



# CR 210-DSE

## product data sheet

### ● GENERAL DESCRIPTION:

The digital siren control receiver CR 210-DSE is a fixed, non-portable receiving radio unit. It is used for remote control purposes in digital radio alerting systems.

It is equipped with a RF-receiver for one single receiving frequency and one demodulator for DFSK modulation.

The radio paging code Nr. 1 (POCSAG) is used for transmitting the remote control signals.

Decoding is effected in accordance with the technical BOS guideline "Geräte für die digitale Funkalarmierung", dated March 2000.

- > BOS approval number: DSE-06/05
- > The receiver is conform to the requirements of the VDE-regulations and the ETS-guidelines 300341.
- > The single channel receiver can be operated on a frequency between 146 and 174 MHz.
- > When you place your order, its absolutely necessary to specify the exact frequency.
- > Channel spacings of 20 KHz or 12,5 KHz are possible
- > The decoding sensitivity is better than  $0,25 \mu V$  into 50 Ohm. This is very high for a digital system.
- > It is the result of a special hardware- and software-filtering of the received data stream.
- > You can configurate a baud rate of 512 bd or 1200 bd.
- > You can program up to 20 calling addresses and 4 siren programs.
- > The following parameters are customer-specifically programmable:
  - o Baud rate 512 or 1200
  - o Up to 20 calling addresses
  - o Up to 4 siren programs
  - o Number of alarm storages



### ● CONSTRUCTION:

Construction:

The conception of the device guarantees that it works even under unfavourable conditions.

All functions are controlled by a modern RISC-processor. It also decodes the POCSAG-datastream.

The different components are mounted on a metal plate which is also used as a RF-counterbalance for a mountable antenna.

The compact design allows an easy assembly and maintenance of the device. For configuration and troubleshooting purposes a service program is available.

# SONNENBURG ELECTRONIC AG

Kommunikation mit Sicherheit





## CR 210-DSE

## ● Technical data

POWER SUPPLY	11V <sub>DC</sub> – 30V <sub>DC</sub>	175V ~ - 255V ~
POWER CONSUMPTION	relay on 2,0VA relay off 1,4VA	at 230V 8,6VA at 230V 8,0VA
TEMPERATURE RANGE	-40°C - +70°C	
FREQUENCY STABILITY MAX	±900Hz -40°C - +70°C typical ±700Hz	
FREQUENCY RANGE	146MHz - 174MHz	
NUMBER OF HIGH FREQUENCY CHANNELS	1	
CHANNEL SPACING	20kHz (12,5kHz possible)	
INTERMEDIATE FREQUENCY	1. ZF = 21,4MHz    2. ZF = 455kHz	
MODULATION	DFSK	
BANDWIDTH	±7,5kHz	
INPUT IMPEDANCE	50 Ohm	
ANTENNA CONNECTO	BNC-socket	
DECODING SENSITIVITY AT DFSK	at ±4kHz frequency deviation and 20kHz channel spacing < 0,25μV U <sub>a</sub>	
SELECTIVITY AT FM	< 0,4μV U <sub>a</sub> at 20dB S/R	
ADIACENT CHANNEL SELECTIVITY	> 86dB typical 88dB	
SPURIOUS RESPONSE REACTION	to 4GHz >88dB typical 90dB	
NTERMODULATION RESPONSE REACTION	> 73dB	
IMAGE RESPONSE RATIO	> 90dB	
BLOCKING	>91 dB Typisch 95dB bei 1MHz Abstand	
CO-CHANNEL REJECTION	-4dB	
DISTORTION FACTOR	> 2%	
SPURIOUS RADIATION	< 2nW	
CALLING SYSTEM	POCSAG	
ADDRES CODING	about PC	
CONTACTS	1-4 potential free contacts max. 250V~/5A 30/110/220V <sub>DC</sub> – 5/0,2/0,1A	
CASE	plastic case Kunststoffgehäuse for wall mounting	
IP NUMBER	IP 54	
DIMENSIONS	150mm • 200mm • 78mm	
WEIGHT	1,2 kg	
BOS APPROVAL NUMBER:	DSE-06/05	
ETS - STANDARD	300341	