Team Information

Picture of vehicle:

Name of vehicle: OFRO+detect

Team Information

Picture of team leader:

Name of team leader:	Dr. Jens Hanke
Team Name:	Robowatch
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Team Information

Team Description:

Robowatch Technologies is a venture active in the area of robotics and based in Berlin, Germany. Robowatch Technologies develop and distribute service and surveillance robots, which, for instance, are used in object surveillance. The robots are also fit for service where human safety personnel would be endangered or overstrained – for instance when watching high hazard zones or very large areas.

A special advancement is OFRO+detect, a highly engineered mobile security robot for NBC-reconnaissance. OFRO+detect investigates, for instance, type and concentration of the gas while simultaneously transmitting video images from the location to the control room. The flexible employment of the mobile reconnaissance robot thus ensures rapid initiation of well-targeted measures to protect endangered persons and facilities in hazardous situations.

In the impact-resistant and weatherproof casing, two electric motors provide for the necessary power. Although the robot could drive faster, the recommended speed allowing for an optimal detection of persons is 4 km/h. The caterpillar drive enables the robot to deal with bumpy terrain while being extremely agile. With a total weight of only 65 kg, the robot can patrol up to 12 hours. Variations in temperature from -20° to 60° Celsius pose no problems. The sensor head rotatable by 360° with integrated LCD and thermal image camera enables OFRO and OFRO+detect to recognise potential delinquents, for instance, before they enter the property. The detection is completely independent of weather, area conditions or unpredictable movements (i.e. by animals) up to a distance of 100 metres. The onboard DGPS receivers and two receivers for correctional data provide for exact navigation. Robot communication is maintained continuously using the radio standards GPRS, UMTS and WLAN.

The development of the OFRO+detect began in 2004. At the time the of the initial team application, the vehicle is largely functional and has logged dozens of autonomous miles along several test courses.

Sponsors: - none-

Selection of scenario: urban __ non-urban _**X**__ EOD/UXO __

Proof of citizenship: Copy of team leader passport (attached)