

The Flex Force ASP is the first (and currently only) system in a new category of actively stabilized, locally-controlled crew-served weapon mounts. Unlike simple gimbals, ASP actively corrects for platform motion in pitch, roll and yaw. With optional laser range finder (LRF) and inertial navigation system (INS) the ASP can correct for platform linear motion (e.g. geo-track a specific point on earth or in the air, versus maintaining aim in a purely inertial reference frame). Unlike remote control weapon systems, all ASP capabilities are available to an operator collocated with the weapon, holding the weapon grip, without relying upon expensive, sensitive cameras or trouble-prone trigger and charging actuators. The safety-review process is greatly simplified because the operator directly actuates the trigger.

This new class of weapon system has the following advantages:

- preserves complete situational awareness
- feels immediately familiar to operators, in manual/free-motion mode
- has low maintenance requirements
- is accurate—performance comparable to an advanced remote control system with target tracking disabled
- weighs half as much as a remote weapon station, requiring no structural modifications for most vehicles
- is simple and reliable, lacking many of the high-failure components of a remote control stations
- does not require additional passenger or cargo space in the vehicle or vessel interior

System Specifications	
Size	.50 Cal ASP: 19.3" w x 39.4" l x 20.4" h 7.62 mm ASP: 15.7" w x 21.9" l x 17.1" h
Weight	.50 Cal ASP: 125 to 170 lbs. depending on configuration 7.62 mm ASP: 85 lbs.
Voltage	28 VDC Nominal (18-33 VDC)
Power draw	3 to 7 amps Nominal (30/60/80 amps peak depending on version)
MIL STD design.	MIL-STD-810G; Environmental Test Methods and Engineering Guidelines MIL-STD-167-1A; Mechanical Vibration of Shipboard Equipment MIL-STD-901G; High Impact Shock Tests MIL-STD-461; Electro-Magnetic Interference Test Methods MIL-STD-464A; Electromagnetic Environment Effects MIL-STD-882D; Standard Practice for System Safety
Field-of-Regard; Azimuth	Sea/Land: 350° AZ Fixed/Rotary Wing: 350° AZ (Safety stops set to Forward Field of Fire 85°, Aft FOF 75° at the factory)
Field-of-Regard; Elevation	Sea/Land: -20° to +60° EL Fixed/Rotary Wing: +1.5° to -70°
Motion Limits	Configurable AZ Safety Hard Stops in 5° Increments
Peak Slew Rate	> 100° per second
Stabilization rating	Less than 0.1 mrad (0.3 MOA) for MEMS Gyros (Fiber Optic Gyroscope Options Available for Increased Stability)
Stabilization Method	Baseline: 3-axis, using Tactical Grade MEMS Gyros Option: 3-axis, using Fiber-Optic Gyros