Technical data

MEDER CommTech

Antenna	
Operating frequency	1299 MHz
Radiated power	< 2 mW
Modulation	None (CW radar)
Sensitivity	-90 dBm (S/N = 10 dB)
Standard antenna	Integrated into radar unit
Dimensions	250 mm x 300 mm x 60 mm
Direction of beam	Vertical to surface 250 x 300
Angle of beam	ca. 55°

Operating voltage

Up to 18 V; 10 x LR6 (AA, 1,5 V); > 2,0 Ah

Power consumption

Ca. 4 W (without Laptop)

Data transfer	BR 502w	BR 402
WLAN (range 100 m)	■	
Cable (10 m)		■

PC receiving box

LAN (TCP/IP) and USB

Software

Windows XP or Vista or 7, Record and evaluate data on screen; save data on hard disk or mobile data medium; hard copy on printer

Laptop

Outdoor Laptop

Weight

Radar Weight: 3.15 kg

Weight with Hard Case: 12 kg

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Life detection with MEDER RescueRadar

RescueRadar BR502w and BR402- device system for detection

Description

RescueRadar is the name for a device system for detection and analysis of movements of living beings, primarily of humans. The function is based on the analysis of radar waves, which are emitted from the device, as reflected waves are received again.

So all body movements can be detected, including breath- and heart movements. In the process of refurbishing the received signals, the presence of a living person in the radiation cone of the antenna can be proved with a high probability. Further statements are possible after the analysis of the signals in the computer. The radiation used is by its very low power completely safe for all participants and is about ≤2mW.

The RescueRadar is able to perform its detection through dielectric materials. Such materials are for example, normal brick or concrete walls (also several in a row), and layers of sand, gravel, soil, snow up to a thickness of several meters - or other obstructions of non-metallic types. Metal parts such as steel reinforcement in concrete always effect a sensitivity loss that depends on its present volume.

Monitoring

Authority, Customs, Police

Lifesaving

Lifesaving and monitoring

Function

- Detection of living beings in vehicles and containers with a probability of about ≥ 96 %
- Safe detection of people or animals in customs or border controls at airports, streets or ports.

Ranges of application

- Search for persons buried alive (earthquakes, avalanches)
- Detection of persons in passenger cars (automatic multifloor car parks)
- Detection of persons hidden in trucks and passenger cars (customs, prisons)
- Checking of movements in non-metallic underground discharge channels and cavities.

RescueRadar BR 502w
The High-Tech-System with data transfer via W-Lan

Measurement duration and specifications

- Small and light weight antenna
- Opertional within seconds
- First reliable measurement possible after ≥ 40 sec
- Detection range up to 30 meters depending on material

RescueRadar BR 402
The High-Tech-System with data transfer via a 10m long cable