

Special Display Equipment

Distance from

DFTI

The number of aircraft movements in and out of an airport is governed by the ability of the aerodrome controller to judge when outbound aircraft can be released safely for take-off between successive aircraft on landing approach. This demands an accurate knowledge of the position of aircraft on the approach path and in particular their distance from the runway threshold.

Previous attempts to provide radar displays in the cabs of control towers have been unsatisfactory because of the high ambient light level, and the low brightness of conventional radar displays.

However, the DFTI uses a direct view storage tube (DVST) which provides a picture several hundreds of times brighter than the ordinary display. This can be read under all ambient light conditions, including direct sunlight.

Data Summary

Useful screen size: 102mm Brightness: 300 to 500ft lamberts.

Deflection system

Sync: positive going pulse 5V to 50V,

50 to 100 ohm

Azimuth: \sin/\cos , $\pm 10V$ or $\pm 50V$ at 100k ohm or digital incremental

Range scale

Off-centred: 10nm or 15nm diameter.

Centred: 10 to 20nm or 40nm

Video system

2 channels, one with STC.

Level: positive going from earth, 1V to

6V at 50 to 100 ohm

Minimum pulse length: $0.5\mu s$

Note: nm denotes nautical mile(s)

Mogisoldisplay Unit

S3020

Weight:

The S3020 is a large flatscreen display capable of being used horizontally or vertically.

It is a basic X-Y-Z monitor capable of being interfaced to a wide variety of systems. It can free-stand vertically for conference use or be mounted on a trolley to tilt the face-plate to the appropriate working angle.

The deflection amplifier has a bandwidth sufficient to handle high speed character writing waveforms. Dynamic correction ensures no pin cushion distortion and the spot is maintained at optimum by dynamic focussing.

The video amplifier is a single d.c. coupled channel.

In this display the power supply unit is not included in the display chassis, and has to be mounted separately. Accommodation is provided for the power supply in the trolley mentioned above.



Monitor Display Type S3020

Data Summary	S3020
Useful screen diameter:	485mm
Focus spot size:	0.7mm
Main deflection:	Fully differential input
Sensitivity:	4V or 10V/radius
Setting time:	15μs diameter to within 0.1% diameter
Symbol input:	Fully differential
Sensitivity:	5.1mm/V
3dB bandwidth:	2.5MHz (Limited aperture)
Dimensions	
Height × Width × Depth Overall:	660mm × 660mm × 750mm
Power Unit Dimensions:	
${\sf Height} \times {\sf Width} \times {\sf Depth\ Overall} :$	336mm \times 440mm (481 over brackets) \times 232mm