



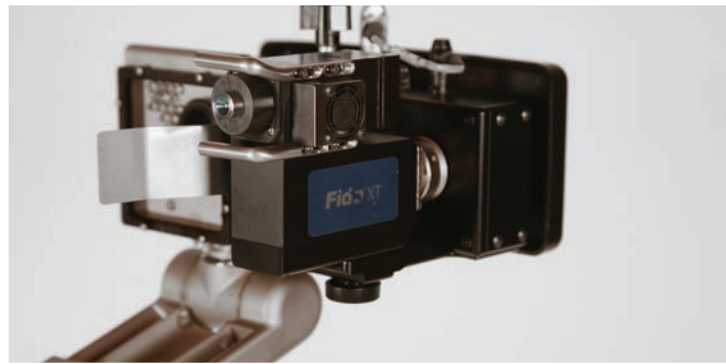
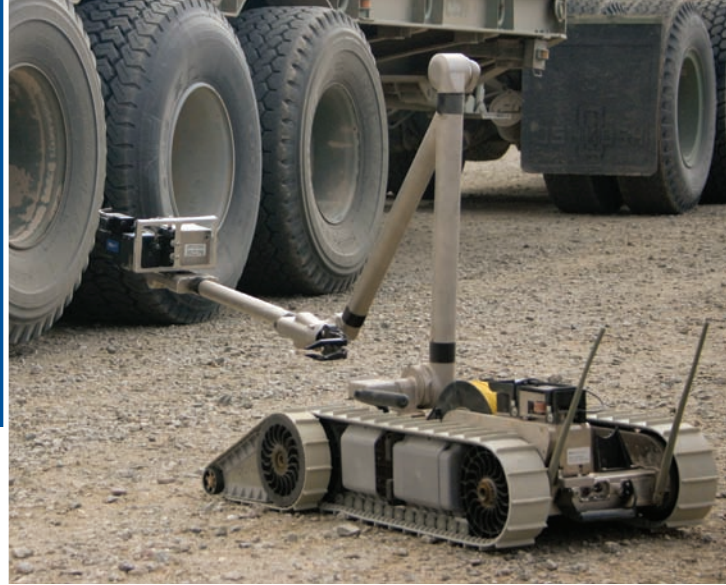
ROBOT-INTEGRATED EXPLOSIVES VAPOR DETECTION

Due to the dramatic impact the threat of explosive devices has on media coverage and public sentiment, explosives continue to be a favored weapon of terror and destruction. In many scenarios, a person is required to come in close proximity with a potential explosive device before accurate detection and verification can take place. Enhancing a robot with explosive detection capabilities will keep personnel out of harm's way.

The Fido® OnBoard is the only proven robot-mountable explosives detection system on the market. Employing ultra-sensitive vapor detection, the sensitivity of the Fido sensor is comparable to that of highly trained bomb dogs. The combined Fido-robot systems enable users to detect explosive materials remotely - keeping the operator at a safe, standoff distance.

The Fido OnBoard provides varied levels of integration on a robotic platforms. In a basic integration, the entire handheld Fido system is inserted as a payload. When fully integrated, only the Fido sensor head and a tightly coupled communications box are mounted on the robot. Either way, the Fido detection results are transmitted to and displayed on the robot's operator control unit (OCU). No matter which integration model is chosen, the Fido sensor can be removed and utilized for general handheld detection operations.

The Fido OnBoard detector has been successfully integrated onto numerous robotic platforms, including the iRobot® PackBot®, Foster-Miller Talon™ and the Exponent® MARCbot.



FEATURES

- Detection readings on robot OCU
- Removable for handheld detection operations
- Trace vapor detection
- Proven in a combat environment

INTEGRATION OPTIONS

BASIC INTEGRATION

- "Plug-and-Play" payload
- Cost effective

ADVANCED INTEGRATION

- Reduced total weight (2 lbs)
- Reduced footprint, secure cableless component connections
- System powered
- Compatible with the majority of unmanned ground vehicles (UGV)

SPECIFICATIONS

Fido – PackBot (iRobot)

as shown on the front page

INTEGRATION

Fully integrated with a dedicated piece of interface hardware mounted on the PackBot arm. The Fido-integrated PackBot is offered by iRobot as a complete system dedicated to explosive scent detection. Over 100 Fido-PackBot systems have been field-proven as of the summer 2008. The Fido can be quickly dismantled and configured for handheld use for performing non-robot operations.

POWER

Utilizes the PackBot power supply, no need to change batteries on the Fido system.

DATA

Data is streamed real time to the OCU in both visual and audio formats. Data is not stored on the Fido system and is not available for later retrieval.

Fido – Talon (Foster-Miller)

INTEGRATION

Utilizes the handheld Fido configuration mounted into the body of the Foster-Miller Talon robot. The Fido can be integrated into new or existing Talon robots via an upgrade kit offered by Foster-Miller.

POWER

Utilizes the internal Fido power supply. Low battery condition is shown on the Talon OCU.

DATA

Data is streamed real time to the OCU in both visual and audio formats. Data is also stored in the Fido system for later retrieval if needed.

Fido – MARCbot (Exponent)

INTEGRATION

Utilizes the handheld Fido configuration mounted onto the body of the MARCbot robot. The Fido can be integrated onto new or existing MARCbot robots via an upgrade kit offered by Exponent.

POWER

Utilizes the internal Fido power supply.

DATA

Data is streamed real time to the OCU in both visual and audio formats. Data is stored in the Fido system for later retrieval if needed.

