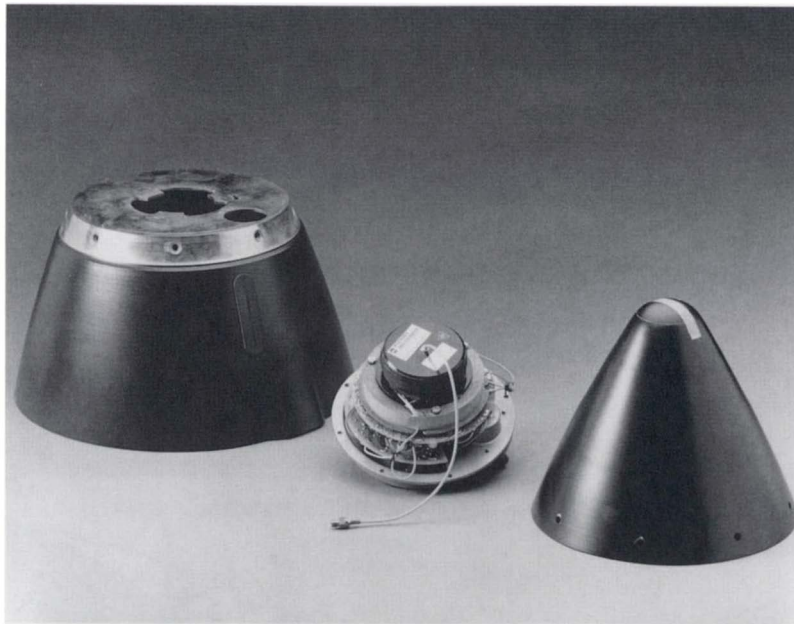


ESD8301

Airburst Proximity Sensor MFBF



- *Ultra low level release capability*
- *All weather operation*
- *High accuracy*
- *Easy installation*
- *Unchanged ballistics*
- *All solid state*
- *Highly reliable*

GEC-Marconi Radar and Defence Systems, Electronic Systems Division has designed and developed for the UK Ministry of Defence a new proximity sensor to provide an air burst capability for conventional bombs. The use of pulse doppler techniques offers, for the first time, the ability to achieve an air burst when the weapon is delivered at ultra low level in the retarded mode, thus offering greater operational flexibility and reduced aircraft attrition.

The unique radiation pattern from the specially designed antenna ensures a constant burst height irrespective of bomb delivery method and bomb attitude; this improves the bomb's effectiveness against radar aerials, soft skinned vehicles, ship superstructure and revetted aircraft. The sensor is unaffected by even the heaviest rain or variations in target reflectivity.

The sensor is mounted on all UK and US Mk 80 series bombs by using the existing nose plug. A simple adaptor permits the sensor to be fitted on other weapons. The low cost and easy attachment enables all weapons to be fitted with the sensor during weapon preparation, thus eliminating the need for alternative weapon loading plans and permitting complete operational flexibility in the air. The clean aerodynamic design does not affect weapon ballistics so no changes are required to weapon system computers or ballistic tables.

The unit is entirely solid state and encapsulated for reliability and a long shelf life.

General

Power supply required

9.5V to 18V DC/0.5A max at 9.5V

Nominal transmitter power

5W peak

Shock

40G peak 15ms

Air carriage vibration

0.04G²/Hz 10Hz to 2kHz

Operational vibration

0.01G²/Hz 20Hz to 500Hz

Operating temperatures

-46°C to +90°C

Storage temperature

-56°C to +90°C

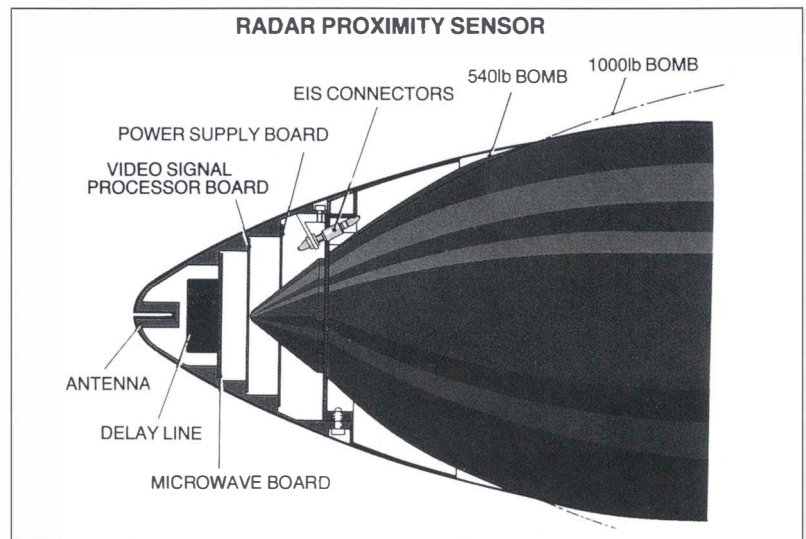
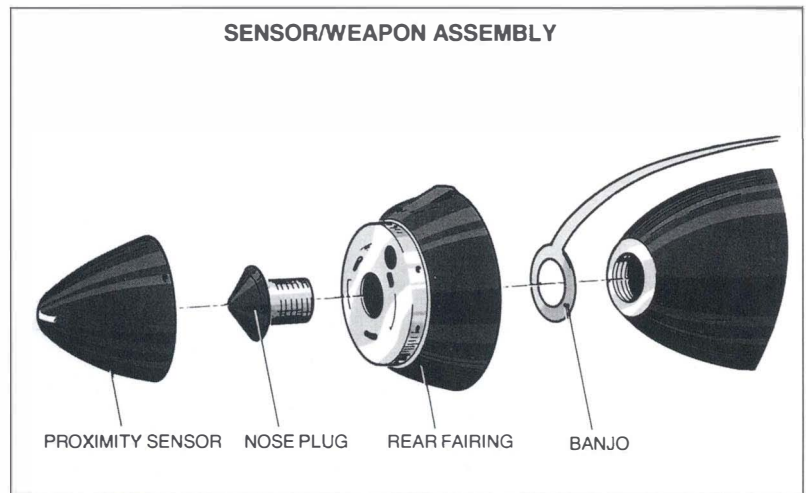
Shelf life

15 years

Weight

2.5Kg approx

(depends on adaptor type)



GEC-Marconi

Radar and Defence Systems

Electronic Systems Division

Browns Lane, The Airport, Portsmouth, Hampshire, PO3 5PH.

Telex: 869442 MARDEF G

Tel: (+44) 01705 226000 Fax: (+44) 01705 226001

e-mail: charles.andrews@gecm.com

USA

GEC-Marconi Office, 1111 Jefferson Davis Highway, Crystal Gateway North, Suite 800, Arlington, Virginia 22202, USA Tel: 1(703) 4166582 Fax: 1(703) 4160135

ESD8301

Airburst Proximity Sensor MFBF

ESD Publication No. ESD/059.08.96

This document gives only a general description of the product(s) or services and except where expressly provided otherwise shall not form part of any contract. From time to time, changes may be made in the products or the conditions of supply.

©1996 GEC-Marconi Limited