

## Performance Specifications and Features - MATILDA II Robotic Platform

Item	Specifications	Features
<b>Basic System</b>		
<b>Platform / Mobile Base Unit</b>   <b>Block II</b>	<b>Platform (MBU):</b> Size: 21"W x 12"H x 30"L Weight: 61 Lb. Batteries: 12 VDC NiMH (4 Rechargeable Packs) Operating Time: 6 -10 hrs. Speed: 2 mph Payload Bay Dimensions: 13.5"W x 16.5"L Payload Capacity: 125 Lb. Towing Capacity: 225 Lb. Fording Depth: 6 in. Ground Clearance: 3 In. Zero Turn Radius Climbs 50° Stairs	Man Packable Standard Payload Interface Mount Pan & Tilt Driving Camera Assembly: Color, B & W Driving Cameras Fixed B & W Rear Camera Two-Way Audio RF and Fiber Optic Control  Extended Length Track Packs are Available (Adds 4" in Length and 2.5 Lb.)  All-Weather Operation  Range: 700 meters
<b>Briefcase Operator Control Unit (OCU)</b> 	<b>Briefcase OCU:</b> Weight: 25 Lb. Power: 12 VDC NiMH, 120 VAC Adapter	900 MHz Digital Control, 1.8 or 2.4 GHz Analog Video System  12.1" Daylight Readable Display  4 Control Joy Sticks: 1 - Vehicle Control, 1 - Camera Control, 2 – Manipulator Control  8 Remote Switch Functions  Key Features: Full Manipulator Functionality, Built-In Firing Circuit
<b>Handheld Operator Control Unit</b> 	<b>Handheld OCU / Backpack:</b> Total Weight: 23 Lb. Power: 12 VDC NiMH  120 VAC Adapter	900 MHz Digital Control, 1.8 or 2.4 GHz Analog Video System,  6.4" Daylight Readable Display, Auxiliary 13" Flat Panel Display Available  2 Control Joy Sticks: 1 – Vehicle Control, 1 – Camera Control  Switchable Manipulator Control 8 Remote Switch Functions
<b>Battery Charging Unit</b> 	Voltage Input Range: 90 - 240 VAC, 48 to 62 Hz, <u>or</u> 22 to 32 VDC Weight: 20 Lb.	Charges 10 NiMH Battery Packs Simultaneously Charge Time: 2 hrs on Fully Depleted Batteries Auto Trickle Charge NATO Cable Available Designed Specifically for Mesa NiMH Batteries
<b>Support/Training:</b> Operation and Maintenance Manual (Hardcopy and CD ROM); Training at MRI or Customer Site, Six month Warranty; Factory Service, Maintenance, and Spare Parts		

Options / Attachments		
<b>Manipulator Arm with Zoom Camera Option</b> 	<p>5 dof Movement, 360° Field of Operation</p> <p>Arm Reach: 44 In.</p> <p>Lift Capacity: 35 Lb.</p> <p>Stowed Height (Mounted): 19 In.</p> <p>Extended Height (Mounted): 50 In.</p> <p>Below Grade Reach: 19 In.</p> <p>Weight: 45 Lb. (with Zoom)</p>	<p>Includes Gripper, Incandescent Light &amp; Camera (Color with IR Lights)</p> <p>Utilizes Power from MBU</p> <p>Continuous 360° Rotation on Gripper Wrist</p> <p>Option: 300X Color Zoom (25X Optical, 12X Digital), with Image Stabilization</p>
<b>Recoilless Disrupter Mount</b> 	<p>Weight: 2 Lb.</p>	<p>Specify Mounts for: PAN Recoilless, RE 12-12 or Proparms 20 mm Disrupters</p> <p>Note: Utilizes Duke Pro Shock Tube Initiator</p>
<b>Payload Equipment Mount</b> 	<p>Weight: 10 Lb.</p> <p>Power: 12 VDC</p>	<p>Mount for Sensors, Lights, Cameras, Tactical Tools, and Non-Lethal Weapons</p> <p>Utilizes Power from MBU or Separate Add-on Battery Packs</p>
<b>Fiber Optic Control</b> 	<p>Fiber Length: 300 Meters</p> <p>Weight: 15 Lb.</p>	<p>Spool Payout, Manual Take-Up</p> <p>Mounts with All MATILDA Attachments</p> <p>Option: 500 Meter Fiber Length</p>
<b>Fiber Optic Control with Disposable Spooler</b> 	<p>Fiber Length: 2000 – 10,000 Meters</p> <p>Weight: 4 Lb.</p>	<p>Mounts with All MATILDA Attachments</p>
<b>Tactical Trailers – Two, Four Wheel</b> 	<p>Cargo Area: 18"W x 25"L</p> <p>Payload Capacity: 500 Lb.</p> <p>Cargo Area: 18"W x 20"L</p> <p>Payload Capacity: 250 Lb.</p>	<p>Option: Remote Release</p> 