



TALON® Standard 2DOF
General Specifications

Length	34.5" (87 cm)
Width	22.5" (58 cm)
Height (arm stowed)	18" (54 cm)
Horizontal Reach	52" (1.3 m)
Below Grade Reach	24" (60 cm)
Ground Clearance	2.75" (7 cm)
Deployable Mast	
Height from Ground	40.5" (1.029 m)
Weight	Starting at 115 lbs (52 kg) (configuration dependent)
Gripper Force	30 lbs (13.6 kg) gripping strength 4" (10.16 cm) wide opening (13.6 kg) 360 degree rotation 170 lbs (77 kg) drag capacity
Tow Capacity	Up to 750 lbs (340 kg)
Arm Lift Capacity	10 lbs (4.5 kg) at full extension 20 lbs (9.07 kg) max capacity
Obstacle Navigation	Up to 43 degree stairs Up to 45 degree slide slope Up to 15" (38 cm) snow or demolition rubble
Operating Range	Exceeds 2,600 ft /800 m line-of-sight (LOS)
Endurance	3-4 hours (mission dependent)

Vehicle Battery Options

- Lead acid batteries
 - Uses two, 300 W-hr, 36 V batteries
 - 3-4 hours mission dependent
 - 4.5 hr typical recharge time
- Q-Tray
 - Accepts 6x standard BB-2590/Ubatteries
 - 4.5 hr typical run time. Multiple charging options.



TALON® 5 DOF
General Specifications

Same as 2DOF unless noted	
Turning Circle	52.5" diameter (133 cm)
Max Payload Weight	150 lbs (68 kg)
Horizontal Reach	62" from front most edge of track (157 cm) Reach to wrist 49" (125 cm) Reach to gripper tip 59" (152 cm)
Below Grade Reach	43" (11 cm)
Weight	178 lbs (81 kg) with batteries
Gripper Force	110 lbs (49.9 kg)
Gripper Rotation	360 degree rotation
Tow Capacity	220 lbs (100 kg)
Arm Lift Capacity	50 lbs (22.7 kg) at optimal distance 15 lbs (6.8 kg) at full extension
Arm Degree of Freedom	5 - Controller operated (shoulder yaw, shoulder pitch, elbow pitch, wrist roll). Manual (wrist pitch).
Vertical Reach	77" from floor (195 cm) Reach to wrist: 66" (168 cm) Reach to gripper tip: 77" (195 cm)
Communications	External IP Radio (Persistent System's MPU5 Radio) Gigabit Ethernet Communications Backbone
Cameras	Gripper, Elbow, Rear (two options): Infrared illuminated analog cameras (gripper, elbow, rear), Pixels (HxV); NTSC: 510x492 IOP digital camera w/ 20 x digital zoom, 1/3" 2.1 Megapixel Color CMOS sensor, 720p resolution, Low light - 0.1 lux/F=1.8 PTZ: Auto focus color zoom camera, NTSC - 1/4 Supper HAD CCD, 680,000 pixels, 470 TV lines, 300:1 (26X optical - 12X digital)
Optional Cameras	- Thermal color or B&W (supported) - Night vision (supported)
Available I/O Ports	2x IOP A connectors 1x IOP B connector 4x Gigabit Ethernet and 12VDC (24VDC opt.) 2x RS-232 ports 1x USB port 1x CAN bus 6x Interfaces for legacy TALON accessories

Additional Tools/Accessories

- Universal disruper mount (Ideal Products PAN, Royal Arms)
- Chemring RE series mount
- Shotgun mount
- Portable x-ray mount
- Wire cutting tool
- Heavy duty tracks and sprockets
- Reusable shipping/storage containers
- Arm ski (ascending and descending tool—standard 2DOF TALON only)
- Ideal Products tool kit
- Stratton tool kit
- Loud hailor



TALON® CBRN
Modular Configurations

Integrated Sensors (select any)	<ul style="list-style-type: none"> • Smith® Detection LCD 3.3 or JCAD – detects chemical warfare agents (CWAs) and toxic industrial chemicals (TICs) • CANBERRA AN/UDR-14 – detects radiation (gamma dose rate) • Honeywell RAE® Systems Multi-RAE and MultiRAE Pro-detects radiation and volatile gases • Thermo Scientific™ FirstDefender™ RMX – identifies unknown solid and liquid chemicals down range including explosives, toxic industrial chemicals, chemical weapons, narcotics, precursors, white powders and more • Thermo Scientific™ RadEye GN Plus – detects radiation (neutron and gamma dose rate)
TALON Arm Options (select one)	<ul style="list-style-type: none"> TALON Standard 2DOF Arm TALON Heavy Lift 5DOF Arm

Flexible Controller Options

- UC-LITE (*Universal Controller, Lightweight Interoperable Tactical Equipment*)
 - Dimensions: 12" x 7.5" x 2.3" (W x H x D)
 - Weight: 2.5 lbs
 - Optional dual screen
- TRC (*Tactical Robot Controller*)
 - Dimensions: 6.5" wide monitor
 - Weight: 2.5 lbs
 - Optional dual screen
- LCU (*Laptop Control Unit*)
 - Dimensions: 14" x 13" x 4" (W x H x D)
 - Weight: 17 lbs

TALON ROBOTS

For Reconnaissance, Security,
HAZMAT/CBRN



TALON's are credited with performing over 100,000 successful missions and have saved thousands of lives.



TALON®

The Robotic Workhorse

For almost 20 years, TALON robots have been in continuous, active service to support critical and often dangerous missions worldwide. In military, law enforcement and first responder applications, TALONs are widely deployed for improvised explosive device (IED) and explosive ordnance disposal (EOD), reconnaissance, communications, CBRN (Chemical, Biological, Radiological, Nuclear), Hazmat, security, defense and rescue missions.



At Ground Zero after the 2001 World Trade Center attack, TALON withstood repeated decontamination and remained operational to support rescue teams by searching through rubble.

Leading the Way

Throughout its history, TALON has had industry-first and industry-leading features that protect the lives of those who protect us. TALON was first used in 2000 in Bosnia for moving and disposing of live explosives. They were also the first military robot to be used in active combat in Afghanistan and in Iraq. Now on its fifth generation, TALON 5 is the first Interoperability Profile (IOP) fielded robotic system that has successfully gone through Army Test and Evaluation Command testing.

CBRN, HAZMAT Robotic Kit

The TALON CBRN/Hazmat kit is equipped with a variety of sensors that offer ultimate protection in dangerous CBRN/Hazmat operations. The sensors detect radiation, volatile gases and traces explosives in addition to identifying over 7,500 explosives and chemicals. The CBRN kit is available for TALON IV and above models.

TALON® 5

IOP Compatible

TALON 5's enhanced electronics and software, and the ability to use third party components, offers increased performance capabilities, flexibility and system level modularity for greater mission effectiveness.

Today, TALON robots continue to support all four branches of the U.S. Military, along with Federal, State and Local Law Enforcement and 36 nations worldwide.

