

Mini-CALIBER® SWAT ROBOT

MAN TRANSPORTABLE ROBOT

The lightweight, modular Mini-CALIBER® is a man transportable robot for SWAT and EOD operators. Developed for rapid tactical missions, the robot is simple to operate and quick to deploy, providing fast action for searching rooms, hallways, stair wells and confined spaces.

MISSION CONFIGURABLE

Basic Set-Up - The modular robot is configurable to your mission requirements. The basic Mini-CALIBER® provides simple surveillance capabilities with 2 wide angle IR cameras for low light conditions and two-way audio communications. Front and rear flippers allow for climbing stairs. An optional motorized, telescoping Pan-Tilt-Zoom (PTZ) camera expands the vertical viewing capability of the robot, extending up to 41" (104cm) as well as pivoting 0° - 190° facilitating under-vehicle searches.

Advanced Set-Up - The advanced configuration of the Mini-CALIBER® includes a manipulator arm on a rotating turret with a 10X zoom camera on the claw. The arm will lift objects up to 15lbs, deliver packages and open doors. The zoom camera will reach up to 64" (163cm), high enough to look into car windows and the horizontal reach of 50" (128cm) allows for under vehicle searches. Panning and tilting the zoom camera is controlled by moving the claw.

PAYLOADS

CBRNE detectors and sensors can be mounted onto the deck of the robot chassis, assisting first responders in identifying hazardous items. Contact your ICOR representative for complete details.

MOBILITY

The compact platform measures less than 16" (40cm) wide, allowing it to drive down aisles of planes, buses and other confined spaces. Powerful 24V DC variable drive motors achieve speeds up to 2.5 mph (4 km/h) and handle rough terrain, rocks and snow with ease. The polyurethane tracks and articulating front and rear flippers allow the robot to effortlessly climb stairs and other angles between 40° and 45°.

COMMAND & CONTROL UNIT (CCU)

Weighing only 5.2lbs (2.3 kg) the handheld CCU is truly

portable and intuitive to use. The robot is controlled through a variable speed joystick and incorporates 2-way audio for crisis negotiation. Clear images are transmitted to the 5.8" (14.7cm) LCD daylight readable screen over a wireless RF system.

MULTIPLE MISSIONS

- Surveillance / Reconnaissance
- Inspection of planes, trains & buses
- Barricaded suspect / crisis negotiation
- Deliver / retrieve packages
- Open doors and move objects
- Under-vehicle inspection
- IEDD identification & disposal
- Intelligence gathering



Man portable
Mini-CALIBER®

*Images subject to change.

Standard Features & Capacities

FEATURE	DESCRIPTION
Front Drive Camera	One wide angle IR color CCD camera mounted in front of chassis
Rear Drive Camera	One wide angle IR color CCD camera mounted in rear of chassis
Drive System	<ul style="list-style-type: none"> • Variable drive speed from 0 to 2.5 mph (4 km/h) • 2 drive modes - Stair Climbing and Standard • Chain Drive motors with polyurethane tracks • 0° turning circle
Front/Rear Flippers	<ul style="list-style-type: none"> • Front & Rear articulating flippers for stair climbing and obstacle clearance • 0° - 270° flipper rotation with positional feedback • Pre-set position for stair approach with LED indicator • Pre-set position for stair climbing (flat) with LED indicator • Pre-set position for stowage (home button) • User programmable pre-sets
Robot Battery Pack	<ul style="list-style-type: none"> • 24V DC, 9.6Ah Lithium-Iron-Phosphate (LFP) rechargeable batteries • Battery Chargers included • Up to 3 - 5 hours run time (mission dependent)
Command & Control Unit (CCU)	<ul style="list-style-type: none"> • Handheld, portable CCU • Variable Speed Joystick Control • 5.8" (14.7cm) LCD daylight readable anti-glare screen • Weight: 5.2lbs (2.3kg); 5.7lbs (2.5kg) w/ Firing Circuit Key • Lithium-Ion Battery • LED function status indicator • Diagnostic tether cable • Weather resistant
RF Communications	<ul style="list-style-type: none"> • Wireless RF Video, Data, and Digital Audio • Approximately 1,000 ft operating distance
2 - Way Audio	<ul style="list-style-type: none"> • Digital 2-way (talk/listen) • PTT headset with adjustable volume • Omni-directional microphone on robot • Weather resistant speaker
Training Course	One day Robot Operation and Maintenance course. Either at ICOR or customers facility
WARRANTY	2-YEAR LIMITED WARRANTY
TECHNICAL SUPPORT	UNLIMITED TECHNICAL SUPPORT

Optional Features

FEATURE	DESCRIPTION
PTZ Camera	<ul style="list-style-type: none"> • Pan-Tilt-Zoom Color Camera with 10x optical zoom • Shoulder range: 0° - 190° • Motorized telescoping pole, up to 41" (104cm) * Telescoping PTZ is not available with Claw Arm
Claw Arm	<ul style="list-style-type: none"> • 5 axis arm on rotating turret • Turret rotate: + / - 95° • Claw rotate: 360° Continuous Rotation • Max 64" (163 cm) Vertical Reach • Max 50" (128 cm) Horizontal Reach • 15lbs (6.8 kg) lift capacity • Wide angle Claw Camera • Color zoom camera with 10x optical zoom • LED indicator for turret home position (allows for safe stowage of arm)
Firing System	One independent, isolated firing circuit w/ removable key switch for RSP tools and/or breaching
Shock Tube Initiator	1 Channel Shock Tube Initiator with attachment mounts
Handheld Screen	Secondary handheld, portable, RF wireless LCD screen. Ideal for SWAT entry teams to view images from robot.

General Capacities

Width	15.8" (40 cm)
Height	9.5" (24 cm)
Length	<ul style="list-style-type: none"> • 24" (60 cm) Flippers Stowed • 33.8" (86cm) Flippers Deployed
Ground Clearance	1.5" (3.8 cm)
Weight	40 lbs (18 kg) - Basic Set-up 60 lbs (27 kg) - Advanced Set-up
Stair Climbing Angle	40° - 45° depending on stair structure (with front and rear flippers)
Weather Resistance	Environmentally sealed; chem.-bio wash down capability



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