

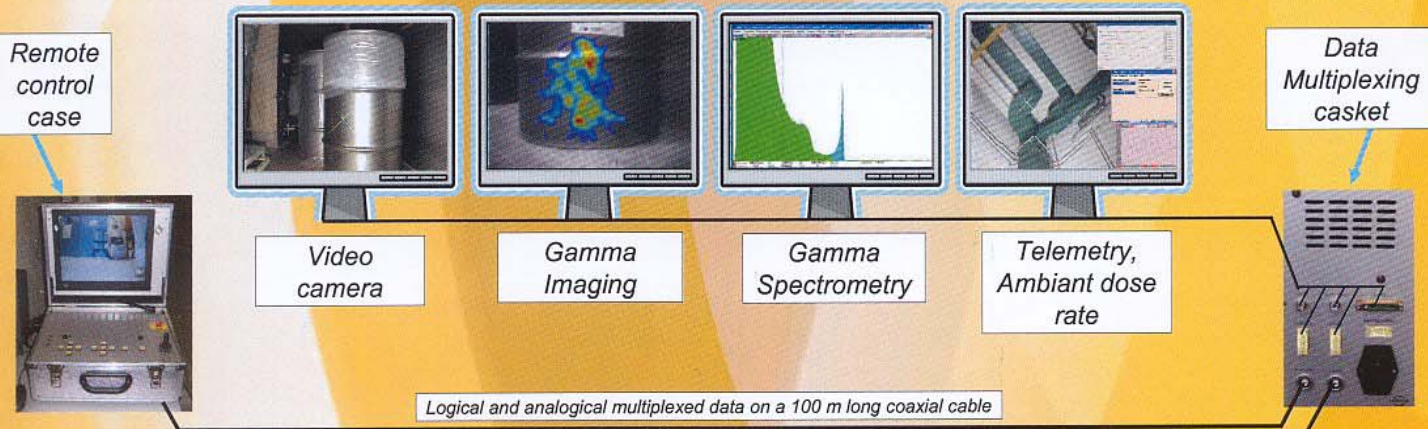
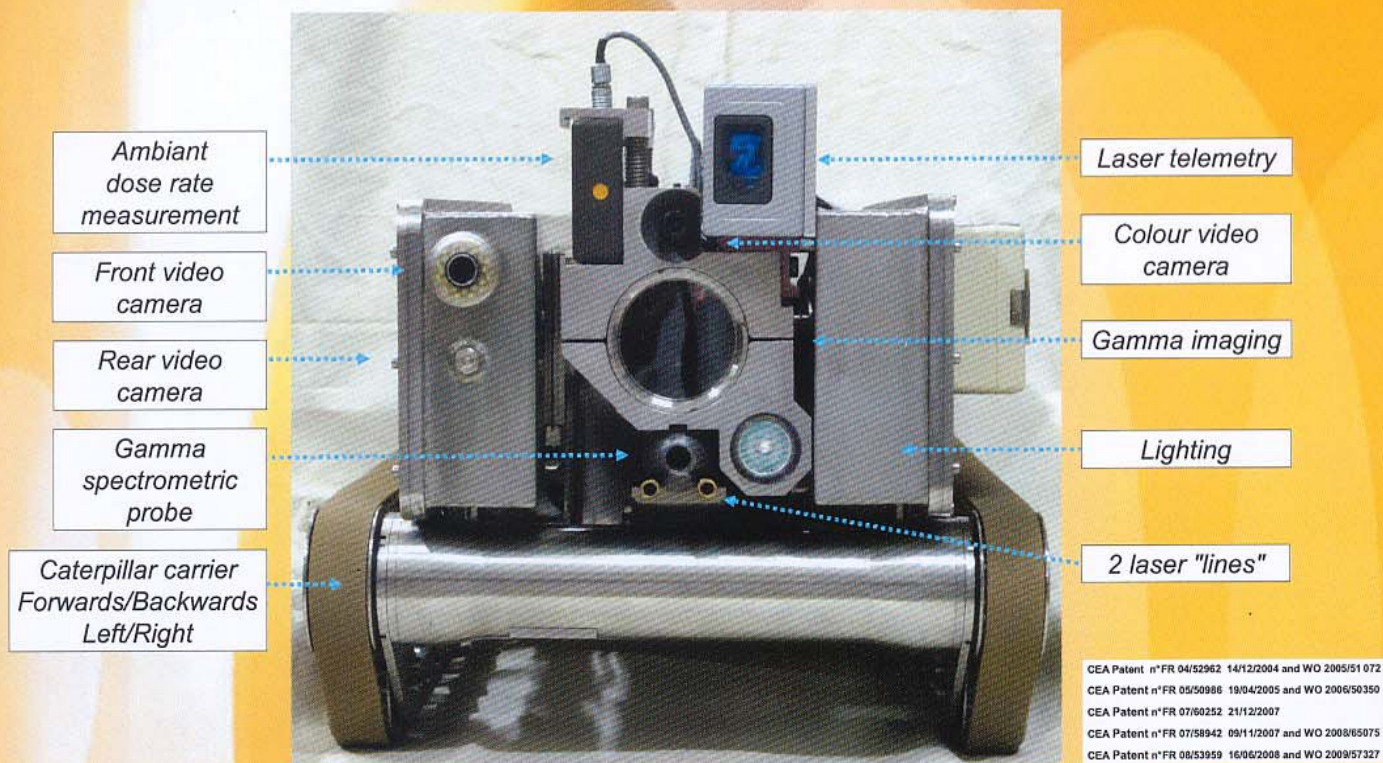
## RICA 3: Blind Cell Inspection Robot

CEA DEN/DEIM/SEIA (MARCOULE centre - France) has developed a new inspection robot in collaboration with the company CYBERIA (France). The carrier « RICA 3 » (an acronym which translates as BCIR Blind Cell Inspection Robot n°3) allows physical and radiological inspection of nuclear cells by using classic and nuclear measurement equipment in order to prepare the dismantling of the cells.

CEA Patent n° FR 07/60252 - 21/12/2007.

### RICA 3: A nuclear measurement instrument portable package

Weight: 90 kg. Speed: 0 to 5 m.min<sup>-1</sup> (0 to 30 ft.min<sup>-1</sup>)







TECHNICAL SPECIFICATIONS

<b>DESIGNATION</b>	<b>CRAWLER RICA 3</b>
<i>Motor power</i>	300 W
<i>Robot power supply</i>	28 V DC
<i>Tracks</i>	OUI
<i>Speed</i>	Proportional
<i>Material</i>	Stainless steel 304 L
	<b>TILT AXIS for CAMERA GAMMA</b>
<i>Axis</i>	90° with limit switch
<i>Electronic</i>	multiplex through coaxial cable
	<b>CRAWLER CAMERA</b>
	2 : 1 in FRONT and 1 BACK
<i>Sensor</i>	CCD colour 1/4 " 752 (H) x 582 (V)
<i>Resolution</i>	350 TV Lines
<i>Sensitivity</i>	0.4 Lux
<i>Focal</i>	Field of view (H)72°(V) 57
<i>Lighting</i>	White leds
<i>Equipment</i>	GAMMA CAMERA from CANBERRA (CEA licence) SAPHYMO radiation probe Laser telemeter Gamma SPECTRO
<i>Dimensions ( L x W x H ) mm</i>	<b>570 x 420 x:330</b>

<b>DESIGNATION</b>	<b>UMBILICAL</b>
Type	Coaxial cable KX4 50Ω
Length	100 METERS
Winch	Manual with encoder for distance

<b>DESIGNATION</b>	<b>DATA POWER BOX FOR CRAWLER and SYSTEM MANAGEMENT</b>
Type	SAREL in Paint steel
Power supply	90 – 230 V 50-60 Hz
Signals out put	Link with VISUCASE (crawler control unit) Link with a GAMMA computer Link for laser telemeter Link for radiation probe Link for GAMMA spectrometry

<b>DESIGNATION</b>	<b>VISUCASE</b>
Power supply	90-230 Volts AC 50 - 60 Hz
Dimensions	(H)210 mm x (L)435 mm x (W)320 mm
Weight	14 Kg
Equipment	<i>In Front</i> Push buttons for camera functions and Tilt axis , joystick for carrier forward and backward, potentiometers for adjustable camera lightings , LCD screen Colour

