

BRU-57/A SMART MULTIPLE CARRIAGE RACK

Releases two smart weapons from a single station

The L3Harris BRU-57/A smart multiple carriage rack increases the stores carriage capacity of the aircraft while improving pilot and ground crew safety and efficiency.

BRU-57/A is a combat-proven system used extensively by a growing number of air forces world-wide. The system incorporates two BRU-46 pyrotechnic racks and doubles the number of smart weapons that can be carried by a single station. It is fielded on the F-16 and will be in use on the Korean KF-X platform.

Compatible with 500-pound and 1000pound joint direct attack munitions (JDAM), BRU-57/A also supports joint standoff weapon (JSOW). Universal Armament Interface (UAI) type I weapons will be included as they become available. BRU-57/A supports various weapons on a single unit and asymmetric loading on the aircraft.

The rack is compatible with the F-16 Block 40 and above and requires no modification to the aircraft. BRU-57/A's patented bus buffer system informs the operational flight program, weapon stores manager and pilot of the loaded weapons' status.



BENEFITS

- Ability to carry more weapons provides greater mission flexibility
- Increased number of stores improves pilot safety by reducing the number of missions required
- > Automatic and independent hooks enables safer loading
- > Clear visual indicators improve quality control for pyrotechnic cartridges, hook status and in-flight locks
- Automatic sway braces, pitch valves and positive arming attachments decrease loading time



BRU-57/A CHARACTERISTICS

BRU-57/A was designed to address the U.S. Air Force requirement to increase the weapon load on the F-16 in order to increase mission effectiveness and efficiency.

The L3Harris design enhances pilot safety by allowing a mix of weapons and improves ground crew effectiveness through thoughtful operations and clearly visible indicators of critical release system elements.

BRU-57/A SYSTEM SPECIFICATIONS

Physical Characteristics	MIL-STD-1760 Class II Signals	BRU-46/A Ejector Signals Implemented
Dimensions: 70 x 29 x 7 in (L x W x H)	Dual redundant MIL-STD-1553 communications	Dual cartridges
Weight: 265 lbs	Audio	Store sensing
Two mounting lugs with 30-inch spacing	115 VAC, 3-phase	Arming units
	High bandwidth 1 (GPS) and 3	115 VAC to 28 VDC power converter provides clear 28 VDC power to carried weapons
	28 VDC 1 (10 amps per store available)	Transparent to weapons
	28 VDC 2	
	Address lines	
	Connector-mated status	
	Structure ground	
	Release consent	

FEATURES

- > UAI type I weapon support
- > MIL-STD-1760 Class II communications
- > Dual redundant MIL-STD-1553 communications
- > Semi-automatic, self-preloading sway braces
- > Easily set pitch valves
- > Automatic and independently latching hooks
- > Robust store presence indicator switches
- > Dual cartridges with clear visual indicators





BRU-57/A

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