

FMU-152A/B



Multi-function hard target/soft target bomb fuze system compatible with U.S. and NATO aircraft.



We are your bomb and missile fuze solution.
We are Precision Fuzing & Sensors.

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SALES@fuzing.us

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Middletown, CT USA 06457

FMU-152A/B

» Compatibility

- Compatible with most U.S. Air Force, Navy, Marine Corps and NATO aircraft
- Compatible with most in-service JDAM and Enhanced Paveway® weapon guidance kits, tail kits, high-explosive bombs, and reduced collateral damage weapons
- Compatible with UAV deployment

» Main Features

- All arming and detonation event functions combined in a single fuze system
- Two independent arming rotor locks to ensure high safety integrity
- Dual independent launch signals and environmental sensing
- Fully developed, qualified and in full-rate production at two manufacturing sites
- Annual production capacity > 25,000 units
- High altitude release capability
- Low speed release capability
- Automatic retard deceleration recognition
- RS422 interface compatible with JDAM and Enhanced Paveway® weapons
- 10-year service life and 20-year shelf life
- Operational reliability in the field > 99%
- Meets safety criteria of MIL-STD-1316D

» Functions

- Proximity (via DSU-33 series and others)
- Proximity plus delay (DSU-33 series and others)
- Impact "0" delay
- Post impact delays - short
- Post impact delays - long

» System Description

The FMU-152A/B Bomb Fuze is a multifunction hard/soft target fuzing system developed for use by the U.S. Air Force and the U.S. Navy in the MK80 series, BLU-100 series, and in conjunction with High Drag and Low Drag Tail Kits.

In addition to impact/post-impact delay, the fuze is capable of accepting a signal from a separate proximity sensor (e.g., DSU-33 series, DSU-38/B, and DSU-40/B).

» Key Features

Key features of the FMU-152A/B include:

- Ease of installation and preparation for flight
- Compatibility with proximity sensor fire signal
- Ability to sense a high-drag delivery
- Ability to manually set the arming and event times prior to take-off, or electrically set them by cockpit selection prior to bomb release via FFCS or via the MIL-STD-1760/RS422 interface

The FMU-152A/B fuze is a multi-function, electronically programmable hard/soft target fuzing system. The fuzing system consists of a cylindrical fuze and a closure ring in the U.S. Navy application.

In the U.S. Air Force application, power is provided by the FZU-63/B air-driven turbine alternator, which is lanyard activated upon release from the aircraft.

In the U.S. Navy application, power is transmitted to the fuze from the AN-AWW series Fuze Function Control Set at release from the aircraft.

FMU-152A/B has passed the appropriate environmental tests of MIL-STD-331 and MIL-STD-810D.

FMU-152A/B

Parameter Settings	U.S. Air Force & U.S. Navy Applications with FZU-63/B	U.S. Navy Applications with FFCS/MK122 Safety Switch
Arming Time – High Drag	2.0, 2.6, 3.0, 4.0, 5.0 seconds	2.6 sec Arm/Instant (+300 vdc) 2.6 sec Arm/Instant (-300 vdc) 2.6 sec Arm/Delay per Switches (+195 vdc) 2.6 sec Arm/Delay per Switches (-195 vdc)
Arming Time – Low Drag	4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10, 14, 21, 25 seconds	Arm per Switches/Instant (+300 vdc) 5.5 sec Arm/Instant (-300 vdc) Arm per Switches/Delay per Switches (+195 vdc) 5.5 sec Arm/Delay per Switches (-195 vdc)
Detonation Delay Times	Instantaneous, 5 ms, 15 ms, 25 ms, 35 ms, 45 ms, 60 ms, 90 ms, 180 ms, 240 ms, 15 min, 30 min, 45 min, 60 min, 4 hrs, 8 hrs, 12 hrs, 16 hrs, 20 hrs, 24 hrs	See above
Reliability	In excess of 95% (specification), in excess of 99% (operational)	
Power Supply	FZU-63/B	FFCS at Release
Mission Duration	Up to 10 minutes	
Weapons	MK80 series, BLU-100 series, Low Drag and High Drag Tail Kits, all JDAM and Paveway® Kits	
Aircraft	Most U.S. and non-U.S. (NATO) Ground Attack Aircraft (F-15, F-16, F/A-18, F-22, F-35, B-1, B-2, B-52, Mirage 3, Mirage 2000, Gripen, Tornados, Typhoon, AV-8, A-10, AT-802U, A-29, A-37); MQ-9 UAV, Kfir, AT-6, OV-10	
Setting Compatibility	Manual & from cockpit via MIL-STD-1760/RS422 Interface and JDAM/Paveway® Kits	

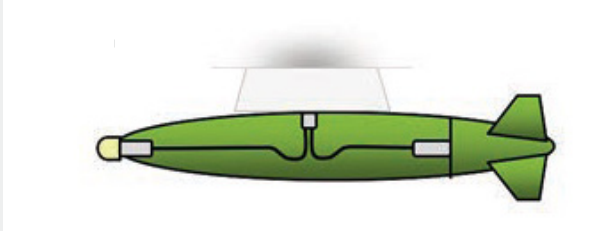
Note: All Arm/Delay settings listed available via MIL-STD-1760/RS-422 interface. Bold indicates those settings via control panel switches

Nomenclature	Description	Part No.	NSN No.
FMU-152A/B & FZU-63/B	Fuze and accessories (USAF) universal fuze system	20065500	1325-01-575-8162
FZU-63/B*	Initiator, bomb fuze	20065505	1325-01-572-2166
FMU-152A(D-1)/B	FMU-152A (D-1)/B Inert bomb fuze	20014640	1325-01-504-0197
FMU-152(D-2)/B	Inert bomb fuze	20014630	1325-01-504-0198
FMU-152A(D-5)/B	EOD training assembly	20014646	1325-01-504-0199
FMU-152-A(D-2)/B, FZU-63(D-2)/B	Inert bomb fuze and dummy trainer initiator	20097432	1325-01-588-4950

* Available separately for spares

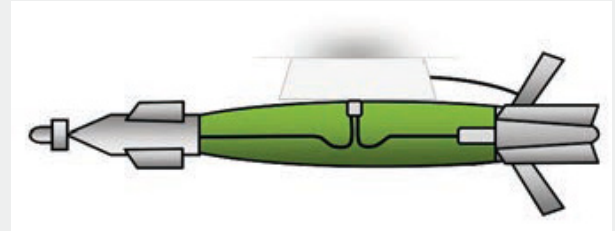
FMU-152A/B

Typical weapons applications



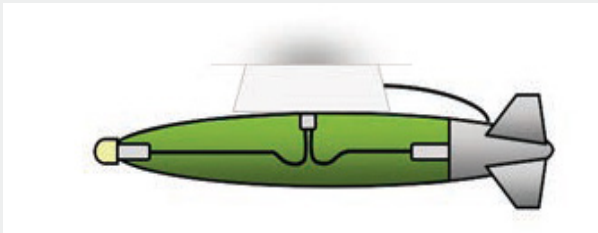
Gravity bomb

- > HoB sensor
- > General purpose warhead
- > FMU-152A/B fuze
- > FZU-63/B initiator



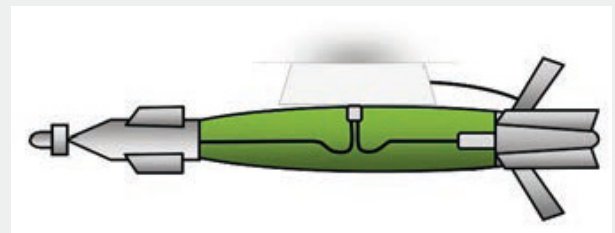
Laser-guided gravity bomb

- > Nose guidance unit
- > General purpose/penetrator warhead
- > FMU-152A/B fuze
- > FZU-63/B initiator
- > Stabilization tail



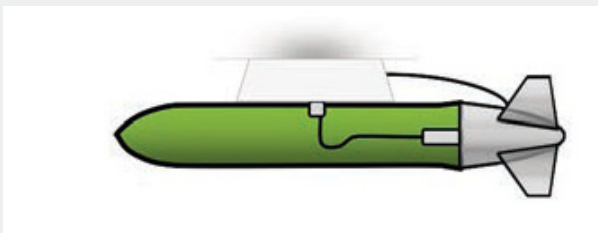
GPS-guided gravity bomb

- > HoB sensor
- > General purpose warhead
- > FMU-152A/B fuze
- > FZU-63/B initiator
- > JDAM GPS tail



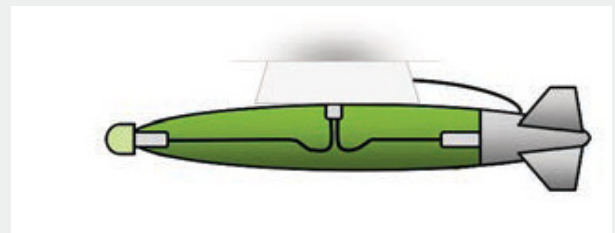
GPS/INS dual-mode laser-guided gravity bomb

- > Nose guidance unit
- > General purpose/penetrator warhead
- > FMU-152A/B fuze
- > FZU-63/B initiator
- > Stabilization tail



GPS-guided penetrator gravity bomb

- > Penetrator warhead
- > FMU-152A/B fuze
- > FZU-63/B initiator
- > JDAM GPS tail



GPS/INS dual-mode laser-guided gravity bomb

- > DSU-38/B, DSU-40/B or DSU-42/B Laser Detector
- > General purpose warhead
- > FMU-152A/B fuze
- > FZU-63/B initiator
- > JDAM GPS tail