Radiological and Chemical Detector

CWA, TIC and gamma-radiation detection for vehicles and unmanned platforms

The MS-RCD3 family (3.1/3.2/3.3) provides detection of chemical warfare agents (CWA) and toxic industrial chemicals (TIC), detection of radioactive sources and monitoring of radioactive contamination of the area.

The base MS-RCD3 unit is supplied for integration into safety systems and unmanned aerial and ground vehicles. The indication-unit configuration is designed for integration inside armoured vehicles as an element of a collective protection system. The shockproof-tablet configuration is intended for special vehicles of CBRNE and HAZMAT units, police, rescue services and border guards.

DETECTS

- CWA: sarin, soman, mustard gas, lewisite, Vx
- TIC: chlorine, ammonia
- Gamma dose rate and radioactive sources

APPLICATIONS

- Environmental radiological monitoring
- Determination of the dose rate of gamma radiation
- Localization of radioactive contamination areas
- Automatic determination of CWA and TIC in the environment
- Localization of hazardous areas

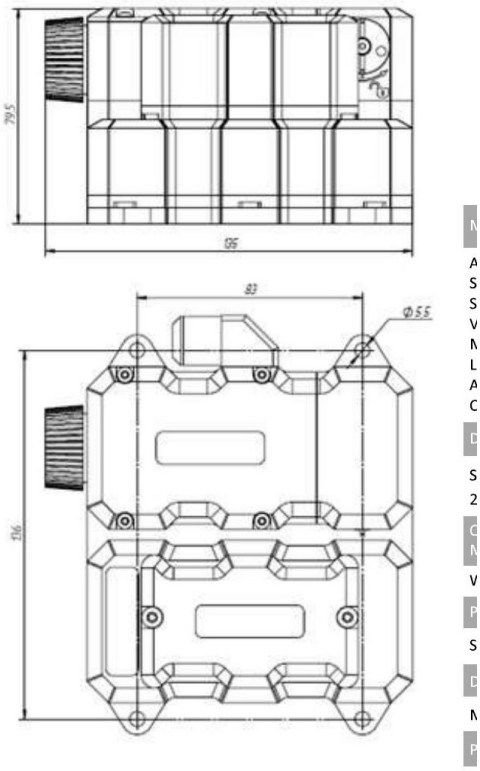
Radiological and Chemical Detector MS-RCD3

Specifications

Chemical detection	
Max alarm delay at dangerous gas concentrations	< 5 s
Alarm concentration — Sarin (±25%)	2×10^{-1} mg/m³
Alarm concentration — Soman	5×10^{-2} mg/m³
Alarm concentration — Vx	2×10^{-2} mg/m³
Alarm concentration — Mustard gas	2 mg/m³
Alarm concentration — Lewisite	2×10^{-1} mg/m³
Alarm concentration — Ammonia	20 mg/m³
Alarm concentration — Chlorine	1 mg/m³

Radiological	
DER registration of gamma radiation (±30%)	0.1 µSv/h to 2.0 Sv/h
Sensitivity to photon radiation, 0.06–2.0 MeV (^{137}Cs)	not less than 100 s^{-1}/(µSv/h)

General	
Operating temperature	±40 °C (max ±60 °C)
Weight	1.2 kg
Protection	IP67
Standard	MIL-STD-810G
DC supply voltage	12 to 24 V
MTBF	10,000 h
Possible interfaces	CAN, USB, RS-485



Dimensional drawings and indication unit

Specifications are subject to change without notice.
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