antenna & static discharger design, measurement & advisory services

including:

Antenna siting studies and model polar diagram measurements Special purpose and 'built-in' antenna design and development In-flight polar diagram measurements VSWR and impedance measurements Environmental testing Static discharger siting studies and a complete systems advisory service

CHELTON (ELECTROSTATICS) LIMITED

CHELTON

ADVANCE DATA

ADVANCE DATA





Intended primarily for measuring aircraft antenna installations, the QB6 provides a fast and accurate method of checking V.S.W.R.'s both on the aircraft and in the antenna workshop.

CHELTON (ELECTROSTATICS) LIMITED MARLOW BUCKINGHAMSHIRE SL7 1LR ENGLAND Telephone: (Marlow) 062 84 72072 Telex: 849363

QB6 Oct. 1973

Associate Member of the SBAC DGOA (DEF-STAN 05-21) and CAA Design and Inspection Approved

ADVANCE DATA

ADVANCE DATA

L-BAND V.S.W.R. TEST SET TYPE QB6

The QB6 comprises a voltage controlled oscillator feeding into an r.f. bridge circuit. After checking calibration with the standard mismatch provided, the antenna installation under test is connected to the QB6 and a direct reading of V.S.W.R. is obtained.

Important features of the QB6 are :-

- Completely portable and self contained.
- Direct reading in V.S.W.R.
- Frequencies cover DME, TRANSPONDER, IFF and TACAN.

SPECIFICATION

OSCILLATOR FREQUENCIES BRIDGE IMPEDANCE V.S.W.R. RANGE BATTERIES RECHARGE POWER SUPPLY REQUIREMENTS DIMENSIONS CONNECTOR

960 MHz, 1030 MHz, 1090 MHz, 1150 MHz, 1220 MHz. Matched for 50 ohm systems. 1:1 to 3:1

Re-chargeable Nickel-Cadmium.

110 v. or 220 v. 50-60 Hz, 0.5 A. 5.75 in. (146 mm) x 8.75 in. (222 mm) x 4.25 in. (108 mm). Type N.

CHELTON



ADVANCE DATA

V.S.W.R. TEST SET TYPE QB7



Intended primarily for measuring aircraft antenna installations, the QB7 provides a fast and accurate method of checking V.S.W.R.'s both on the aircraft and in the antenna workshop.

CHELTON (ELECTROSTATICS) LIMITED MARLOW BUCKINGHAMSHIRE SL7 1LR ENGLAND Telephone: (Marlow) 062 84 72072 Telex: 849363

QB7 Oct. 1973

Associate Member of the SBAC DGOA (DEF-STAN 05-21) and CAA Design and Inspection Approved

ADVANCE DATA

ADVANCE DATA

V.S.W.R. TEST SET TYPE QB7

The QB7 comprises one crystal controlled, and one voltage controlled oscillator feeding into an r.f. bridge circuit.

After checking calibration with the standard mismatch provided, the antenna installation under test is connected to the QB7 and a direct reading of V.S.W.R. is obtained.

Important features of the QB7 are :-

- Completely portable and self contained.
- Direct reading in V.S.W.R.
- Frequencies cover VOR/ILS, Marker, Glideslope and VHF Communications.

SPECIFICATION

OSCILLATOR FREQUENCIES

BRIDGE IMPEDANCE V.S.W.R. RANGE BATTERIES RECHARGE POWER SUPPLY REQUIREMENTS DIMENSIONS CONNECTOR 75 MHz, 108 MHz, 112 MHz, 118 MHz, 124 MHz, 132 MHz, 136 MHz, 328 MHz, 332 MHz, 336 MHz. Matched for 50 ohm systems. 1:1 to 5:1.

Re-chargeable Nickel-Cadmium.

110 v. or 220 v. 50-60 Hz, 0.5 A. 5.75 in. (146 mm) x 8.75 in. (222 mm) x 4.25 in. (108 mm). Type N.







UHF LOG PERIODIC ANTENNAS-TYPE GD2000

RUGGEDIZED FOR USE IN EXTREME WEATHER CONDITIONS

Manufactured to a British Broadcasting Corporation design, Type GD2000 UHF log periodic antennas, of rugged construction to withstand extreme environmental conditions, are intended for broadcasting and military ground communication applications.

The construction comprises two aluminium-alloy booms of square, box-section, each fitted with a total of fifteen logarithmically related elements along the boom length. A wedge of high density polythene, fitted between the booms provides additional rigidity, and the complete assembly is rivetted into a solid aluminium end block which forms a substantial mounting plate for fixing to a mast or tower.

RF feed point is across the tip of the antenna and is protected by a high density polythene moulding; a Type 'N' coaxial socket provides connection to the feed point via a low-loss, semi-rigid coaxial cable running inside one of the booms. Drainage holes in the two booms prevent moisture accumulation. The antenna can be supplied finished in an overall protective finish of stoved white epoxy paint.

SPECIFICATION

Frequency range:	400 — 1300 MHz
Impedance:	50 ohms (nominal)
VSWR	1.25:1 maximum (470 – 854 MHz) 1.75:1 maximum (400 – 1300 MHz)
Polarisation:	Horizontal or vertical depending upon orientation
Gain:	8-10 dB relative to isotropic
Connector:	Type 'N' female coaxial connector
Weight:	2.72 kg (6.00 lb.)
Installation:	See overleaf
Finish:	Normally unpainted (Type GD2000) Can be supplied finished in hard white epoxy paint (Type GD2000P3)

CHELTON (ELECTROSTATICS) LIMITED MARLOW BUCKINGHAMSHIRE SL7 1LR ENGLAND Telephone: (Marlow) 062 84 72072 Telex: 849363

DATA SHEET

LOG PERIODIC ANTENNA

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UHF LOG PERIODIC ANTENNAS - TYPE GD2000



NOTE: ALL DIMENSION ARE NOMINAL