

Versatile robot rascals weigh in for battle

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(PhysOrg.com) -- Defense technology company QinetiQ North America (QNA) has launched a ten-pound tyke of a robot that can operate in hostile military environments, doing reconnaissance before fighters come in. The robot, called the DR10, is designed as a lightweight offshoot of the company's Dragon Runner military robots. The new DR Lite edition is intended specifically for supporting small military units and first responders.



Military robotics is a reality, and expectations are that robots used in military environments will increase. Bob Quinn, a QinetiQ executive, sees the real growth in ground robotics in infantry and dismounted operations using different sensors.

The DR10 is light enough and small enough to be carried in a standard-issue pack. It is 15 inches long, 13.5 inches wide and 5.8 inches tall. Users can throw it into buildings or on rough terrain and let it scurry along the rocky dust and mounds for discovery work. Its sensors allow it to operate day or night.

A wearable controller manages it at distances of up to 2,130 feet. Adapting to different environments, the DR10 can move along tracks or on wheels. QinetiQ Technology Solutions Group President JD Crouch has said "it's better to send the <u>robot</u> in first," which is a difficult thought to challenge with any hope of success.

Today's hostile military rounds feature ingenious explosive devices that require expert sensors and surveillance. As such, the robots can provide life-preserving support.

The DR 10 has a two-hour battery life, but an external battery pack can add over six hours and an in-service recharge.

The first-responder function of agile robots was showcased earlier this year when QinetiQ responded to Japan's twin crisis of tsunami and nuclear plant explosions.

The company, headquartered in McLean, Virginia, sent their robotic kits that can quickly convert Bobcat loaders into unmanned vehicles. Attachments like shovels, buckets, cutters and other tools were breaking down walls and doors yet operated safely at a distance up to a mile away. The kits contributed to the Bobcat's work with cameras, night vision,



thermal imagers, and radiation sensors. Rubble, buried objects and debris were able to be removed safely.

More information: Press release

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