

CALIBER® MK4 LARGE EOD ROBOT

MULTI-USE

The CALIBER® MK4 EOD robot is the biggest robot in the CALIBER® family with unprecedented towing and dragging capability coupled with speed, agility, and dexterity

MANEUVERABLE

The variable speed drive system accelerates the robot up to 2 mph (3.2 km/h). The low end torque allows the CALIBER® MK4 to climb stairs and drag a fully loaded battle wagon for VBIED countermeasures. The rubber tracks can maneuver over various types of rugged terrain including snow, mud, and sand.

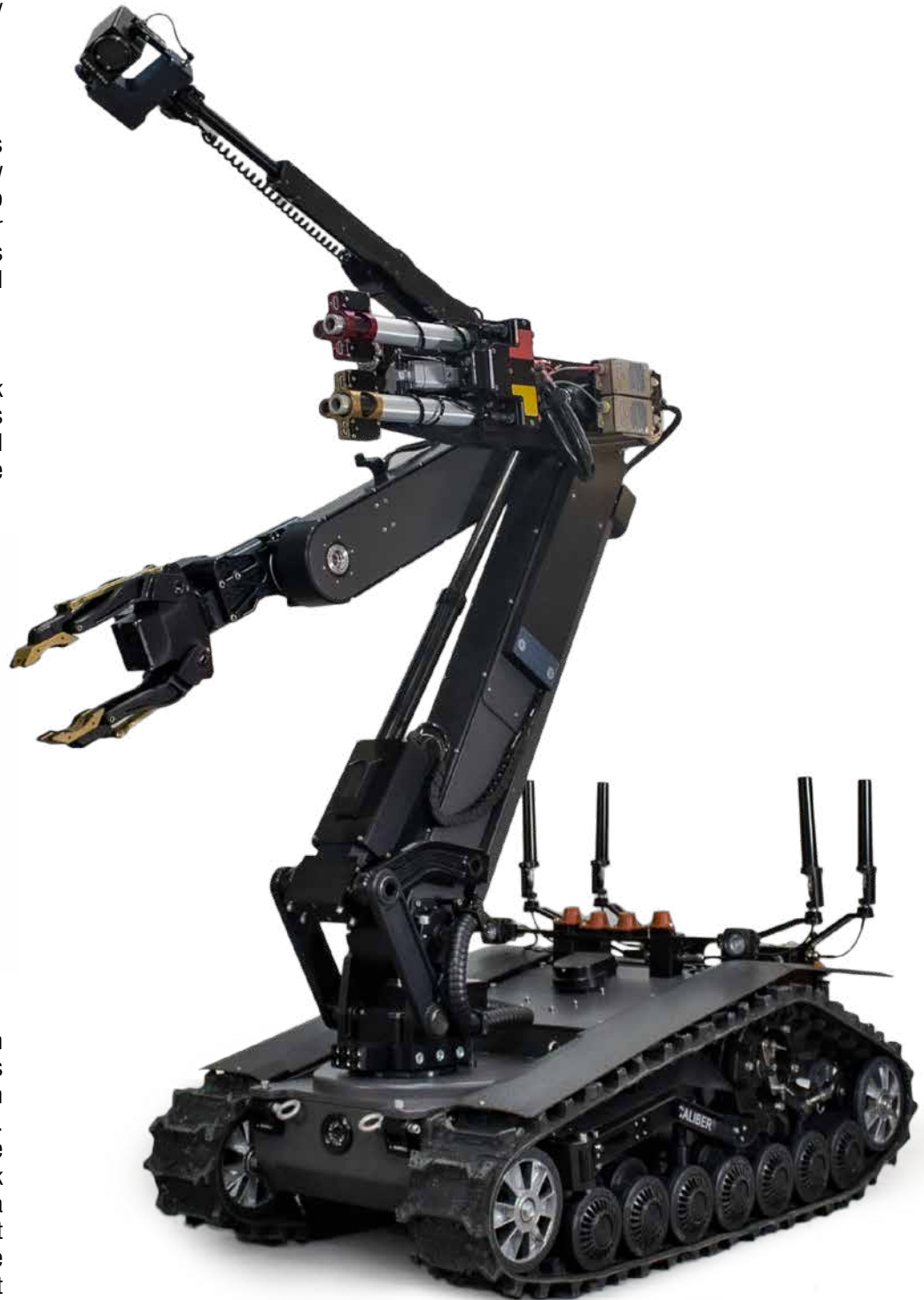
MISSION TIME

One 48V DC quick change battery pack extends your mission time by up to 5 hours (mission dependent). It also reduces the need to change batteries during the mission. The CCU screen indicates real-time battery status



COMMAND & CONTROL UNIT (CCU)

The weather resistant CCU's low reflection LCD color TOUCH screen shows clear images in both bright and low light conditions from any of the 7 color cameras on the robot. The CCU provides precise operation of the CALIBER® MK4 using variable speed joystick and dedicated Pan-Tilt-Zoom (PTZ) Camera joystick. Also included is a 3-D avatar that provides real-time positional feedback on the actual position of the robot. Automatic preset positioning facilitates robot deployment.



CALIBER® MK4 Large EOD Robot

Standard Features

FEATURE	DESCRIPTION
Drive System	<ul style="list-style-type: none"> • Rubber Track System with 3-speed drive system • Speed up to 2 mph (3.2 km/h) • Manual quick release to shift drivetrain into neutral • Two outriggers stabilizers
CCU	<ul style="list-style-type: none"> • Command Control Unit to operate robot • Multi-function control, variable speed joystick • 2 x 15" (38 cm) daylight readable touch screen • 3-D avatar with real-time positional feedback • Auto stow and preset positions • Firing key, arm & fire buttons • Weather resistant • Operates from AC power • HDMI and USB ports • Quad screen Picture-in-Picture (PIP)
RF System	Wireless IP mesh radios system ensures transmission of data, audio, and video images free of distortion up to 1 km. Ideal for mobile and urban environments.
Robot Battery Pack	26 Ah, 48V DC, quick-change, rechargeable, lead-acid battery.
Battery Chargers	<ul style="list-style-type: none"> • 1 x Smart robot battery charger with balanced individual cell charging • 24V DC/110 or 220V AC
Lift Capacity	<ul style="list-style-type: none"> • Arm Retracted: 200 lbs (90 kg) • Arm Extended with Outriggers: 100 lbs (45 kg)
Claw Arm	<ul style="list-style-type: none"> • 5 axis arm including 360° rotating claw • 2 x Standard Picatinny rail on claw • 1 x Color CCD camera • 1 x LED light • 12" (30 cm) Gripper opening • 113" (287 cm) Vertical Reach • 86" (218 cm) Horizontal Reach from Chassis • 2 x 24V Firing Circuit • 1x Green Aiming Laser • 100 lbs (45 kg) clamping force • LIDAR distance measuring sensor • Linear telescoping mode
Weapons Arm	<ul style="list-style-type: none"> • 2 x Color CCD Weapon Cameras • 4 x Green Aiming Lasers • 2 x 24V Firing Circuits (2 x weapons) • 2 x LED lights • LIDAR distance measuring sensor • On screen Cross hairs for aiming • Turret Rotate: +/-90° • Turret Tilt: 0-90° • Linear telescoping mode
PTZ Camera Arm	<ul style="list-style-type: none"> • Motorized Pan-Tilt-Zoom (PTZ) color CCD camera • 30X optical zoom color camera with LED lights • 360° continuous rotation • Preset home position • Motorized telescopic height adjustment 9' (2.7 m)
Front/Rear Drive Cameras	Color CCD cameras with IR light.
Shoulder Camera	Color CCD camera.
LED Lights	Front, Rear, Flood Lights, Arms and PTZ camera.
Tow Hitch	Motorized Tow Hitch: remotely adjustable tow hitch for towing battle wagon. Can be adjusted for Vertical or Horizontal clamping.
Walkalong controller	Wired controller for loading and unloading robot.
Hardwire Tether	Standard 500' (152 m) tether reel with Slip Ring; used as an alternative to RF control.
Digital 2 - Way Audio	Two-way communication (talk/listen). PTT with volume adjustable headset.
Concealed Off Switch	Hidden on/off switch.

Training Course	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
Spare Parts Kit	Set of basic spare parts for CALIBER® robot.
X-ray Mount	X-ray mounting bracket for major X-ray brands and OpenVision™ live video X-ray system.
Truck Mount	External truck brackets for wireless system.
Shock Tube Initiator	Shock Tube Initiator with attachment mounts on weapons and/or claw arm.
FLIR® Thermal Image Camera	The thermal imaging camera displays heat signatures in color or B/W and is mounted in place of the PTZ camera.
Claw Kit	Set of tools for the MK4 CALIBER® claw that includes: window breaker, tire deflator, finger extension, cutting hook, utility knife, multiple effectors and hook & line accessories, and digging/probing tools.
CCU Power Pack	The CCU Power Pack powers the CCU when AC power is not available and is ideal for using the CCU in remote locations.
Universal Disrupter Mount	Disrupters mount with interchangeable mounting blocks for commonly used disrupters.
Fiber Optic Reel	1000' (305m) milspec fiber-optic tether reel with motorized spooler for use as a backup to RF control.



Specifications

Mission Time	2 – 5 hours+ (mission dependent)
Width	29.5" (75 cm)
Height (Stowed Position)	34.5" (87 cm)
Length	55" (140 cm)
Weight	770 lbs (350 kg) with batteries
Stair Climbing Angle	40°
Weather	Environmentally sealed; chem.-bio wash down capability
Third Party Tested	NIST