



T7™

MULTI-MISSION ROBOTIC SYSTEM

ROBOTIC SYSTEMS

T7 provides best-in-class mobility, manipulation, and intuitive control, delivering uncompromised performance.

BENEFITS

Improves mission effectiveness through precision control and human-like dexterity

Rapid reconfiguration to meet evolving mission requirements

Reduces cognitive burden and shortens task completion time via intuitive control

Extends service life of the system with upgradeable design and common interfaces

Minimal training time reduces total lifecycle costs

Based on the input of hundreds of users, Harris developed T7 from the ground up to support the demanding requirements of commercial and military missions, including hazardous materials (HAZMAT) cleanup, explosive ordnance disposal (EOD), intelligence, surveillance and reconnaissance (ISR) and special weapons and tactics (SWAT) missions. Its highly intuitive interface redefines ease of use with dynamic force feedback, providing unmatched command and control. Constructed from field-proven subsystems, T7 has the strength and dexterity to tackle any challenge. Its rugged, automotive-grade track system provides outstanding mobility and maneuverability. A variety of attachments enable use of standard-issue sensors, disruptors, and tools, supporting a wide range of commercial and military missions, including HAZMAT and vehicle-borne improvised explosive device (VBIED)

defeat. In the configuration shown, T7 includes a pan, tilt, and zoom (PTZ) camera mast, high power multiple-input and multiple-output (MIMO) radios, and immersive haptic feedback for unprecedented intuitive control, situational awareness, and mobility in rough terrain.

INNOVATIONS

Immersive, high-fidelity, multi-axis, haptic (force-feedback) manipulator control

Camera frame teleoperation for natural and intuitive control of manipulator

Unique platform mobility design easily overcomes complex obstacles

Fender-mounted corner cameras for close-quarters maneuverability

Platform Specifications	
Weight	710 lbs [322 kg] with manipulator installed (includes batteries)
Dimensions	47.3 x 27.6 x 45.7 in [1201 x 701 x 1161 mm] (L x W x H)
Power	12 BB-2590 (hot swappable) 8+ hour runtime (depending on task) In-vehicle battery charging
Max Speed	4 mph [6.5 kph]
Mobility	Skid steer track system Climbs stairs and slopes over 40° Traverses lateral slopes over 30° Neutral turn diameter: 54.8 in [1391 mm] Quick-release hub locks for towing Wired, handheld controller for loading/unloading
Cameras	2 driving cameras (front, rear) PTZ mast camera with 120x zoom 4 fender-mounted corner cameras
Payloads	3 Ethernet and 24 VDC connectors Picatinny rails for user equipment

Manipulator Specifications	
Dimensions	87 in [2200 mm] horizontal reach 122 in [3099 mm] vertical reach Stows within platform footprint
Dexterity	Six degrees of freedom Continuous wrist rotation
Lift Capacity	250+ lbs [113+ kg] near chassis 60+ lbs [27+ kg] at full extension Self-righting capability
Gripper	Integrated haptic (force-feedback) sensing
Cameras	Gripper camera Mid-arm camera
Lighting	Visible and IR on gripper

Accessories	
	VBIED defeat kit
	Remote initiation system
	Two-way audio payload
	Mount for disruptor payloads
	Non-conductive, wire-cutting gripper
	Forklift attachment: 66 lbs [30 kg] lift
	Other tools available on request

Haptic Controller Specifications	
Weight	35 lbs [16 kg] (including battery)
Dimensions	18.7 x 16.2 x 9.2 in [475 x 410 x 234 mm] (L x W x H)
Power	1 BB-2590 or external 24-30 VDC power 4+ hour runtime
Controllability	Intuitive spatial control with pistol grip 4 DOF haptic feedback (X, Y, Z, and gripper) Manipulator presets (standard and user-defined) Manipulator motion rewind function
Audio/Video	Daylight visible display Two-way audio AV out ports with support for headsets

Communication Specifications	
Radio	Single/dual-band MIMO radios UHF through ISM frequencies available LOS range: 3300+ft [1000+ m] NLOS Range: 1000+ ft [300+ m]
Tether	500 ft [150 m]

About Harris Corporation

Harris Corporation is a leading technology innovator, solving customers' toughest mission-critical challenges by providing solutions that connect, inform and protect. Harris supports government and commercial customers around the world. Learn more at harris.com.



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