

DSU-33D/B Proximity Sensor

All-weather, Single-mission Sensor that Operates in ECM Environments

FACT SHEET



Product Overview

The DSU-33D/B proximity sensor is an all-weather, battery-operated, active, radio frequency, ranging radar. It provides proximity detonation of general-purpose aerial bomb warheads at a fixed height-of-burst. It is a single-mission device capable of operating in an electronic countermeasure environment. It supports many delivery modes including single, multiple, high or low drag releases.

Application

The DSU-33D/B proximity sensor is used by the U.S. Air Force and U.S. Navy with the M117 and the MK80 series warheads, including JDAM variants. The sensor is compatible with the FMU-139 and FMU-152 series bomb fuzes, as well as the FZU-48, -55, and -63 initiators. The DSU-33D/B sensor is supplied with a pre-installed filtered power cable.

DSU-33D/B Qualification and Production Data

- Qualified – February 2008
- Production started in 2008
- Sensors delivered – More than 54,000

FACTS AT A GLANCE

Product Features and Benefits

- Safely operates the fuze only under specified conditions
- Advanced, current solid-state electronics
- Accurate and consistent height-of-burst
- Resistant to electronic countermeasures (ECM)
- Robust design and extensive factory testing assures reliability
- Meets all U.S. Air Force and U.S. Navy requirements
- Flexible design allows user to mate sensor with desired fuze and warhead

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Specifications

Technical Data

Weight	< 5 lb (< 2 kg)
Delivery modes	Drop: single or multiple Salvo: 6-bomb simultaneous release Ripple: 24-bomb release LOFT/TOSS and lateral TOSS High or low drag
Power supply	Battery initiated by FZU-48 initiator, FMU-152/B fuze, FZU-55/B initiator or Navy FFCS

Performance Data

Air Speed	250 to 700 KCAS
Delivery altitude	200 to 50,000 ft (60.96 to 15.24 m)
Height of burst	14 to 26 ft (4.27 to 7.92 m)
Closing velocity/fuzing	75 to 1,400 ft/sec (22.86 to 426.72 m/sec)
Reliability	95 percent after 10 years
Operational life	200 seconds (min)
Shelf life	10 years (min)
Service life	5 years (min)

Orbital ATK Capabilities

Orbital ATK is an industry leader in advanced fuzing and height-of-burst technology and has been the sole producer of the DSU-33 series for the U.S. government and its allies since 1999. More than 154,000 units have been delivered, encompassing three multi-year prime contracts and three configurations: DSU-33B/B, C/B and D/B.

For more information contact:

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