



Description

This radio transmission system was specially developed for wireless transmission of measurement data from strain gauge sensors.

The radio transmission system consists of a radio transmitter and a radio receiver. The transmitter is linked by cable to a sensor. It records the analog sensor measurement signals and transmits the data to the receiver via a 2.4 GHz radio link. The receiver in turn transmits an analog signal. Digital transmission via USB is also optionally available on the receiver.

We can provide you with two radio transmitters with different power supplies. The RFT 2.0 transmitter operates with easily replaceable batteries. The RFT 2.1 transmitter is powered by two rechargeable batteries. It is equipped with internal battery recharging electronics.

The radio transmission system has two automatic deactivation durations of differing lengths which can be selected by the user. The system also has a fault detector which can detect a transmitter failure, radio transmission disruption or range exceeding.

One significant advantage of the radio transmission system is its use in locations which cannot be accessed with cable connections, or only to a limited extent.

Features

- | For strain gauge sensors
- | No registration or charge for frequency (2.4 GHz)
- | Range 25m
- | Power supply via batteries/rechargeable batteries
- | Fault detection
- | Optional: digital output

Applications

- | Measurement of forces, loads or pressures

Technical data

Frequency	2.4 GHz
Transmission channels	80
Range	25 m
Transmission rate	200 Hz

RFT 2.x transmitter

RFT 2.0 transmitter power supply	4 x battery, type AA (Mignon)
RFT 2.1 transmitter power supply	4 x rechargeable battery, type AA (Mignon) with internal battery recharging electronics (transmission is not possible during recharging)
Power consumption	150 mW (30 mA)
Automatic deactivation durations	10 min. / 60 min.
Operating temperature	-10 °C to +50 °C
Storage temperature	-30 °C to +50 °C (without batteries/rechargeable batteries)
Degree of protection	IP 40
Housing	Plastic housing with protective frame
Dimensions	w 78 x l 145 x h 44 mm
Weight	200 g (without batteries/rechargeable batteries)
Cable	
Type	FDCY / 4 x 0.14 mm ²
Length	1.5 m

RFR 2.0 receiver

Power supply	12–14 VDC
Analog output	1–9 mA or 4–20 mA
Power consumption	700 mW (60 mA)
Degree of protection	IP 40
Housing	Plastic housing
Dimensions	w 67 x l 125 x h 30 mm
Cable	
Type	LIYCY / 4 x 0.25 mm ²
Length	0.5 m

Options

Digital output via USB port in N, kg, decimal or hexadecimal values