



Remotus T-Rx 1000/1500

Remotus T-Rx is Åkerströms Björbo's mobile platform for radio remote control of mobile applications. The Remotus T-Rx receiver line is modular and flexible—so it can be customized for your specific needs. The line consists of three different models of receiver. T-Rx 1000 is a receiver with up to 24 on/off functions and T-Rx 1500 is a complete analogue receiver.

The Remotus T-Rx 1000/1500 receivers are designed to control all mobile applications with up to 8 analogue functions, PWM (0-3 A) or analogue outputs (0-10V or 0-20 mA). The system can also be used to equip wheel loaders, excavators, mobile cranes etc. with radio remote control. The system is adapted for tolerating tough conditions such as drastic temperature differences, dust, vibrations, oil, and dampness.

High security.

The Remotus T-Rx 1000/1500 receivers have a shock- and water resistant aluminum housing. They have double security outputs and transmitted radio messages are very secure because the system runs a cyclic 32 bits redundancy check. The receivers have double micro-processors that monitor each other. Each

message is checked before it is accepted. Command errors don't occur and security is increased. Self diagnostic testing is carried out during operation. The system is approved according to the safety standard EN ISO 13849-1, Cat 3 PLd.

Reliable radio transmission and duplex.

The radio transmission within the system is made insensitive to interference. A continuous frequency hopping technology is employed. According to a predetermined pattern the transmitter and receiver automatically synchronize with each other and rapidly jump between a large number of set frequencies. Frequency management is completely automated and requires no set-up. The receivers have duplex function which enables data transmission back to the transmitter (operator).

Personal settings and statistics.

Personal settings or appropriate operating characteristics such as initial and maximum speed or feeling in the control lever can easily be adjusted and set with a software program running on an ordinary PC. The receivers onboard diagnostics simplifies troubleshooting.

TECHNICAL FACTS

Operating voltage:
10-32 V DC, negative grounded system

Current consumption:
100 mA (without external load at 12 V)

Operating frequency:
Bluetooth, 433 MHz, (868 MHz), (915 MHz)

Process monitoring: 2 CPU design, 2 solid state safety switches (RCSS)

Housing: Aluminum, grey/black

Size: 218*174*64 mm

Protection class: IP67

Weight: 1,6 kg

Operating temperatur: -25°C - +70°C

Storage temperatur: -40°C - +85°C

Cable control optional.

In some cases where it is not permitted to control by radio frequency or there is no charged battery available, the control system can use a cable between the (joystick-) transmitter and receiver. If cable control is used, power to the transmitter is supplied by the receiver.

Recommended transmitters:

T-Rx 28J B - joystick/push button transmitter

T-Rx 12B - push button transmitter

T-Rx 100J/P, 200P, 300J och 500J - joystick/paddle transmitter



TECHNICAL FACTS

REMOTUS T-Rx 1000

OUTPUTS:

RCSS: 2 outputs. 3 Amp source

Digital: Maximum 24 outputs 3 Amp source.

External indication: 1 output 0,5 A

OPTIONS:

Cable control

CONNECTIONS:

External antenna: 1xSMA

In-/Outputs, power supply: AMP MCP 62-pole

Option cable control: M12 8-pin female

REMOTUS T-Rx 1500

OUTPUTS:

RCSS: 2 outputs. 3 Amp source

Digital: Maximum 24 outputs 3 Amp source.

8 are always outputs. 16 shares function with PWM outputs.

PWM: Maximum 16 outputs 3 Amp source, 50-400 Hz, 12 bits resolution.

External indication: 1 output 0,5 A

Analogue:

8 outputs 0-10V or 0-20mA, 12 bits resolution.
10V ref: 10V, 100 mA reference output to sensors, potentiometers etc.

INPUTS:

Digital: Maximum 16 inputs

Analogue:

2 inputs 0-10V or 0-20mA, 10 bits resolution

OPTIONS:

Cable control

Serial communication: RS422/RS485

CANopen

CONNECTIONS:

External antenna: 1xSMA (2xSMA option)

In-/Outputs, power supply: AMP MCP 62-pole

Option cable control: M12 8-pin female