+44 20 8123 2220
info@marketpublishers.com

Nuclear Robot Market

https://marketpublishers.com/r/ND694233F3EEN.html
Date: July 2013
Pages: 686
Price: US$ 3,800.00 (Single User License)
ID: ND694233F3EEN

Abstracts

LEXINGTON, Massachusetts (September 16, 2013) – WinterGreen Research announces that it has a new study on Nuclear Response Robots. The 2013 study has 503 pages, 184 tables and figures. Worldwide markets are poised to achieve significant growth as automated process is put in place to provide nuclear power capability worldwide. These responder robots are evolving a new core technology in which all participants in the industry and in governments worldwide must invest.

We all know the story, “Let me go I am old,” the very very brave man who went into the melted down nuclear facility in Japan, pushing his younger colleagues out of the way of harm.

Nuclear response robots are being built out so the nuclear industry can build out devices that leverage rapid safe response. Well, now is the time to use robots in this nuclear industry.

According to Susan Eustis, lead author of the team that put the study together, “Until now, robot technology has not been robust enough to reasonably supplement human tasks in handling of nuclear situations. That is no longer the case, robots have sufficient mobility, size, sensors, and tooling to be effective in a variety of situations.” Nuclear response robots are anticipated to have significant market growth as people in the industry begin to recognize the value of automated process in dealing with radiation.

Nuclear responder robots are mobile automated process platforms that are responsive to nuclear handling needs. They are emerging in the context of globalization and nuclear energy development. Nuclear robots are inherently local, they are used locally at nuclear energy installations and for materials handling where the materials may be radioactive. They are needed by personnel in particularly dangerous situations. Nuclear responder robots are evolving as specially designed ground robots used to address

+44 20 8123 2220
info@marketpublishers.com

nuclear and defense needs to support managing radioactive materials.

Nuclear response robot market shares and market forecast analysis considers that the targeted robots have a new market based on robotic advances in size, mobility, sensors, and materials handling devices.

The move from a primary delivery with a cost structure that accounts for truck rolls to a portable device market is set to bring dramatic changes to the industry. For vendors that have relied on the distribution network and financing the distribution network, their hold on the market has shifted.

Nuclear responder robot markets at $55 million in 2012 are anticipated to reach $1.1 billion dollars by 2019. Growth is a result of new interest in introducing automated process into nuclear markets.

WinterGreen Research is an independent research organization funded by the sale of market research studies all over the world and by the implementation of ROI models that are used to calculate the total cost of ownership of equipment, services, and software. The company has 35 distributors worldwide, including Global Information Info Shop, Market Research.com, Research and Markets, electronics.ca, Bloomberg, and Thompson Financial.

WinterGreen Research is positioned to help customers facing challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust wintergreen research to work alongside them to ensure the success of the participation in a particular market segment.

WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

+44 20 8123 2220
info@marketpublishers.com

Contents

NUCLEAR RESPONSE ROBOTS EXECUTIVE SUMMARY

Nuclear Robots Leverage Rapid Safe Response
  Nuclear Response Robot Market Driving Forces
Nuclear Response Robot Market Shares
Nuclear Robot Market Forecasts

1. NUCLEAR RESPONSE ROBOTS MARKET DESCRIPTION AND MARKET DYNAMICS

1.1 Nuclear Responders
  1.1.1 Nuclear Industry Need for Robot Responders
1.2 Nuclear Response Robot Scope
  1.2.1 Nuclear Response Robot Applications
1.3 Transition Between The Current Market And Where The Market Is Going
  1.3.1 Nuclear Response Robot Reconnaissance
  1.3.2 Recharging The Robot's Batteries
  1.3.3 Specialized Tools
  1.3.4 Nuclear Response Robot Mission Control
1.4 Different Sizes of UGVs
  1.4.1 Types of First Responder Robots
  1.4.2 Telerob Explosive Observation Robot and Ordnance Disposal
  1.4.3 QinetiQ North America Talon Robots Universal Disrupter Mount
  1.4.4 General Dynamics Next-Generation CROWS II Increases First Responders Safety
  1.4.5 First Responder Unmanned Ground Vehicle from iRobot
1.5 UGV Enabling Technologies
  1.5.1 Sensor Processing
  1.5.2 Machine Autonomy
1.6 First Responder Robot Bandwidth
  1.6.1 UGV Follow-Me Capability
  1.6.2 Communications Bandwidth
  1.6.3 Battery Power
  1.6.4 Combination Of Batteries Linked To Onboard Conventional Diesel
1.7 SUGVs
  1.7.1 Mid-Size Category UGV
  1.7.2 Large UGV

+44 20 8123 2220
info@marketpublishers.com

1.7.3 Ground Combat Vehicle
1.7.4 TARDEC
1.7.5 Tacom
1.8 Robots Delivering Offensive and Defensive Capabilities to SWAT Teams

2. NUCLEAR RESPONSE ROBOTS MARKET SHARES AND FORECASTS

2.1 Nuclear Robots Leverage Rapid Safe Response
2.1.1 Nuclear Response Robot Market Driving Forces
2.2 Nuclear Response Robot Market Shares
2.2.1 Selected Leading Nuclear First Responder Robots
2.2.2 Energid / Mitsubishi Next-Generation Robot for Nuclear Power Plant Heat Exchanger Tube Inspection
2.2.3 Northrop Grumman
2.2.4 Northrop Grumman
2.2.5 General Dynamics Robotic Systems
2.2.6 iRobot Robots
2.2.7 iRobot Research / iRobot Collaborative Systems
2.2.8 iRobot Packbot
2.2.9 iRobot PackBot Scout
2.2.10 iRobot PackBot Explorer
2.2.11 iRobot
2.2.12 iRobot Research / iRobot Collaborative Systems
2.2.13 Thales Group Mini UAV and UGVs
2.2.14 Kongsberg
2.2.15 BLACK-I Antiterrorist ROBOTICS
2.2.16 QinetiQ North America’s Dragon Runner Robot Delivered to Mesa AZ SWAT Team
2.2.17 QinetQ
2.2.18 QinetQ TALON
2.2.19 BAE Systems Electronic Bugs Developed for First Responder, Law Enforcement, Border Patrol Use
2.2.20 Allen Vanguard Armadillo Micro UGV
2.2.21 ReconRobotics
2.2.22 ReconRobotics Tactical, Micro-Robot Systems
2.3 Nuclear Robot Market Forecasts
2.3.1 Active Nuclear Warheads by Country, 2013
2.3.2 World Nuclear Association List of Nuclear Reactors
2.3.3 Bomb Disposal Management Robots, IOD detection Robots, Autonomous

+44 20 8123 2220
info@marketpublishers.com

Nuclear Facility and Nuclear Response Robots
2.4 Nuclear Response Robot Prices
2.4.1 QinetQ Talon
2.4.2 iRobot Pacbot
2.4.3 Recon Scout Throwbot
2.4.4 RoboteX Avatar Home & Office Robot
2.5 Nuclear Response Robot Regional Analysis

3. ROBOTS FOR THE NUCLEAR INDUSTRY: PRODUCT DESCRIPTION

3.1 Energid / Mitsubishi Next-Generation Robot for Nuclear Power Plant Heat Exchanger Tube Inspection
3.1.1 Energid SelectinTM
3.2 Pedsco
3.3 ReconRobotics Tactical, Micro-Robot Systems
3.3.1 Recon Robotics Recon Scout IR
3.3.2 Recon Robotics Recon Scout XL
3.3.3 Recon Robotics Throwbot XT
3.3.4 Recon Robotics Searchstick
3.4 Mitsubishi SCARA Robots
3.5 iRobot
3.5.1 iRobot PackBot 510 for First Responders
3.5.2 iRobot PackBot 510 for HazMat Technicians
3.5.3 iRobot 510 PackBot for EOD Swat Technicians
3.5.4 iRobot PackBot 510 for Border Patrol
3.5.5 iRobot PackBot 510 for Law Enforcement Engineers
3.5.6 iRobot 710 Warrior
3.5.7 iRobot 110 FirstLook
3.5.8 iRobot SUGV
3.6 Northrop Grumman
3.6.1 Northrop Grumman F6A - First Responders & SWAT
3.6.2 Northrop Grumman Andros Robots
3.6.3 Northrop Grumman ANDROS Hazmat
3.6.4 Northrop Grumman Mark V-A1 - HAZMAT Technicians
3.6.5 Northrop Grumman Andros for First Responders
3.6.6 Northrop Grumman Mini Andros II Features
3.7 QinetQ
3.7.1 QinetiQ North America TALON Detects Deadly IEDs And Saves Lives
3.7.2 QinetQ TALON

+44 20 8123 2220
info@marketpublishers.com

3.7.3 QinetiQ TALON Product Line Expansion
3.7.4 QinetQ Dragon Runner
3.7.5 QinetQ Dragon Runner
3.7.6 QinetQ Robotic Appliqué Kit
3.7.7 QinetQ Expertise in Action:
3.7.8 QinetQ MAARS
3.8 OC Robotics
3.8.1 OC Robotics Nuclear decommissioning case study: LaserSnake
3.8.2 OC Robotics Nuclear decommissioning case study: Areva
3.8.3 OC Robotics The Explorer Range
3.8.4 OC Robotics Snake-Arm Control
3.8.5 OC Robotics Snake-Arm Simulator
3.8.6 OC Robotics Snake-Arm for Aircraft Assembly
3.8.7 OC Robotics Extender Snake Range Of – Motion Robots Reach The Unreachable
3.8.8 OC Robotics Snake-Arm –
3.8.9 OC Energy & Environment Robotics
3.9 Diakont
3.9.1 Diakont Inspection Robotics
3.9.2 Diakont AURORA
3.9.3 Diakont RODiS-TST
3.9.4 Diakont Nuclear Buried Pipe Inspection
3.10 Nuclear Robotics Group
3.10.1 Nuclear Robotics Group IRAD System
3.11 ST Robotics
3.11.1 ST Robotics Twin Robots
3.11.2 ST Robotics Swabbing Robot
3.11.3 ST Robotics Robot Controllers
3.11.4 ST Robotics Sampling Robot
3.12 Telerob
3.12.1 Telerob - EOD / IEDD Equipment, EOD Robots and Vehicles
3.12.2 Telerob Heavy Duty Explosive Ordnance Disposal (EOD) Robot
3.12.3 Telerob Telemax High-Mobility EOD Robot
3.12.4 Telerob EOD / IEDD Service Vehicles

4. NUCLEAR RESPONSE ROBOT TECHNOLOGY

4.1 Nuclear Response Robot Technology Enablers
4.1.1 Military Robot Logistics

+44 20 8123 2220
info@marketpublishers.com

4.2 MRAP ATV: Requirements and Contenders
4.3 First Responder Intel Integrated Circuit Evidence-Based Innovation
4.3.1 Open Robotic Control Software
4.3.2 First Responder Robot Key Technology
4.3.3 PC-Bots
4.3.4 Visual Simultaneous Localization & Mapping
4.4 Advanced Robot Technology: Navigation, Mobility, And Manipulation
4.4.1 Robot Intelligence Systems
4.4.2 Real-World, Dynamic Sensing
4.5 User-Friendly Interfaces
4.5.1 Tightly-Integrated, Electromechanical Robot Design
4.6 Field Based Robotics Iterative Development
4.6.1 Next-Generation Products Leverage Model
4.6.2 Modular Robot Structure And Control
4.6.3 Lattice Architectures
4.6.4 Chain / Tree Architectures
4.6.5 Deterministic Reconfiguration
4.6.6 Stochastic Reconfiguration
4.6.7 Modular Robotic Systems
4.7 Intel Military Robot Cultivating Collaborations
4.8 Hitachi Configuration Of Robots Using The SuperH Family
4.8.1 Hitachi Concept of MMU And Logic Space
4.8.2 Robotic Use of Solid State Thin Film Lithium-Ion Batteries
4.9 Network Of Robots And Sensors
4.9.1 Sensor Networks Part Of Research Agenda
4.9.2 Light Sensing
4.9.3 Acceleration Sensing
4.9.4 Chemical Sensing
4.10 Military Robot Technology Functions
4.11 Carbon Nanotube Radio
4.12 UUVMP Vision
4.12.1 Hovering Autonomous Underwater Vehicle (HAUV)
4.12.2 Alliant
4.12.3 ATSP is a Government-Wide Contracting Vehicle
4.12.4 Quick, Efficient Contracting Vehicle
4.12.5 Facilitates Technology And Insertion Into Fielded Systems
4.12.6 Access to all Northrop Grumman Sectors
4.13 iRobot Technology
4.13.1 iRobot AWARE Robot Intelligence Systems

+44 20 8123 2220
info@marketpublishers.com

4.13.2 iRobot Real-World, Dynamic Sensing.
4.13.3 iRobot User-Friendly Interface
4.13.4 iRobot Tightly-Integrated Electromechanical Design.
4.14 Evolution Robotics Technology Solutions
4.14.1 iRobot / Evolution Robotics Example Applications
4.14.2 Homeland Security Robot Technology Trends
4.15 Classes of Unmanned Ground Vehicles (UGVs)
4.15.1 Armed Robotic Vehicle (ARV)
4.15.2 US BCT Unmanned Ground Vehicle Funding
4.15.3 Funding Military Robots in US for 2011
4.15.4 US Army's BCT Modernization Program Funding
4.15.5 Efforts to Mitigate The Improvised Explosive Device Threat To Dismounted Operations
4.15.6 US Joint Improvised Explosive Device Defeat Organization
4.15.7 Route Mapping
4.15.8 Man-Packable SUGV
4.15.9 Demilitarized Zone Between South and North Korea
4.15.10 Chinese Military Robots
4.15.11 Western Europe
4.15.12 China & the Russian Federation
4.15.13 Middle East
4.15.14 India & Japan
4.15.15 Australia & Canada
4.16 Military and First Responder Robot Pricing Notes
4.16.1 iRobot
4.16.2 QinetiQ / Foster-Miller
4.16.3 Allen Vanguard
4.16.4 Northrop Grumman
4.16.5 Telerob
4.16.6 AB Precision (Poole) Ltd.
4.16.7 Beijing Defense
4.16.8 First-Response Robotics
4.16.9 Mesa Associates
4.16.10 re2 (robotics engineering excellence)
4.16.11 ForeRunner RDV
4.16.12 ReconRobotics
4.16.13 TechnoRobot

5. NUCLEAR RESPONSE ROBOTS COMPANY DESCRIPTION

+44 20 8123 2220
info@marketpublishers.com

5.1 AB Precision (Poole) Ltd
5.1.1 AB Precision (Poole) Ltd Dragon (ABL900) de-armer
5.1.2 AB Precision (Poole) Ltd Limpet Mine Disposal Equipment
5.1.3 AB Precision (Poole) Ltd IED disruptor devices
5.1.4 AB Precision (Poole) Ltd Recoilless Disruptors
5.1.5 AB Precision (Poole) Ltd Explosive Ordnance Disposal (EOD) Equipment
5.2 Allen Vanguard
5.2.1 Allen Vanguard Rapid Development
5.3 BAE Systems
5.2 Black I Robotics
5.4 Boston Dynamics
5.3 Carnegie Mellon University
5.3.1 Carnegie Mellon School of Computer Science (SCS)
5.4 Chemring EOD Limited
5.4.1 Chemring EOD Limited Initiation Systems / Exploders
5.4.2 Chemring EOD Limited ROV Integration Packages
5.4.3 Chemring EOD Limited Security: VehicleScan - Under Vehicle Surveillance Systems
5.5 Diakont
5.5.1 Diakont RPV Test Specimens Removed Safely and Effectively with Diakont Manipulator
5.5 DCD-DORBYL (Pty) Ltd) / RSD (the Rolling Stock and Defense Division
5.5.1 RSD Combat-Proven Landmine Detection Systems
5.5.2 RSD Ballistic Protection For Peacekeeping And Defense Operations
5.5.3 RSD Engineering For Various Defense Environments And Scenarios
5.6 Ditch Witch
5.6 ECA Robotics
5.7 Elbit Systems
5.7.1 Elbit Systems Principal Market Environment
5.8 Energid Technologies
5.8.1 Energid Technologies Robotic Systems
5.8.2 Energid Technologies
5.7 First-Response Robotics
5.9 General Dynamics
5.9.1 Sequester Mechanism
5.9.2 General Dynamics Revenue
5.9.3 General Dynamics Robotic Systems
5.9.4 General Dynamics Robotic Systems (GDRS) Vision

+44 20 8123 2220
info@marketpublishers.com

5.9.5 General Dynamics Robotic Systems (GDRS) Manufacturing
5.9.6 General Dynamics Autonomous Land And Air Vehicle Development
5.10 G-NIUS / Shared Company of Israel Aerospace Industries (IAI) and Elbit Systems Ltd.
5.11 ICOR Technology
5.12 iRobot
5.12.1 iRobot Home Robots:
5.12.2 iRobot Defense and Security: Protecting Those in Harm's Way
5.12.3 iRobot Role In The Robot Industry
5.12.4 iRobot SPARK (Starter Programs for the Advancement of Robotics Knowledge)
5.12.5 iRobot Revenue
5.12.6 iRobot Acquires Evolution Robotics, Inc.
5.12.7 iRobot / Evolution Robotics
5.13 Kairos Autonami
5.13.1 Kairos Autonomi Autonomy ROI
5.13.2 Kairos Autonomi Upgrades Robot Conversion Kit
5.14 Kongsberg
5.14.1 Kongsberg Defence Systems Revenue
5.15 Lockheed Martin
5.15.1 Lockheed Martin Symphony Improvised Explosive Device Jammer Systems
5.15.2 Lockheed Martin Aeronautics Revenue
5.15.3 Lockheed Martin Electronic Systems
5.15.4 Lockheed Martin
5.16 Mesa Robotics
5.16.1 Systems Development Division of Mesa Associates
5.16.2 Mesa Robotics Affordable Robotic Solutions
5.16.3 Mesa Robotics Revenue
5.17 Mitsubishi Heavy Industries
5.18 Nuclear Robotics Group
5.19 Northrop Grumman
5.19.1 Northrop Grumman Revenue
5.19.2 Northrop Grumman Remotec
5.19.3 Northrop Grumman Leading Global Security Company
5.19.4 Northrop Grumman Supplies Marine Navigation Equipment
5.19.5 Northrop Grumman Recognized by UK Ministry of Defense for Role in Supporting Sentry AWACS Aircraft During Military Operations in Libya
5.19.6 Northrop Grumman Corporation subsidiary Remotec Inc. Upgrade the U.S. Air Force Fleet of Andros HD-1
5.19.7 Northrop Grumman NAV CANADA Supplier

+44 20 8123 2220
info@marketpublishers.com

5.20 OC Robotics
5.20.1 LaserSnake Project Completed With Successful Demonstration
5.20.2 Decommissioning with a snake-arm robot
5.20.3 OC Robotics Technology & Innovation
5.20.4 OC Roboics Robots Extend The Reach Of Manual Process
5.20.5 OC Robotics A CANDU Snake-Arm Robot
5.20.6 OC Robotics Snake-Arm Robots
5.21 Pearson Engineering
5.22 Pedsco
5.23 QinetiQ
5.23.1 QinetQ Comprised Of Experts
5.23.2 QinetiQ North America TALON Detects Deadly IEDs And Saves Lives
5.23.3 QinetiQ World-Leading Products:
5.23.4 QinetiQ Innovation
5.23.5 QinetiQ North America
5.23.6 QinetiQ Revenue
5.23.7 QinetiQ Vision
5.23.8 QinetiQ Mission
5.23.9 QinetiQ / Foster Miller
5.23.10 QinetiQ / Foster Miller Financial Position
5.23.11 QinetiQ North America Order for 100 Dragon Runner 10Micro Robots
5.23.12 QinetiQ / Automatika
5.23.13 QinetiQ Customer Base
5.24 Re2, Inc
5.24.1 Rehttp://www.resquared.com/images/sup2.gif Leading Developer
5.24.2 Re2 Forerunner High Speed Inspection Robot
5.24.3 Re2 ForeRunner RDV
5.24.4 Re2 HST - High-Speed Teleoperation
5.25 ReconRobotics
5.25.1 ReconRobotics Tactical, Micro-Robot Systems
5.26 Robosoft
5.27 RoboteX
5.27.1 RoboteX Avatar Home & Office, A Personal Security Robot
5.27.2 RoboteX Portable Reconnaissance
5.27.3 RoboteX Avatar I Spec List:
5.27.4 RoboteX Avatar I Use Cases:
5.28 ST Robotics
5.29 TechnoRobot
5.30 Telerob

+44 20 8123 2220
info@marketpublishers.com

5.30.1 Telerob
5.31 Thales Group
5.31.1 Thales Core Businesses
5.31.2 Thales: - A Global Player
5.31.3 Thales Revenue
5.31.4 Thales Key Technology Domains
5.31.5 Thales Open Research
5.31.6 Thales Stance on Environment
5.31.7 Thales Processes
5.31.8 Thales Product Design
5.31.9 Thales Site Management
5.31.10 Thales Alenia Space Integration Of Service Module For The Fourth ATV
5.31.11 Thales Sonar ‘Excels’ In Anti-Submarine Warfare Exercise
5.31.12 Thales Group Ground Alerter
5.31.13Thales Group Ground Master 400 (GM 400)
5.31.3 Thales Group Ground Smarter 1000
5.31.14 Thales Group
5.32 Vecna Technologies
5.32.1 Vecna Telemedicine
5.33 Selected Homeland Security Robot Response Companies
5.33.1 Selected Robot Companies

+44 20 8123 2220
info@marketpublishers.com

List Of Tables

LIST OF TABLES AND FIGURES

Table ES-1 Nuclear Response Robotic Functions
Table ES-2 Nuclear Response Robots Market Driving Forces
Figure ES-3 Nuclear Response Robot Market Shares, Dollars, Worldwide, 2012
Figure ES-4 Nuclear Response Robot Market Forecasts, Shipments, Dollars, Worldwide, 2013-2019
Table 1-1 Nuclear Response Robot Applications
Figure 1-2 Telerob Explosive Observation Robot and Ordnance Disposal Unit
Figure 1-3 Telerob Explosive Ordnance Disposal EOD System For Operation In Confined Areas
Figure 1-4 QinetiQ North America TALON Robots Universal Disruptor Mount (UDM)
Figure 1-5 Next-Generation General Dynamics CROWS II
Figure 1-6 Organization for Combating Terrorism: Technology Support Office
Table 2-1 Nuclear Response Robotic Functions
Table 2-2 Nuclear Response Robots Market Driving Forces
Figure 2-3 Nuclear Response Robot Market Shares, Dollars, Worldwide, 2012
Table 2-4 Nuclear Response Robot Market Shares, Dollars, Worldwide, 2012
Figure 2-5 Energid / Mitsubishi Nuclear Robot
Figure 2-6 Northrop Grumman Mini-ANDROS II
Figure 2-7 iRobot 210 Negotiator
Table 2-8 iRobot 510 Packbot Characteristics
Table 2-9 iRobot 510 PackBot for EOD Conventional Ordnance and SWAT Missions
Figure 2-10 QinetQ TALON
Figure 2-11 BAE Systems Electronic Bugs
Figure 2-12 Nuclear Response Robot Market Forecasts, Shipments, Dollars, Worldwide, 2013-2019
Table 2-13 Nuclear Response Robot Market Forecasts Dollars, Worldwide, 2013-2019
Table 2-14 Nuclear Response Robot Market Forecasts Units, Worldwide, 2013-2019
Table 2-15 Nuclear Response Robot Shipments Market Forecasts, Units, Worldwide, 2013-2019
Figure 2-16 Active Nuclear Warheads by Country, Percent, 2013
Table 2-17 Active Nuclear Warheads, Number, Worldwide, 2013
Table 2-18 World Nuclear Association List of Nuclear Reactors
Table 2-18 (Continued) World Nuclear Association List of Nuclear Reactors
Figure 2-19 Nuclear Response Robot Regional Market Segments, Dollars, 2012
Table 2-20 Nuclear Response Robot Regional Market Segments, 2012

+44 20 8123 2220
info@marketpublishers.com

Figure 3-1 Energid Actin Joint Control
Table 3-2 Energid Selectin Toolkit Advantages
Figure 3-3 Energid Selectin Robot
Figure 3-4 Recon Robotics Recon Scout IR
Figure 3-5 Recon Robotics Recon Scout XL
Figure 3-6 Recon Robotics Throwbot XT
Table 3-7 Mitsubishi SCARA Robots Key Standard Features:
Figure 3-8 iRobot PackBot 510 for First Responders
Table 3-9 iRobot PackBot 510 Target Markets
Figure 3-10 iRobot PackBot 510 for HazMat Technicians
Table 3-11 iRobot PackBot 510 Target Markets for HazMat Technicians
Figure 3-12 iRobot 510PackBot for EOD Swat Technicians
Table 3-13 iRobot 510 PackBot for EOD Conventional Ordnance and SWAT Missions
Figure 3-14 iRobot PackBot 510 for Border Patrol
Figure 3-15 iRobot PackBot 510 for Law Enforcement Engineers
Table 3-16 iRobot 510 PackBot for Law Enforcement Engineers Tasks
Figure 3-17 iRobot 710 Warrior
Table 3-18 iRobot 710 Warrior Uses
Figure 3-19 iRobot 110 FirstLook
Figure 3-20 iRobot 110 Small, Light And Throwable FirstLook Uses
Figure 3-21 iRobot SUGV
Figure 3-22 iRobot SUGV Uses
Figure 3-23 Northrop Grumman F6A
Table 3-24 Northrop Grumman Andros Robots Functions
Table 3-25 Northrop Grumman Andros Robots Applications
Figure 3-26 Northrop Grumman ANDROS Hazmat
Figure 3-27 Northrop Grumman F6A with Window Breaker and Dual PAN Disrupter Mount
Figure 3-28 Northrop Grumman ANDROS F6A
Table 3-29 Northrop Grumman F6A Features
Figure 3-30 Northrop Grumman Mark V-A1
Table 3-31 Northrop Grumman V-A1 Features
Figure 3-32 Northrop Grumman Andros for First Responders
Table 3-33 Northrop Grumman Mini Andros II Features
Figure 3-34 Northrop Grumman Mini Andros II
Figure 3-35 QinetQ TALON
Table 3-36 QinetiQ North America’s TALON Family Of Robots Features
Table 3-37 QinetiQ North America’s TALON Family Of Robots Target Markets
Table 3-38 QinetiQ North America’s TALON Family Of Robots Mission Positioning

+44 20 8123 2220
info@marketpublishers.com

Table 3-39 QinetiQ TALON Product Line
Table 3-40 QinetiQ TALON Expertise in Action
Table 3-41 QinetiQ TALON Product Line Specific Task Expansion
Figure 3-42 QinetQ Dragon Runner
Figure 3-43 QinetQ Dragon Runner
Figure 3-44 QinetQ Robotic Appliqué Kit Transforms Bobcats into Remotely-Operated Robots
Figure 3-45 QinetQ Modular Advanced Armed Robotic System
Figure 3-46 OC Robotics AREVA
Figure 3-47 OC Robotics Explorer Range
Figure 3-48 OC Robotics Explorer Range User Interface
Figure 3-49 OC Robotics Explorer Range Actuator Pack
Figure 3-50 OC Robotics Explorer Range Snake Arm
Figure 3-51 OC Robotics Explorer Arm Extensions
Figure 3-52 OC Robotics Extender Snake Range Of –Motion
Figure 3-53 OC Robotics Extender Models and Payloads
Figure 3-53 (Continued) OC Robotics Extender Models and Payloads
Figure 3-54 OC Robotics Arms in Confined Spaces
Figure 3-55 Diakont Inspection Robotics
Table 3-56 Diakont Inspection Robotics Features
Figure 3-57 Diakont RODiS-TST
Table 3-58 Diakont RODiS-TST Features
Figure 3-59 Diakont Nuclear Buried Pipe Inspection
Figure 3-60 Nuclear Robotics Group IRAD System
Figure 3-61 ST Robotics Twin Robots
Figure 3-62 ST Robotics Swabbing Robot
Figure 3-63 ST Robotics Robot Controllers
Figure 3-64 ST Robotics Sampling Robot
Table 3-65 Telerob’s Key Product Areas
Figure 3-66 Telerob Heavy-Duty EOD Robot Product
Figure 3-67 Telerob TeleMAX Small Bomb Disposal EOD Heavy-Duty Robots
Figure 3-68 Telerob teleMAX
Figure 3-69 Telerob Bomb Disposal Vehicles
Figure 3-70 Telerob Bomb Disposal Vehicle Interior
Figure 4-1 Military Robot Technology Enablers
Table 4-2 First Responder Robot Technology Characteristics
Figure 4-3 Homeland Security Robot Technology Enablers
Table 4-4 US Army Military Robot Logistics Positioning
Figure 4-5 Robot Systems Associated with Force Application Description

+44 20 8123 2220
info@marketpublishers.com

Figure 4-6 Robotic Performance Characteristics
Table 4-9 Military Robot Integrated Circuit-Based Innovation Functions
Table 4-10 First Responder Robot Key Technology
Table 4-11 Robot Communications Key Technology
Table 4-12 Military Robot Key Navigation Technologies
Table 4-13 Human-Robot Interaction
Table 4-14 Visual Simultaneous Localization & Mapping Functions Relevant to Robotics
Figure 4-15 Hitachi Modular Robot Configuration
Table 4-16 Military Robot Key Product Technology Factors
Table 4-16 (Continued) Military Robot Key Product Technology Factors
Table 4-17 Military Robot Technology Functions
Table 4-17 (Continued) Military Robot Technology Functions
Figure 4-19 UUVMP Vision
Table 4-20 Alliant Features
Table 4-20 (Continued) Alliant Features
Figure 4-21 iRobot / Evolution Robotics Technology Solutions
Figure 4-22 iRobot / Evolution Robotics Object Recognition
Table 4-23 iRobot / Evolution Robotics Applications
Figure 2-24 US Protection Modernization Strategy
Table 2-25 US Army Revised Military Robotics Vision
Figure 4-26 Taser, iRobot to Build Military Robot With Stun Gun
Figure 4-27 Foster Miller Talon Robot
Figure 5-1 Allen Vanguard Threat Intelligence
Table 5-2 Allen-Vanguard R&D Team Mandate:
Table 5-3 Allen-Vanguard Scientific And Engineering Topics Researched and Developed
Table 5-4 Allen-Vanguard R&D Fundamental Research
Table 5-5 Allen-Vanguard R&D Engineers And Scientists Comprehensive Research
Table 5-6 BAE Systems Standards
Figure 5-7 BAE Systems Revenue in Defense Market
Table 5-8 Chemring EOD Limited Initiation Systems / Exploders
Table 5-10 Diakont Products and Services
Table 5-11 Diakont Engineering
Table 5-12 Diakont Production
Figure 5-13 Diakont RPV Test
Table 5-14 ECA Robotics Range Of Products
Table 5-15 Elbit Systems Activities
Table 5-16 Selected Energid Partners
Table 5-17 G-NIUS Unmanned Ground Systems (UGS) Solutions

+44 20 8123 2220
info@marketpublishers.com

Figure 5-18 Lockheed Martin Segment Positioning
Table 5-19 Lockheed Martin's operating units
Figure 5-20 Lockheed Martin Aeronautics Segment Positioning
Figure 5-21 Lockheed Martin Aeronautics Segment Portfolio
Figure 5-22 Lockheed Martin Aeronautics C130 Worldwide Airlift
Figure 5-23 Lockheed Martin Aeronautics Falcon Fighter
Figure 5-24 Lockheed Martin Electronic Systems Portfolio
Table 5-25 Mesa Robotics Technical Experience
Table 5-26 Northrop Grumman Partner Of Choice
Figure 5-27 Northrop Grumman Systems Segments
Figure 5-28 Northrop Grumman Portfolio
Figure 5-29 OC Robotics LaserSnake
Figure 5-30 OC Robotics
Figure 5-31 OC Robotics Conducts Inspections Within CANDU Reactors
Figure 5-32 OC Robotics Snake-Arm Robot Technology
Table 5-33 QinetiQ Vision
Figure 5-34 QinetiQ Dragon Runner Urban Operations Rugged Ultra-Compact, Lightweight And Portable Reconnaissance Robot
Table 5-35 QinetiQ Customer Base
Figure 5-36 Core Technologies
Figure 5-37 Unmanned Ground Vehicles
Figure 5-38 Forerunner Key Features
Figure 5-39 Re2 Open Architecture for Robots
Figure 5-40 Robosoft Unmanned Ground robots, For Security, Transport, Cleaning, Healthcare And Research
Figure 5-41 Robotex Avatar I Tactical Robot Unmanned Ground Robots
Figure 5-42 Robotex Unmanned Ground Robots
Figure 5-43 Robotex Avatar II Tactical Robot
Table 5-44 RoboteX Portable Reconnaissance Controls
Table 5-45 RoboteX Avatar I Use Cases:
Figure 5-46 Technorobot
Figure 5-47 Technorobot Collaborations
Table 5-48 Thales Key Technology Domains
Figure 5-49 Thales Measurable Environmental Targets
Figure 5-50 Thales Group GROUND Master
Table 5-51 Thales Group GROUND Master 400 Key Features:
Table 5-52 Thales Group Ground Smarter 1000 Key Features:
Figure 5-53 Thales Critical Decision Chain
Figure 5-54 Vecna Hospital Delivery Bot

+44 20 8123 2220
info@marketpublishers.com

Figure 5-55 Vecna Robotics: HG2
Table 5-56 Vecna Technologies Hydraulic End Effector Specifications
Figure 5-57 Vecna Telemedicine

+44 20 8123 2220
info@marketpublishers.com

About

This is the 564th report in a series of primary market research reports that provide forecasts in communications, telecommunications, the Internet, computer, software, telephone equipment, health equipment, and energy. Automated process and significant growth potential are a priority in topic selection.

The project leaders take direct responsibility for writing and preparing each report. They have significant experience preparing industry studies. They are supported by a team, each person with specific research tasks and proprietary automated process database analytics. Forecasts are based on primary research and proprietary data bases.

The primary research is conducted by talking to customers, distributors and companies. The survey data is not enough to make accurate assessment of market size, so WinterGreen Research looks at the value of shipments and the average price to achieve market assessments. Our track record in achieving accuracy is unsurpassed in the industry. We are known for being able to develop accurate market shares and projections.

The analyst process is concentrated on getting good market numbers. This process involves looking at the markets from several different perspectives, including vendor shipments. The interview process is an essential aspect as well. We do have a lot of granular analysis of the different shipments by vendor in the study and addenda prepared after the study was published if that is appropriate.

Forecasts reflect analysis of the market trends in the segment and related segments. Unit and dollar shipments are analyzed through consideration of dollar volume of each market participant in the segment.

Installed base analysis and unit analysis is based on interviews and an information search. Market share analysis includes conversations with key customers of products, industry segment leaders, marketing directors, distributors, leading market participants, opinion leaders, and companies seeking to develop measurable market share.

Over 200 in depth interviews are conducted for each report with a broad range of key participants and industry leaders in the market segment. We establish accurate market forecasts based on economic and market conditions as a base. Use input/output ratios, flow charts, and other economic methods to quantify data. Use in-house analysts who

+44 20 8123 2220
info@marketpublishers.com

meet stringent quality standards.

Interviewing key industry participants, experts and end-users is a central part of the study. Our research includes access to large proprietary databases. Literature search includes analysis of trade publications, government reports, and corporate literature.

Findings and conclusions of this report are based on information gathered from industry sources, including manufacturers, distributors, partners, opinion leaders, and users. Interview data was combined with information gathered through an extensive review of internet and printed sources such as trade publications, trade associations, company literature, and online databases. The projections contained in this report are checked from top down and bottom up analysis to be sure there is congruence from that perspective.

The base year for analysis and projection is 2011. With 2011 and several years prior to that as a baseline, market projections were developed for 2012 through 2018. These projections are based on a combination of a consensus among the opinion leader contacts interviewed combined with understanding of the key market drivers and their impact from a historical and analytical perspective.

The analytical methodologies used to generate the market estimates are based on penetration analyses, similar market analyses, and delta calculations to supplement independent and dependent variable analysis. All analyses are displaying selected descriptions of products and services.

This research includes referencde to an ROI model that is part of a series that provides IT systems financial planners access to information that supports analysis of all the numbers that impact management of a product launch or large and complex data center. The methodology used in the models relates to having a sophisticated analytical technique for understanding the impact of workload on processor consumption and cost.

WinterGreen Research has looked at the metrics and independent research to develop assumptions that reflect the actual anticipated usage and cost of systems. Comparative analyses reflect the input of these values into models.

The variables and assumptions provided in the market research study and the ROI models are based on extensive experience in providing research to large enterprise organizations and data centers. The ROI models have lists of servers from different

+44 20 8123 2220
info@marketpublishers.com

manufacturers, Systems z models from IBM, and labor costs by category around the world. This information has been developed from WinterGreen research proprietary data bases constructed as a result of preparing market research studies that address the software, energy, healthcare, telecommunicatons, and hardware businesses.

+44 20 8123 2220
info@marketpublishers.com

I would like to order

Product name: Nuclear Robot Market
Product link: https://marketpublishers.com/r/ND694233F3EEN.html
Price: US$ 3,800.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/ND694233F3EEN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

**All fields are required

Custumer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970