

Semi-mobile H.F Wireless Station (350 W)

Type HS 27/HR 28

TYPE HS 27/HR 28 provides an entirely self-contained semi-mobile communications station. The latest techniques in i.s.b, s.s.b, and f.s.k telegraph communications are embodied to give a station with the fullest operational facilities.

Features

Choice of five operational services.

Reliable communication by ground-wave up to 70 miles (112 kilometres) over average rolling countryside.

Rapid, simple operation by the use of colour-coded knobs.

Remote control of equipment on all services is possible.

Full protection against interference.

Ease of maintenance and servicing ensured. Suitable for operation over a wide range of climatic conditions.

EQUIPMENT

The main equipment is designed for installation in a 1-ton truck or transportable shelter. The power generator, when used, can form a separate trailer. The applications of the equipment are not confined to that of a self-contained station. In association with other similar station-working with similar aerial systems, a comprehensive h.f network or series of point-to-point communication links can be set up.

The complete mobile station comprises the following units:

- (a) Transmitter Type HS 27 with power supply unit, aerial matching unit and test load.
- (b) Reflectometer directional coupler and trip unit ratiometer.
- (c) Transmitter test meter.
- (d) Receiver Type HR 28 with aerial matching unit (for local or remote application), acceptor unit and aerial change-over unit.
- (e) Operator's control unit.
- (f) Remote control unit.
- (g) Teleprinter.
- (h) Morse key, handset and loudspeaker.
- (i) L.T power distribution board.
- (j) Aerial and mast gear.
- (k) Cables and connectors.
- (l) Power generator in trailer (optional).

Data Summary
GENERAL
Services:

C.W on/off telegraphy (A1) F.S.K telegraphy (F1) S.S.B telephony (A3a) I.S.B telephony (A3b)

D.S.B telephony (A3)

Dimensions:

Height Width Depth Weight Transmitter Type HS 27 (excluding power unit)

4 ft 6½ in. 2 ft 2 ft 5 in. 520 lb (138 cm) (61 cm) (74 cm) (236 kg)

Receiver Type HR 28
3 ft 11½ in. 2 ft 2 ft 1½ in. 360 lb (121 cm) (61 cm) (66 cm) (164 kg)

TRANSMITTER TYPE HS 27

Frequency range: 2-21.999 Mc/s.

Power output:

Service Power output 2-15 Mc/s 15-21-999 Mc/s 350 W 300 W F1 250 W 215 W A3a 350 W 300 W A₃b 350 W 300 W A3 100 W 85 W

Power supplies: 200–250 V ($\pm 6\%$) or 100–125 V ($\pm 6\%$), 45–55 or 55–65 c/s single-phase a.c.

Power consumption: 1.5 kVA.

RECEIVER TYPE HR 28

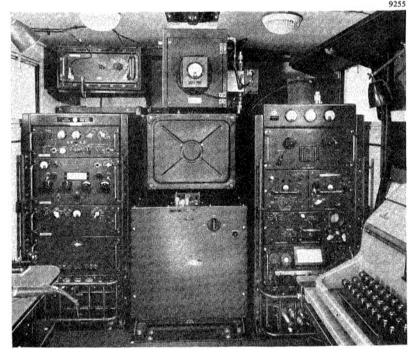
Frequency range: 2·1–27 Mc/s continuously variable.

Frequency stability: 80 c/s max. variation per $^{\circ}$ C and ± 100 c/s for $\pm 6\%$ mains voltage variation. (A.F.C reduces residual mixtune to <20 c/s (telephony) or 10% total shift (f.s.k).)

Noise factor: 8 dB max. from 2·1-10 Mc/s. 12 dB max. from 10 to 27 Mc/s.

Power supplies: 100-125 or 200-250 V $(\pm 6\%)$, 45-65 c/s, single-phase a.c.

Power consumption: 270 VA.



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