



# XM8 – US M4 System Comparison



**XM8 Lightweight Modular Weapon System**  
(includes integrated sight with IR laser & illuminator, red dot reflex sight, integrated mount)

**U.S. M4 Modular Weapon System**  
(includes rail attachment system, AN/PEQ-2, AN/PAQ-4, M68 Close Combat Optic, mounts, back-up sights)

	XM8 LMWS	US M4 MWS
• System Weight:	6.4 lbs. current (carbine variant) 5.7 lbs. objective (carbine variant)	8.85 lbs.
• Overall Length:	<ul style="list-style-type: none"> <li>○ Carbine with 12.5” barrel, stock extended/retracted: 33.3”/30.3”</li> <li>○ Compact Carbine with 9” barrel, stock extended/retracted: 29.8”/26.8”</li> <li>○ Compact Carbine with 9” barrel and butt cap: 20.6”</li> <li>○ Sharp Shooter and Automatic Rifle with 20” barrel: 40.2”</li> </ul>	<ul style="list-style-type: none"> <li>○ With 14.5” barrel, buttstock extended/retracted: 33.0”/29.8”</li> </ul>
• System Cost:	<ul style="list-style-type: none"> <li>○ Carbine only: &lt; \$600*</li> <li>○ Carbine with integrated sight: ≈ \$1800*</li> </ul> <p>*Unit costs are estimates only based upon current projected contract quantities.</p>	<ul style="list-style-type: none"> <li>○ Carbine only: &gt; \$900</li> <li>○ Carbine with accessories listed above ≈ \$2539</li> </ul>
• Modularity:	Common receiver with user exchangeable assembly groups (barrel, hand guard, sights, buttstock, carrying handle, accessories). Operator can assemble numerous variants using 100% interchangeable assembly groups to include standard Carbine with 12.5 “ barrel, Compact Carbine with 9” barrel, Automatic Rifle with heavy profile 20” barrel, and Sharp Shooter with Match-grade 20” barrel.	Accessories only.
• Barrel Exchange:	<ul style="list-style-type: none"> <li>○ Possible at user, unit level.</li> <li>○ Takes &lt; 2 minutes.</li> <li>○ Fixed head spacing.</li> <li>○ Interchangeable 10”, 12.5”, 14.5”, 20” barrels without weapon modification.</li> </ul>	<ul style="list-style-type: none"> <li>○ No barrel replacement at user, unit level.</li> <li>○ Takes &gt; 10 minutes.</li> <li>○ No fixed head spacing.</li> <li>○ 14.5” only without extensive weapon modification.</li> </ul>

	XM8 LMWS	US M4 MWS
	<ul style="list-style-type: none"> <li>○ Cold hammer forged construction for optimum durability, accuracy, operator safety.</li> </ul>	
• Operating System:	<ul style="list-style-type: none"> <li>○ Pusher rod gas system.</li> <li>○ No carbon fouling diverted into weapon. Cleaner operation for increased reliability.</li> <li>○ 70% less operator cleaning time.</li> <li>○ Insensitive to barrel length changes, ammunition types, sound suppressor use.</li> <li>○ Functions if full of water without draining.</li> <li>○ Removable by operator without tools.</li> <li>○ No buffer, buffer tube required thus providing overall shorter length with butt cap or folding stock.</li> <li>○ Cartridge case fully supported by bolt head.</li> </ul>	<ul style="list-style-type: none"> <li>○ Direct gas system.</li> <li>○ Fouling directed into operating system; requires extensive operator cleaning</li> <li>○ Does not work well with short barrels.</li> <li>○ Requires removal of water to operate and to avoid system damage.</li> <li>○ Not removable by operator.</li> <li>○ Buffer and buffer tube required for proper function and buttstock attachment.</li> <li>○ Case head not fully supported by bolt head.</li> </ul>
• Bolt System:	<p>6-lug Stoner rotating bolt system with tungsten granulate anti-bolt rebound system for improved reliability.</p> <ul style="list-style-type: none"> <li>○ No gas seal rings.</li> <li>○ Field strips in the same way as the US M16/M4 bolt group to ease training.</li> </ul>	<p>7-lug Stoner rotating bolt system with gas seal rings</p>
• Reliability:	<ul style="list-style-type: none"> <li>○ 20,000 rounds can be fired without cleaning and lubrication without stoppages or parts failures.</li> </ul>	<p>&lt; 6,000 rounds with regular cleaning and lubrication.</p>
• Operator Cleaning Time:	<p>&lt; 4 minutes</p>	<p>&gt; 12 minutes</p>
• Component Service Life:	<p>All parts &gt;20,000 rounds</p>	<p>&lt; 8000 rounds barrel, bolt head, extractor, various small parts</p>
• Cook-Off Rate:	<p>&gt;240 rounds</p>	<p>210 rounds maximum</p>
• Safety Features:	<ol style="list-style-type: none"> <li>1. Manual safety - blocks trigger movement</li> <li>2. Disconnecter safety</li> <li>3. Inertia firing pin</li> <li>4. Barrel blow-out vents – directs catastrophic chamber failure down and away from operator</li> </ol> <ul style="list-style-type: none"> <li>○ Propellant gases expelled forward away from shooter</li> <li>○ Cold hammer forged barrel prevents weapon damage or</li> </ul>	<ol style="list-style-type: none"> <li>1. Manual safety – blocks trigger movement</li> <li>2. Disconnecter safety</li> </ol> <ul style="list-style-type: none"> <li>○ Propellant gases directed back at operator</li> <li>○ Barrel will rupture with barrel obstruction</li> </ul>

	operator, bystander injury or death in the event of a barrel obstruction (projectile, water, debris).	
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• Accessory Mounting:	<ul style="list-style-type: none"> <li>○ No additional weight, bulk, snag hazards added to weapon to attach accessories. Multiple PCAP (Picatinny Combat Attachment Points) positions on hand guard and receiver to allow optimum rear to front positioning of accessories.</li> <li>○ MIL STD 1913 rail adapters planned to allow use of older legacy accessories.</li> <li>○ Flush PCAP provide 100% boresight retention for the targeting devices mounted on receiver.</li> </ul>	<ul style="list-style-type: none"> <li>○ Rail Attachment System (RAS) (without covers) adds 11 ounces to weapon overall weight just to mount accessories.</li> <li>○ MIL STD 1913 rails without 100% boresight retention.</li> </ul>
• Sighting System: (standard issue)	Integrated operator removable 1/1 reflex sight with integrated IR laser and illuminator. Contains electronic red dot and back-up etched ranging reticle with auxiliary emergency iron sight. All devices are mounted on the same optical plain so all three devices are zeroed on the rifle from the factory or in the field by the operator in one operation. Sight uses a single DL123 battery and single wired or wireless remote switch. Mounts to weapon via flush PCAP mounting points and quick release mount that provides 100% zero retention.	Iron sights Optional M68 CCO, AN/PEO-2, AN/PAQ-4 must be mounted and rezeroed separately when mounted on MIL STD 1913 rails.
• Standard Modes of Fire:	Semi-automatic, fully automatic Optional 2 or 3 round burst without “burst memory”	Semi-automatic, fully automatic Optional 3-round burst with “memory”
• Sustained rate of fire:	85 rpm for 210 rds.	50 rpm for 210 rds.
• Ambidextrous Operating Controls:	*Safety, *magazine release, charging handle, *bolt catch/release, forward assist, buttstock locking lever, integrated sight actuation switch. Charging handle operable with weapon in shoulder firing position. (*operate w/ firing hand on pistol grip)	Charging handle, buttstock locking lever. Charging handle not operable with weapon in shoulder firing position.
• Magazines:	High-reliability 30-round transparent box magazines that lock together without magazine clamp. Can be disassembled by operator without tools. Optional high-reliability 100-round dual drum magazine and 10-round box magazines also available.	20 and 30-round aluminum box magazines. Cannot be disassembled without tools and is easily damaged by rough handling. 100 round C-mag drum magazine not reliable in M4 system.
• Buttstock:	Modular. Standard 5 position collapsible stock. Optional fixed “sniper” stock, buttstock, butt cap, folding collapsible stock.	4 position collapsible stock. Not exchangeable by operator.

	Exchangeable by operator without tools.	
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• Zero Drain Time:	Yes. No weapon draining required before firing, even with sound suppressor attached.	No. Bore, gas tube must be drained before firing to prevent weapon damage, operator injury or stoppages.
• Blank Firing Device:	Safety Blank Firing Device. Will catch up to 3 live projectiles if live rounds are fired in blank firing weapon. Prevents weapon damage, operator injury or death during blank firing training.	Standard BFA. Does not protect operator if live rounds are accidentally fired in blank firing weapon. Could result in injury or death.
• Flash Suppressor:	<ul style="list-style-type: none"> <li>o 22mm OD for rifle grenade firing.</li> <li>o 4-prong flash hider for improved flash disruption on short barrels (9", 12.5") to hide muzzle flash.</li> <li>o Standard US-issue closed "bird cage" and QD sound suppressor versions fit all XM8 variants.</li> </ul>	<ul style="list-style-type: none"> <li>o 22mm OD "bird cage" for rifle grenade firing.</li> <li>o Optional QD sound suppressor variant available.</li> </ul>
• Add-on Grenade Launcher:	<p>XM320 40x46mm side-loading launcher with integral sights.</p> <ul style="list-style-type: none"> <li>o Replaces standard hand guard in seconds without tools.</li> <li>o Maintains zero when removed from host weapon.</li> <li>o Accepts all lengths of 40x46mm grenades.</li> </ul>	<p>M203 40x46mm sliding breech launcher with separate sights.</p> <ul style="list-style-type: none"> <li>o Requires rezeroing each time it is removed from host weapon.</li> <li>o Cannot fire longer 40x46mm rounds.</li> </ul>
• Operator Caliber/Feed Modularity:	Can be converted by operator to fire various calibers from assorted magazine types by changing lower receiver and/or barrel and/or bolt group.	Requires the exchange or armorer disassembly of the complete upper receiver with barrel or its component parts.
• MILES and Land Warrior Compatible:	Yes.	Yes.
• Compliant with USAIC FCR draft ORD specs:	Yes. 67 out of 70 specifications	No.
• Compliant with USSOCOM SCAR-L draft ORD spec dated 9/3/03	Yes. With the addition of available MIL STD 1913 rails	No.
• Production Location:	U.S. – Columbus, GA	U.S. – Hartford, CT

