

Pit Receiver Box

The Pit Receiver Box integrates all electronic components necessary to receive telemetry data from a car equipped with a FM 40 transmitter in one weatherproof package. Typically the receiver box is mounted on the pit roof as close as possible to the RX antenna, thus minimizing cable loss. The connection cable to the receiving PC in the garage, which can be up to 50 m long, also supplies power to the Pit Receiver Box.

Different versions of the receiver box are offered to support several system configurations.



Mechanical data	
Weight	4.2 kg
Conditions for use	
Working temperature range	-20 ... + 50 °C
Max. distance receiver box to PC (with cable B 261 209 481)	50 m
Antenna connector	BNC (Jack) 50 Ω
Data and power connector	motorsports type

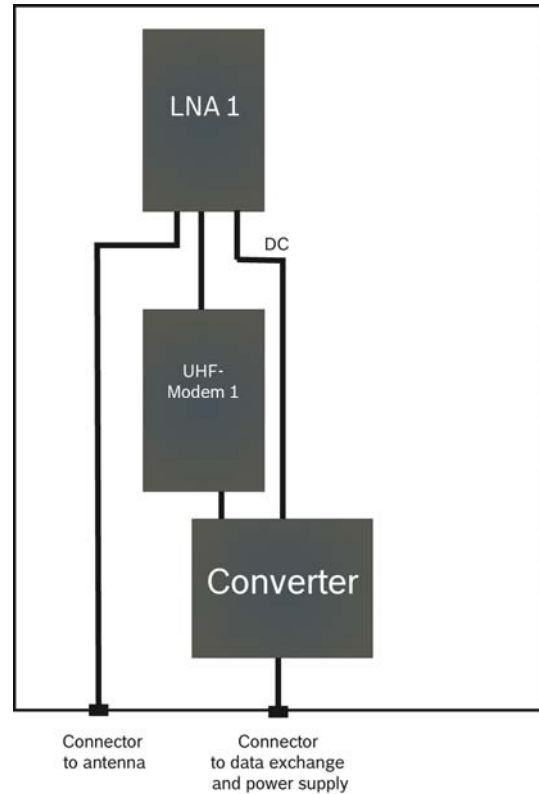
Electrical data	
Frequency range	400 ... 470 MHz
Working frequency band	fc ±1 MHz
Channel spacing	12.5/25 kHz
Sensitivity	≤ -116 dBm @ BER 10 ⁻³
Serial interface	RS232 (19.2 kBit/s, no parity, 8 data bit, 1 stop bit, no flow control)
Radio data rate	19.2 kbps (25 kHz channel) 9.6 kbps (12.5 kHz channel)
Operating voltage	12 V (10 ... 14 V)
Power consumption	approx. 7 W

Pit Receiver Box 1

The Pit Receiver Box 1 contains all electronic components and cables necessary to receive data from a single car, preassembled in a weatherproof box.

The external RX antenna is connected to a low noise filter amplifier (LNA 1). The amplified signal is then fed into the UHF receiver which decodes the data stream. The data converter is used to transmit the data via the connection cable to the server PC in the garage.

Part Number	
Pit Receiver Box 1	F 01T A20 451-01

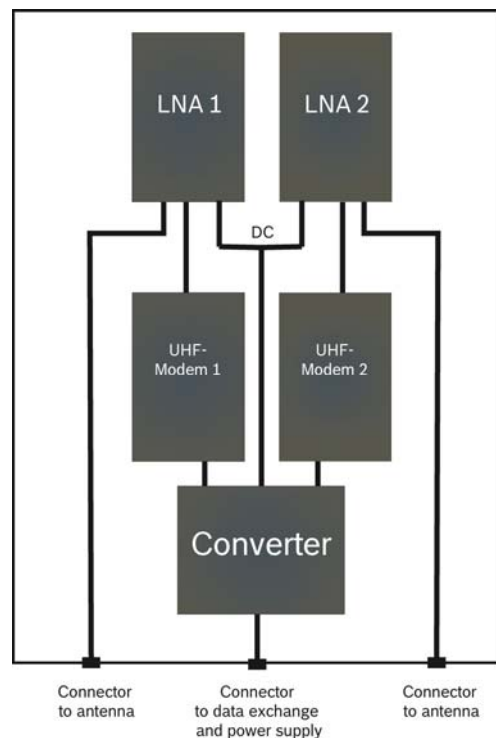


Pit Receiver Box 1/R

The Pit Receiver Box 1/R includes two separate receiver systems which enable the parallel reception of two telemetry data streams. Two RX antennas can be connected to the twin low noise filter amplifiers (LNA 1, LNA 2).

Typical application are the reception of telemetry data from two cars or a system configuration with one car and a telemetry relay station.

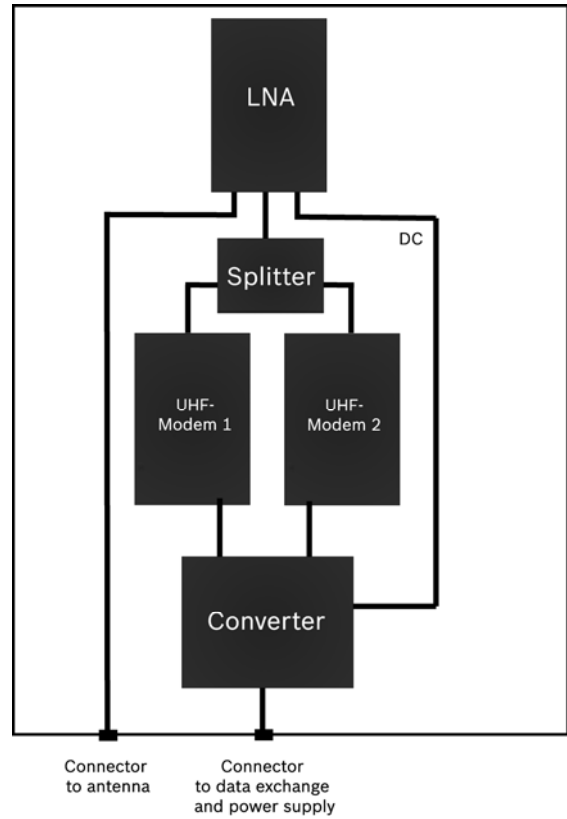
Part Number	
Pit Receiver Box 1/R	F 01T A20 453



Pit Receiver Box 2

The Pit Receiver Box 2 contains two UHF receivers fed by a single RX antenna and low noise filter amplifier (LNA). This enables parallel telemetry data reception from two cars, provided both transmitters operate in the same frequency band.

Part Number	
Pit Receiver Box 2	F 01T A20 455



Pit Receiver Package 1/R and 1

The Pit Receiver Packages 1/R and 1 contain antennas, rf cables, data cables and the controller box, i.e. everything that is required to start operation.

Part Number

Pit Receiver Package 1/R **F 01T A20 454**

Content Pit Receiver Package 1/R

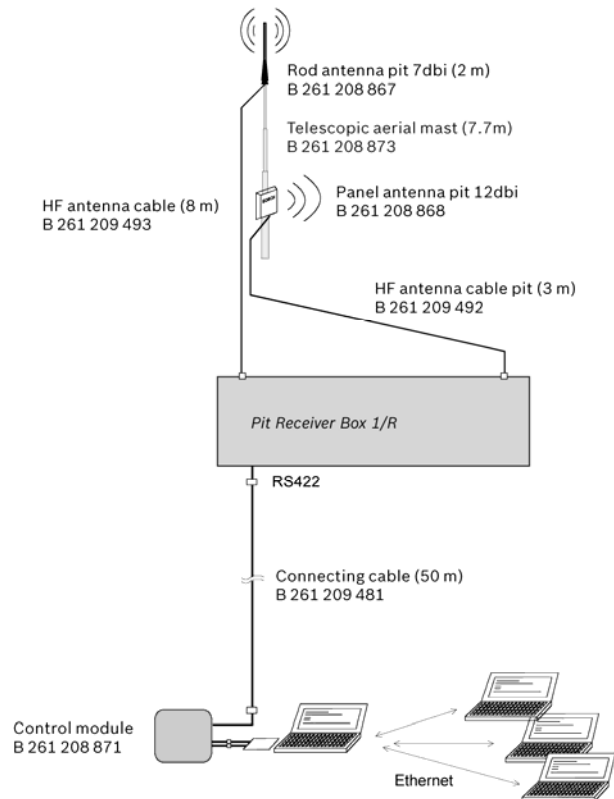
Pit Receiver Box 1/R	F 01T A20 453
HF antenna cable (8 m)	B 261 209 493
Rod antenna pit 7 dbi (2 m)	B 261 208 867
HF antenna cable pit (3 m)	B 261 209 492
Panel antenna pit 12 dBi	B 261 208 868
Connecting cable (50 m)	B 261 209 481
Control module RS232/RS422 pit	B 261 208 871
Telescopic aerial mast (7.7 m)	B 261 208 873

Part Number

Pit Receiver Package 1 **F 01T A20 452**

Content Pit Receiver Package 1

Pit Receiver Box 1	F 01T A20 451
HF antenna cable (8 m)	B 261 209 493
Rod antenna pit 7 dbi (2 m)	B 261 208 867
Connecting cable (50 m)	B 261 209 481
Control module RS232/RS422 pit	B 261 208 871
Telescopic aerial mast (7.7 m)	B 261 208 873



Pit Receiver Package 2

The Pit Receiver Package 2 contains antennas, rf cables, data cables and the controller box, i.e. everything that is required to start operations.

Part Number	
Pit Receiver Package 2	F 01T A20 456

Content Pit Receiver Package 2	
Pit Receiver Box 2	F 01T A20 455
HF antenna cable (8 m)	B 261 209 493
Rod antenna pit 7 dBi (2 m)	B 261 208 867
Connecting cable (50 m)	B 261 209 481
Control module RS232/RS422 pit	B 261 208 871
Telescopic aerial mast (7.7 m)	B 261 208 873

