



Bandwidth: 15MHz (nom.).

Receiver (I.F and Video): Linear and logarithmic i.f amplifiers are included. PLD processing is applied to log video.

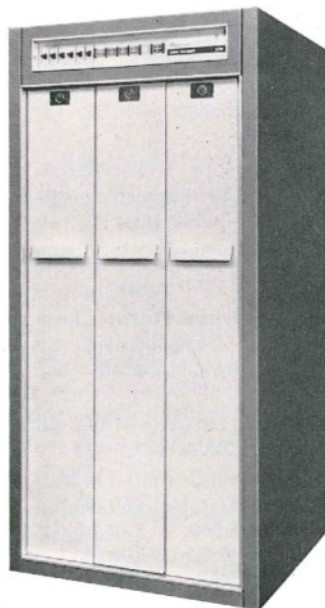
I.F output: 45MHz.

Power input: 380V or 415V 3-phase 50-60Hz. 8kVA.

Dimensions:

Height 167.75cm (5ft 6in.)
 Depth 64.8cm (2ft 1.5in.)
 Width 190.6cm (6ft 3in.)
 Weight 800kg (1750lb)

Full details are given in Marconi Radar Data Sheets B1, B2, B3 and B4



Signal Processing System Type S7005

S 600 Series Signal Processing Systems

A standard modular signal processing system, Type S7005, has been designed to operate with any of the four S600 Transmitter/Receivers (described on page 260). Another version, the S7006, (S7008 where Secondary Radar Trigger is required), has been designed for use with fully coherent radars such as the S650 and S670 described on page 257 and 258.

The signal processing systems are based on a double-cancellation MTI (moving target indication) system with a choice of additional facilities such as PRF Stagger and PRF Discrimination. The system is all solid-state and contained on three drawers in a cabinet only 1.67m (5ft 6in.) high and requiring only 0.46m² (5ft²) of floor space.

Features

- Autonomous system requiring only 45MHz i.f input.
- Choice of system parameters.
- Double-cancellation MTI.
- PRF Stagger.
- PRF Discrimination.
- All solid-state.

Data summary

- PRF:** 250 to 600 p.p.s by choice of quartz delay line.
- Signal input:** i.f at 45MHz.
- MTI:** Double cancellation.
- Cancellation ratio (of canceller):** 50dB.
- Static clutter suppression:** 40dB.

Overall dynamic cancellation ratio: typically 34dB.

Processing facilities:

- PRF Stagger.
- PRF Discrimination.
- Log/Pulse Length Discrimination.

Signal outputs:

- Primary Radar Trigger.
- Secondary Radar Trigger (S7008).
- Display Trigger (3).
- Log/PLD video.
- MTI Video.
- MTI Gated Video.

Power input: 220 or 240V \pm 10%, 45-65Hz. 300VA approx.

Dimensions:

Height: 167.75cm (5ft 6in.)
 Width 68.58cm (2ft. 3in.)
 Depth 64.8cm (2ft 1.5in.)
 Weight 163.4kg (360lb)

Full details are given in Marconi Radar Data Sheet B5 (S7005) and B6 (S7006)

Fixed-coil Radar Displays

The S3000 series is a family of fixed-coil displays which are used in conjunction with a modular back-up system equipped with facilities to meet individual system requirements. This series has been designed to cater for all operational requirements ranging from simple single radar displays to complex multiple synthetic display systems.

There are six basic display units in the S3000 series:

- S3001 } 12in. high-definition fluoride display units.
- S3002 }
- S3008 } 16in high-definition fluoride display units.
- S3009 }
- S3013 } 16in. high-definition single-coil fluoride display unit.
- S3006 } 11in. bright display unit for daylight viewing.

All the display units are fully transistorized with solid-state circuitry mounted on plug-in printed circuit cards. They are built as compact units containing a cathode ray tube, its e.h.t supplies, deflection coil assembly, deflection amplifiers, video amplifier, all appropriate controls and a cooling fan. Power supplies, operating from a mains supply are contained in a separate unit which