

MK3 CALIBER® EOD ROBOT

Articulating Twin Disruptor Turret



Claw Attachment Kit



Lifts up to 65 lbs (29 kg)



X-ray Mount



Arms fold back for easy storage



Extended Disruptor Reach



Portable Command & Control Unit (CCU)



Climbs Stairs

Drags and Tows

MULTI-USE

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

COST EFFICIENT / MODULAR

The MK3 CALIBER® offers mission critical dependent features at a low cost. The robot's modular design, based on bomb technicians' recommendations, results in reduced maintenance costs through easy platform upgrades, field repair, and part replacement.

MULTIPLE WEAPONS

The 315° rotating, 250° tilting Twin-Disruptor Turret provides unparalleled aiming capability for 2 recoilless disruptors. Aiming each weapon is accomplished with integrated cross-hairs on the CCU screen, 2 green lasers and 1 color camera per weapon. Four independent firing circuits are used for initiating recoilless disruptors, and other RSP or x-ray systems.

MANEUVERABLE

The MK3 CALIBER® accelerates up to 5 mph (8 km/h) due to its drive motors, 6X6 pneumatic wheels, rubber tracks, and 3-speed drive system. The low end speed provides the torque needed to climb steep stairs and easily navigate all types of rugged terrain including snow and sand.

COMMAND & CONTROL UNIT (CCU)

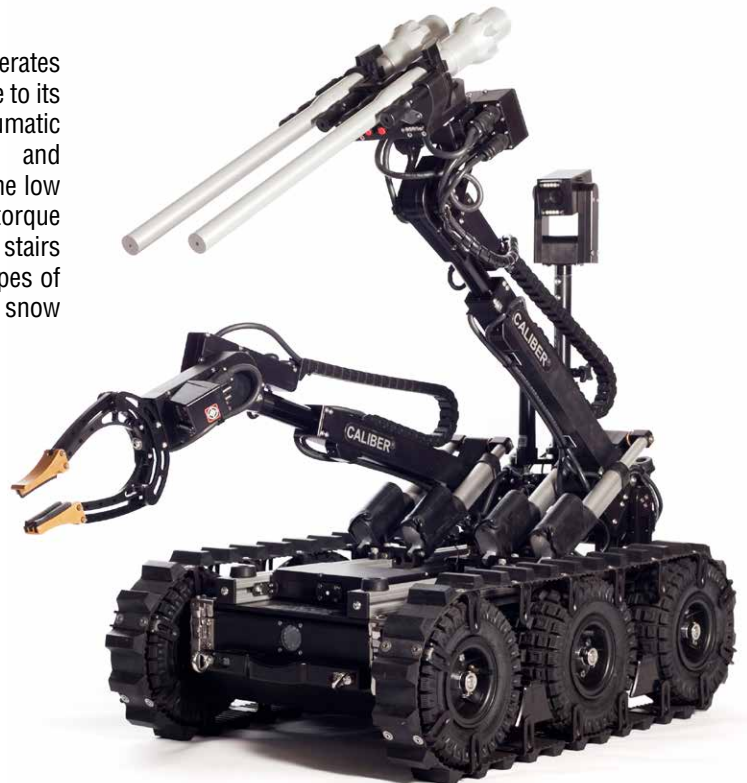
The weather resistant CCU's low reflection 15" (38 cm) LCD color screen shows clear images in both bright and low light conditions from any of the 6 color cameras on the robot. The CCU provides precise operation of the MK3 CALIBER® using the variable speed joystick and a real-time dedicated Pan-Tilt-Zoom (PTZ) camera joystick. It also provides easy operation through its on deck 3-D robot layout, LED button indicators, and user feedback.

MISSION TIME

Two robot battery packs are included in the standard package. Each battery pack powers the robot for 3 – 5 hours (mission dependent) on a single charge. Batteries can be swapped in seconds, which extends mission duration.

DEPLOYED WORLDWIDE

The MK3 CALIBER® is in use by law enforcement agencies throughout the USA, Canada, Europe, Latin America, Middle East, and Asia.



MK3 CALIBER® EOD Robot

Standard Features

| FEATURE | DESCRIPTION |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Drive System | <ul style="list-style-type: none"> • 3-speed, 6x6, all-wheel drive system • 6 Pneumatic tires with quick release coupler • Rubber Tracks over pneumatic tires • Manual Anti-flip bar for climbing stairs • Low Gear: Stair Climbing > 1 mph (1.6 km/h) • Med. Gear: 0-2 mph (0-3.2 km/h) • High Gear: 0-5 mph (0-8 km/h) |
| Robotic Claw on Telescoping Arm | <ul style="list-style-type: none"> • Claw with 360° continuous rotation, 10" (25 cm) opening and rubber lined effectors • 1 x Color CCD Camera with LED lights • 10" (25 cm) claw opening • 71" (180 cm) Vertical Reach • 26" (66 cm) Horizontal Reach from Chassis • 1 x 24V Firing Circuit • Shoulder Range: 0-100° • Lift capacity: 65 lbs (29 kg) |
| Twin-Disruptor Turret on Telescoping Arm | <ul style="list-style-type: none"> • 2 x mounting brackets for recoilless disruptors (*Note: use only recoilless disruptors) • 2 x Color CCD Weapon Cameras • 4 x Aiming Green Lasers • 2 x 24V Firing Circuits • 2 x LED Lights • Turret Rotate: 0-315° • Turret Tilt: 0-250° • Motorized Arm Extension: 16" (41 cm) travel • Shoulder Range: 0-100° |
| PTZ Camera | <ul style="list-style-type: none"> • Pan-Tilt-Zoom (PTZ) color camera • 36X optical zoom color camera with LED lights • 360° continuous rotation • Folds down for transportation • Manual Telescopic height adjustment |
| Front/Rear Drive Cameras | Color CCD cameras with IR light. |
| Robot Deck | <ul style="list-style-type: none"> • Backlit power switch • 1 x 24V Firing Circuit • LED Lights |
| Hardwire Tether | Standard 500 ft. (152 m) tether reel with Slip Ring; used as an alternative to RF control. |
| Robot Battery Pack | 2 x 13 Ah, 24V DC, quick-change, rechargeable, lead-acid battery. |
| Battery Chargers | <ul style="list-style-type: none"> • 1 x Robot: 24V DC/110 or 220V AC • 1 x CCU: 12V DC/110 or 220V AC |
| CCU | <ul style="list-style-type: none"> • Command and Control Unit to operate robot • Multi-function control, variable speed joystick • 15" (38 cm) daylight readable LCD Screen • Battery status indicator • Video jack output to auxiliary monitor • Audio output and MP3 audio input • Weather resistant |
| RF System | Data and Video RF wireless systems. |
| Digital 2 - Way Audio | Two-way (talk/listen) PTT communication with headset; audio in/out ports to connect to MP3 player or external speakers. |
| Training Course | One day Robot Operation and Maintenance course (either at ICOR or customer's facility). |
| WARRANTY | 2-YEAR LIMITED WARRANTY |
| TECHNICAL SUPPORT | UNLIMITED TECHNICAL SUPPORT customerservice@icortechnology.com |

Optional Features

| FEATURE | DESCRIPTION |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Command Post Video Transmitter (CPV) | The CPV allows real time viewing of CCU video, broadcast to 4 devices simultaneously as far as 300' (91m) LOS. With a 12V battery the CPV can last up to 5 hours (mission dependent). |
| Digital COFDM Video System | Upgrade to a true COFDM digital video system. Ensures transmission of video images free of distortion up to 3280' (1000 m) LOS in optimum conditions. Ideal for mobile and urban environments. |
| Picture-in-Picture | Quad screen Picture-in-Picture (PIP) allows for simultaneous viewing of four cameras. |
| Digital Video Recorder | Integrated into the hardshell case of the CALIBER [®] CCU. The DVR captures video and pictures up to 320GB. Built-in 5" (13 cm) LCD Touch Screen. |
| FLIR [®] Thermal Image Camera | The thermal imaging camera displays heat signatures in color and is mounted in place of the PTZ camera. |
| Claw Attachment Kit | Set of 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 [®] Robot. |
| X-ray Mount | Mounting bracket for major x-ray systems. |
| Truck Mount | External truck brackets for RF system. |
| Handheld Controller Unit | Lightweight HCU connected via tether input port provides full motor control of robotic arm, drive system and LED lights. Wireless Bluetooth model also available. |
| Handheld Screen | Secondary portable wireless RF LCD Screen to see images from robot cameras. Ideal for SWAT entry teams. |
| Shock Tube Initiator | 2-Channel Shock Tube Initiator with attachment mounts. |
| Auxiliary Pole Camera | Manually extendable Camera Pole fastens onto disruptor mount to provide a surveillance option up to 142" (361 cm) above ground, or provides remote under-vehicle video inspections. |
| RF Extender | Increases Video/Data distance up to 500 ft. (152m) and overcome LOS issues. |
| Motorized PTZ | Remotely controlled telescoping PTZ mast allows the camera to reach a height of 56" (142 cm) from the ground. |
| Motorized Anti-flip | Remotely stowable anti-flip bar allows for climbing stairs and navigating confined spaces by shortening robot's chassis. |
| Fiber Optic Reel | 1000' (305m) milspec fiber-optic tether reel with motorized spooler for use as a backup to RF control. |

Specifications

| | |
|--------------------------|--------------------------------------------------------|
| Mission Time | 3 – 5 hours +, mission dependent |
| Width | 24" (61 cm) |
| Height (Stowed Position) | 22.5" (57 cm) |
| Length | 36.5" (93 cm) |
| Ground Clearance | 3" (8 cm) - allows for driving in snow and sand |
| Weight | 197 lbs (89 kg) with batteries |
| Drag Capacity | 250 lbs (113 kg) |
| Stair Climbing Angle | 40° - 45° depending on stair structure |
| Weather Resistance | Environmentally sealed; chem.-bio wash down capability |
| Third Party Tested | NIST |