

MK3 - CALIBER® MEDIUM EOD ROBOT

Articulating Dual Weapons Turret



Claw Attachment Kit



Lifts up to 65 lbs (30kg)



X-ray Mount



Arms fold back for easy storage



Extended Disrupter Reach



Portable Command Control Unit (CCU)



Climbs Stairs



Drags / tows bodies

MULTI-USE

The MK3 - CALIBER® EOD robot satisfies a growing need for a medium-size platform that offers the towing and dragging capability of a larger robot, but with the speed, agility and dexterity of smaller lightweight platforms.

COST EFFICIENT / MODULAR

Equipped with a heavy duty claw and rotating Twin-Disrupter Turret the MK3 - CALIBER® offers mission critical dependent features at low cost. Based on recommendations from bomb technicians, the robot is completely modular, allowing for easy platform upgrades, field repair and part replacement and reduces annual maintenance costs.

MULTIPLE WEAPONS

The unique 355° rotating, 180° tilting Twin-Disrupter Turret provides unparalleled aiming capability of 2 recoilless disrupters. Integrated Cross hairs on the CCU screen with 4 green lasers and 2 color cameras are used for sighting weapons. 4 independent firing circuits are used for initiating disrupters, bottle charges or x-ray systems. An optional mount for a Benelli M4 shotgun is also available.

MANEUVRABLE

A 3-speed transmission accelerates the robot up to 5 mph (8 km/h) while providing the low end torque to climb steep stairs and drag bodies. The 6 x 6 all wheel chain drive, fitted with the rubber tracks can maneuver over all types of rugged terrain including snow and sand.

COMMAND & CONTROL UNIT (CCU)

The weather resistant CCU provides precise, simultaneous operation using the variable speed drive joystick and dedicated Pan-Tilt-Zoom (PTZ) Camera joystick. An intuitive 3D layout of the robot on the deck of the CCU includes backlit buttons and user feedback ensuring ease of use during operations. The low reflection 15" (38.1cm) LCD color screen shows clear images in both bright and low light conditions from any of the 6 color cameras. To minimize unsafe actions,

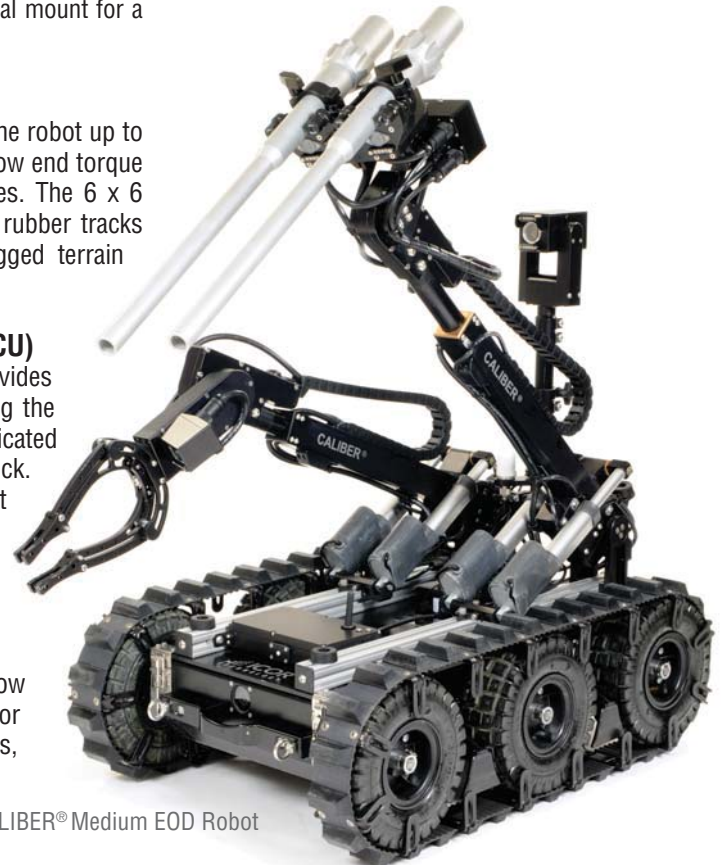
the CCU requires a two-step function for firing disrupters or weapons by featuring a removable key switch and dual push-button operation. Video jacks allow for camera output to an auxiliary monitor. Audio jacks allow for output to powered speakers or input of a MP3 player. Optional features include Picture-in-Picture (PIP) (COFDM only) and Digital Video Recorder for recording MPEG and JPEG and audio. Please see the CCU datasheet for more details on CCU Features.

MISSION TIME

24 VDC quick-change rechargeable batteries extend your mission time to 3 – 5 hours (mission dependant). Feedback screen on CCU indicates battery status of robot and CCU. It literally takes seconds to swap batteries or you can charge the battery without removing it from the chassis.

DEPLOYED WORLDWIDE

Law enforcement agencies throughout the USA, Canada, Europe, Middle East and Asia currently deploy the MK3 - CALIBER® EOD/SWAT Robot.



MK3 - CALIBER® Medium EOD Robot

Standard Features & Capacities

FEATURE	DESCRIPTION
Drive System	<ul style="list-style-type: none"> • 6x6 All wheel chain drive with 3-speed transmission • Pneumatic tires with quick release coupler (tire size: 10.0"/25.0 cm). • Rubber Tracks over pneumatic tires; includes anti-flip bar • Low Gear: Stair Climbing > 1 mph (1.6 km/h) • Med. Gear: 0-2 mph (0-3.2 km/h) • High Gear: 0-5mph (0-8 km/h)
CCU	<ul style="list-style-type: none"> • Command and Control Unit to operate robot • Multi-function control, with simultaneous use of variable speed joysticks • Dedicated joystick for PTZ camera • 15" (38.1cm) bright daylight readable LCD Screen • Battery status indicator • Video jacks output to auxiliary monitor • Audio output and MP3 audio inputs • Weather resistant
RF System	Wireless system (900 MHz data, 2.4 GHz video)
Robot Battery Pack	2 x 13A/h, 24 VDC, quick-change, rechargeable, lead-acid battery
Battery Chargers	<ul style="list-style-type: none"> • 1 x Robot: 24 VDC/110 or 220 VAC • 1 x CCU: 12 VDC/110 or 220 VAC
Robotic Claw on Telescoping Arm	<ul style="list-style-type: none"> • 3 axis, 360° rotating claw • 1 x color camera • 1 x LED light • 10" (25cm) claw opening • 71.5" (181 cm) Vertical Reach; 30" (76 cm) Horizontal Reach from Chassis • 1 x Firing Circuit • Shoulder Range: 0-100° • Lift capacity: 65lbs (29.5kg)
Twin-Disrupter Turret on Telescoping Arm	<ul style="list-style-type: none"> • 2 x mounting brackets for recoilless disrupters <i>(*Note: use only recoilless disrupters)</i> • 2 x Color Weapon Cameras CCD • 4 x Aiming Green Lasers • 2 x Firing Circuits • 2 x LED Lights • Turret Rotate: 0-355° • Turret Tilt: 0-180° • Motorized Arm Extension: 16" (41cm) travel • Shoulder Range: 0-100°
PTZ Camera	<ul style="list-style-type: none"> • Pan- Tilt-Zoom (PTZ) color camera • 26 X optical zoom • 2 x LED light • 360° continuous rotation • Folds down for transportation • Telescopic height adjustment (manual)
Front Drive Camera	Infrared Color CCD
Back Drive Camera	Infrared Color CCD, adjustable
LED Lights	4 sets of LED lights (chassis, arms and PTZ camera)
Hardwire Tether	Standard 500 ft. (153m) tether reel with Slip Ring; used as an alternative to RF control
Digital 2 - Way Audio	Two-way communication (talk/listen) with transmitter, receivers and PTT headset; audio in/out ports to connect to MP3 player or external speakers
Robot Deck	Backlit on/off switch; 1 x Firing Circuit
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
Digital COFDM Video System	Upgrade to a true COFDM digital system. Operating in 1.14 GHz and 1.4 GHz ensures transmission of video images free of distortion up to 1 Km non-line of sight. Ideal for mobile and urban environments.
Picture-in-Picture	Optional Quad screen Picture-in-Picture (PIP) allows for simultaneous viewing of four cameras.
Digital Video Recorder	Hardwired into CCU case. Records up to 120GB of video and audio on an HDD & SD Card memory storage with USB 2.0 PC interface – MPEG-4, JPEG capable. Integrated 3.5" (8.8cm) color LCD screen
Claw Attachment Kit	Set of 10 tools for CALIBER [®] claw includes: window breaker, tire deflator, finger extension, cutting hook, utility knife, multiple effectors and hook & line accessories
Spare Parts Kit	Set of basic spare parts for CALIBER [®]
X-ray Mount	X-ray mounting bracket for Vidisco XR-200 OR XR-300. <i>(Please call for other systems)</i>
Truck Mount	External truck brackets for RF system
Handheld Controller Unit	Lightweight HCU connected via tether input providing full motor control of robotic arms, drive system and LED lights
Handheld Screen	Secondary portable wireless RF LCD Screen. Ideal for SWAT entry teams.
Shock Tube Initiator	2 Channel Shock Tube Initiator with attachment mounts
Ramps	Set of lightweight, folding aluminum ramps for truck deployment
Auxiliary Pole Camera	Extendable Camera Pole mounts into weapons arm to add up to 74" (188 cm) of vertical surveillance
RF Extender	Increases Video and Data RF distance
Heavy Duty Transit Case	Ideal for repeated shipping of robot.
Extra Battery Charger	Additional battery charger for either the robot battery or CCU battery
Motorized PTZ	Control for motorized, telescoping mast for Pan-Tilt-Zoom (PTZ) Camera max reach of 55" (140 cm)
Motorized Anti-flip	Control for motorized anti-flip bar to shorten robot chassis in confined spaces
Fiber Optic Reel	1000' (305m) milspec fiber-optic tether reel with auto-spooler for use as a backup to RF control of the CALIBER [®] robot

General Capacities

Mission Time	3 – 5 hours +, mission dependent
Width	23.75" (60.3 cm)
Height (Stowed Position)	22" (56 cm)
Length	33" (84 cm)
Ground Clearance	2.25" (5.7 cm) - allows for driving in snow and sand
Weight	185 lbs (84 kg)
Drag Capacity	250 lbs (113 kg)
Stair Climbing Angle	40° - 45° depending on stair structure
Weather Resistance	Environmentally sealed; chem.-bio wash down capability

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