MK3 CALIBER®

EOD ROBOT

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

#### Specifications

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard Features</strong></td>
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| Drive System | • 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 | • 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 | • 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 | • Pan-Tilt-Zoom (PTZ) color camera  
• 360° optical zoom 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 | • 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 | • 1 x Robot: 24V DC/110 or 220V AC  
• 1 x CCU: 12V DC/110 or 220V AC |
| CCU | • 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

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<tr>
<td>Command Post Video Transmitter (CPV)</td>
<td>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).</td>
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<tr>
<td>Digital COFDM Video System</td>
<td>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.</td>
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<tr>
<td>Picture-in-Picture</td>
<td>Quad screen Picture-in-Picture (PIP) allows for simultaneous viewing of four cameras.</td>
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<tr>
<td>Digital Video Recorder</td>
<td>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.</td>
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<td>FLIR® Thermal Image Camera</td>
<td>The thermal imaging camera displays heat signatures in color and is mounted in place of the PTZ camera.</td>
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<td>Claw Attachment Kit</td>
<td>Set of tools for CALIBER® claw includes: window breaker, tire deflator, finger extension, cutting hook, utility knife, multiple effectors and hook &amp; line accessories.</td>
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<tr>
<td>Spare Parts Kit</td>
<td>Set of basic spare parts for CALIBER® Robot.</td>
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<tr>
<td>X-ray Mount</td>
<td>Mounting bracket for major x-ray systems.</td>
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<td>Truck Mount</td>
<td>External truck brackets for RF system.</td>
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<tr>
<td>Handheld Controller Unit</td>
<td>Lightweight HCU connected via tether input port provides full motor control of robotic arm, drive system and LED lights. Wireless Bluetooth model also available.</td>
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<td>Handheld Screen</td>
<td>Secondary portable wireless RF LCD Screen to see images from robot cameras. Ideal for SWAT entry teams.</td>
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<td>Shock Tube Initiator</td>
<td>2-Channel Shock Tube Initiator with attachment mounts.</td>
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<td>Auxiliary Pole Camera</td>
<td>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.</td>
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<td>RF Extender</td>
<td>Increases Video/Data distance up to 500 ft. (152m) and overcome LOS issues.</td>
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<td>Motorized PTZ</td>
<td>Remotely controlled telescoping PTZ mast allows the camera to reach a height of 56” (142 cm) from the ground.</td>
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<td>Motorized Anti-flip</td>
<td>Remotely stowable anti-flip bar allows for climbing stairs and navigating confined spaces by shortening robot’s chassis.</td>
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<td>Fiber Optic Reel</td>
<td>1000’ (305m) milspec fiber-optic tether reel with motorized spooler for use as a backup to RF control.</td>
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### 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