# Remote physical and radiological investigation









# Scope

Ground-level radiological mapping module which allows for the automatic positioning and manual adjustment of probes

- Measurement of dose rate, surface contamination and gamma spectrometry
- Rapidly interchangeable probes

Remotely controlled arm with 3 degrees of freedom which can be used to take solid samples and perform radiological mapping of walls and equipment

- Interchangeable grippers for moving objects and measuring probes
- Camera and lighting positioned at the end of the arm

# Module for taking liquid and powdery samples

- Collection of 3 liquid or powdery samples (50 cm3 max.) and in situ dose rate measurement
- · Visualization of the fill level of vessels and monitoring of the aspiration phase

# Mapping module

- Real-time 2D map construction and accurate positioning of measurements
- Possibility of defining a safety perimeter making it possible to slow down then stop when approaching an obstacle

# Advantages

### SIMPLICITY

Easy and intuitive to control, both indoors and outdoors, thanks to the control joystick

### MODULARITY

Quick to change measurement modules and take samples

### ACCURACY

Positioning in its environment and construction of an accurate 2D map of measurements and samples taken

# TRACEABILITY

Automatic recording of measurements which can be exported for use in post-processing

 SAFETY / RADIATION PROTECTION Remote-controlled by the operator

# Key data

### Dimensions :

Length = 775 mm Width = 540 mm Height = 560 mm

Weight: 65 kg

Load capacity: 65 KgMaximum speed: 3 m/s

• Ingress Protection rating: IP54 Autonomy > 2 hours

• Clearance: 120 mm

# Modular and wireless mobile robot that can be used to carry investigation modules adapted to meet operational needs

# **Our services**

- Comprehensive service for the compilation of input data
- Inspections conducted on your premises by an experienced team in close collaboration with your own teams
- Provision of data (radiological and physical readings/measurements), which remain your property





Robotics pack consisting of RIANA™ and DORICA™ selected as winner in 2016 WNE Awards (in the nuclear safety category)



Watch our presentation video for RIANA™

# Our references

# 2015

 One set of equipment delivered to CEA Marcoule (as part of the intervention units pack)



### 2016

 A second set of equipment, identical to the first one, delivered to CEA Marcoule for the purposes of providing a communications relay



### 2017

 A full set of equipment supplied to Orano's National Response Force FINA (Force d'Intervention NAtionale)





# **Orano DS**

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