



Informational Sheet

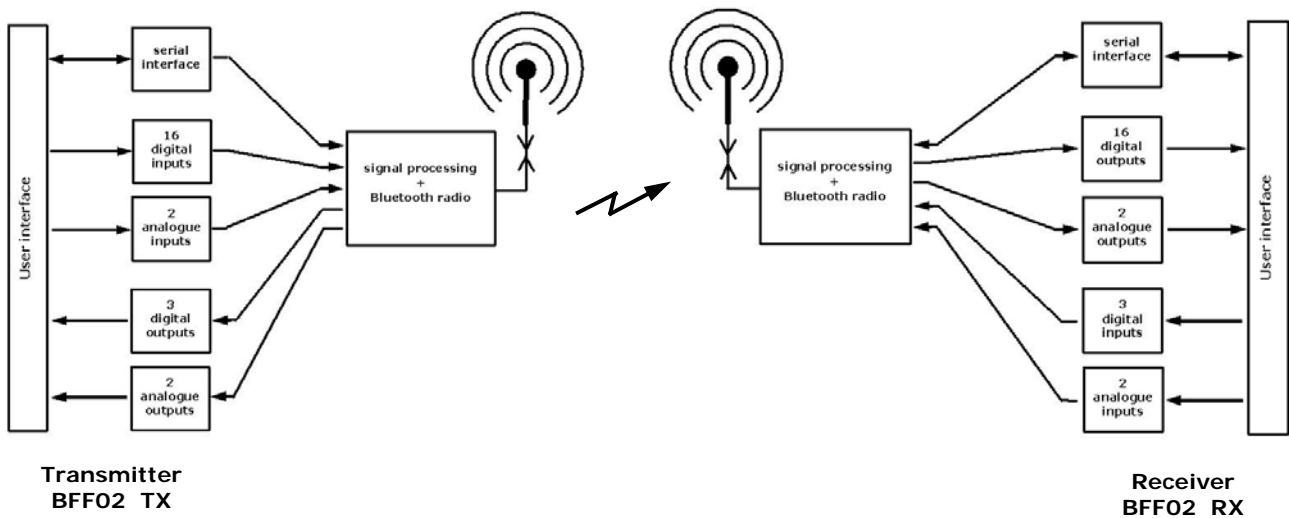
TECHEON Universal Remote Controller BFF02



BFF02

These universal remote control systems employ powerful Bluetooth radio components. A simultaneous application of digital- and analogue in- and outputs together with a full duplex serial interface is possible. The standard DIN rail housing can be easily mounted into your switch cabinet. It is very easy for the user to design a complete remote control for a various different applications by using these sophisticated devices. The BFF02 remote controller can not be adopted by third or other Bluetooth devices and offering a high grade of data security. Due to the application of 79 transmission channels in the frequency hopping mode with 1600 channel alternations per second, the systems securing a high grade of immunity against interferences. No influences by W-LAN devices according to IEEE 802.11b/g. The high radio frequency output power of +20dBm (100mWatts) is representing a good range performance, also. The units operate within the 2.4GHz ISM-Band, what means that those units can be used licence free and free of charge. All Bluetooth software tacks are already integrated and certified.

Block diagram:

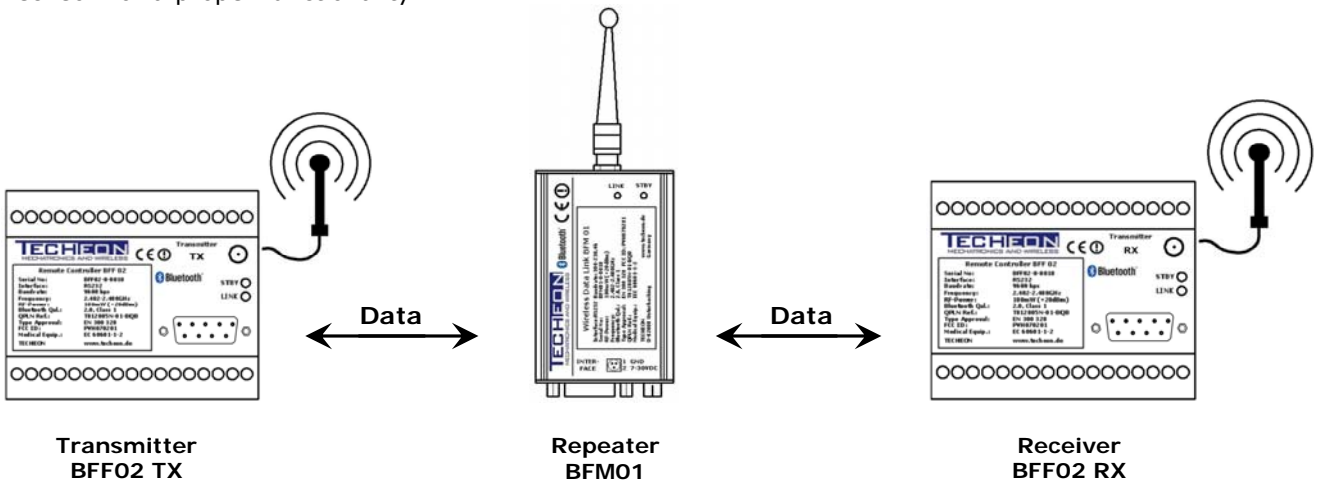


Available models:

model	transmitter →		receiver	receiver	← transmitter	
	analogue channels	digital channels	interface	analogue reverse channels	digital reverse channels	interface
BFF02-0	2	16	RS232	2	3	RS232
BFF02-1	2	16	RS422	2	3	RS422
BFF02-2	2	16	RS485	2	3	RS485
BFF02-3	2	16	TTY	2	3	TTY
BFF02-4	2	16	-	2	3	-

Raising the range by employing a repeater (BFM01):

The transmission range can be increased, by using a repeater (BFM01). The devices must be configured by Techeon for a proper functionality.



8. Technical Data:

Technology:	Bluetooth Class 1, Qualification 2.0
Frequency:	2,402 – 2,480GHz, ISM-Band
RF-Channels:	79
Alternations per second:	1600
Max. Range:	approx. 250 meters in line of sight; also depending on data rate 50 – 100 meters (approx. 150 – 300 ft) inside buildings. Depending on the wall construction
Protocol:	8 data bits, no parity, 1 stop bit transparent data mode
Data rate:	9600 bps
Handshake:	no handshake
Power consumption:	max. 1.5 Watts
Voltage supply:	15 - 35V DC, 8 – 35 V DC for models with option –A5
Digital inputs:	0 - 30V DC; 47kΩ
Analogue inputs:	0 - 10V DC; 0 – 5V DC for models with option –A5 100kΩ; asymmetric; 10 bit A/D-converter resolution
Digital outputs:	open collector (npn); max. 200mAmps per output; max. 1.4A at all outputs together
Analogue outputs:	0 - 10V DC; 0 – 5V DC for models with option –A5 1kΩ, asymmetric; 10 bit D/A-converter resolution
Dimensions:	90 x 75.5 x 45.5mm / 3.54" x 2.97" x 1.79" (W x L x H), without connectors and antenna
Weight:	550grams, without antenna
Protection class:	IP50
Operating Temperature Range:	-25°C - +55°C (-13°F - +131°F)
Storage Temperature Range:	-30°C - +85°C (-22°F - +185°F)
Humidity:	5 – 90%, not condensing
Conformities:	EN 300 328-2 V1.1.1 EMC: EN 301 489 V1.3.1, EN 301 489 V17.1.1, EN 61000-6-2 Low Voltage Directive: EN 61131-2 Medical Electrical Equipment: IEC 60601-1-2
Type Approval:	ETS 300 328, ETS 300 826 FCC ID: PVH070201
Antenna with knee:	L = 100mm (3.94")
Puck antenna:	Ø = 70mm (2.76"); cable length = 3,00m (118")

