

UK/VRC322 Clansman HF Transmitter/Receiver System

The British Army Clansman UK/VRC322 HF system has been designed and developed for mobile military use in all types of armoured and logistic vehicle. .

The UK/VRC322 is a medium power HF station for mobile ground-wave operation, but is also capable of being used as a ground station, and for sky-wave operation over long distances. It can be used for simplex or duplex operation, and is also suitable for radioteletype operation. It has been designed to permit rapid unambiguous operation under all conditions with a minimum of operator training. The UK/VRC322 employs the same RT321 drive unit as the UK/VRC321.

Digital frequency selection in 100 Hz steps over the 1.5 to 30 MHz band is provided. All frequencies are synthesised from one reference oscillator. Independent operation of two stations in one vehicle is possible with 15 per cent frequency separation and 1.8 m antenna separation. This requires 150 dB suppression of unwanted emissions and responses. The equipment operates from a 28 V battery with variations within the range of 20 to 32 V, with up to 7 V peak-to-peak ripple and up to ± 600 V transients. It uses a 300 W linear transmitter, and sub-unit construction with built-in test facilities for rapid maintenance. Direct connection for audio gear, remote-control and so on is provided.

Status

In production since 1977 for the British and other armies.

Technical Specification

As UKIVRC321 except:

Power output

high power: 300 W PEP (SSB), 250 W (CW)
low power: 40 W PEP (SSB), 25 W (CW)

Consumption

high power standby: 250 W
high power transmit: 1050 W
receive: 30 W
Dimensions: all units 360 mm deep and 220 mm high

RF AMPLIFIER UNIT

Width: 430 mm
Weight: 29 kg

HIGH POWER ATU

Width: 300 mm
Weight: 18 kg

AC POWER SUPPLY UNIT 46 A

Width: 300 mm
Weight: 25 kg

Operational Specification

Meets all relevant clauses of DEF-133. Meets current NATO specifications

Manufacturer

MEL Communications Ltd, Crawley.