V	Max Output Power	Bluetooth 5 : <10 dBm (e.i.r.p.) / WIFI: <20 dBm	
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Dimensions in mm (Length x Width x Height) Mounting Method Screw Wall Mounting Housing Material ABS Plastic Color White Weight 135 grams Battery Type Li-ion 18650 Rechargeable battery (backup battery) Nominal Voltage	Sensors	Accuracy: ±0.5 °C: -10 °C to +85 °C;	
Mounting Method Housing Material Color White Weight 135 grams Battery Type Li-ion 18650 Rechargeable battery (backup battery) Nominal Voltage	Physical		
Housing Material Color White Weight 135 grams Battery Type Li-ion 18650 Rechargeable battery (backup battery) Nominal Voltage 3.7V	Dimensions in mm (Length x Width x Height)	110 × 100 × 42	
ColorWhiteWeight135 gramsBatteryTypeLi-ion 18650 Rechargeable battery (backup battery)Nominal Voltage3.7V	Mounting Method	Screw Wall Mounting	
Weight 135 grams Battery Type Li-ion 18650 Rechargeable battery (backup battery) Nominal Voltage 3.7V	Housing Material	ABS Plastic	
Battery Type Li-ion 18650 Rechargeable battery (backup battery) Nominal Voltage 3.7V	Color	White	
Type Li-ion 18650 Rechargeable battery (backup battery) Nominal Voltage 3.7V	Weight	135 grams	
Nominal Voltage 3.7V	Battery		
	Туре	Li-ion 18650 Rechargeable battery (backup battery)	
Canacity 2000mAU	Nominal Voltage	3.7V	
Capacity	Capacity	3000mAH	
Lifetime 24 hours (backup battery)	Lifetime	24 hours (backup battery)	



For more information, contact hello@stratosfy.io Website : www.stratosfy.io

Technical Specifications

Chemical and Mechanical Resistance	
Water	Not Waterproof, IP61 Rating
Withstands Exposure To	UV Resistant, Impact Resistant
Thermal	
Storage	32°F to 86°F (0°C to +30°C)
Operating Temperature	32°F to 140°F (0°C to 60°C)
Other	
Standards	FCC / IC
Warranty	1 year
Others	LEDs & Button

Accessories

Replaceable	Backup	battery
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Type:

Lithium Batteries

Capacity: 3500mAh

Lifetime:

24 hours (backup battery)

Rated Voltage:

3V DC (2*1.5V batteries)

Power plug



Rated Input Voltage:

AC 100- 240V 0.35A 50/60Hz

2A

Certification:

PSE, UL, CE

Output Voltage :

voltage:

40 × 34 × 21 mm

Output Current:

USB Cable



USB Type:

Type -C

5٧

Cable Length:

1m / 39.37 in, 2m / 78.7 in

Function:

3A Fast Charging

Temperature probe



Range : -55°C to+125°C, Accuracy: ±0.5 °C: -10 °C to +85 °C; ±1 °C: -30 °C to +100

°C; ±2°C: –55 °C to +125 °C

Length: 1 m / 39.37 in, 2 m / 78.7 in, 5 m/ 196.85 in **Diameter**: 6

mm / 0.24 in

Velcro tape/3M tape



3M Velcro hook and loop dual lock tape 1 inch squares

