

# **350-watt Mobile HF Wireless Station** Type HS 27/HR 27

TYPE HS 27/HR 27 provides an entirely self-contained mobile communications station. The latest techniques in ISB, SSB and FS 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 normally installed in a 1-ton truck which stows the necessary aerial ancillaries while the power generator forms a separate (optional) trailer. The applications of the equipment are not confined to that of a self-contained station. In association with other similar stations working with similar aerial systems, a comprehensive HF network or series of point-to-point communication links can be set up. Furthermore, the main units can be removed from the vehicle and operated from any suitably sheltered site.

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 27 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) LT power distribution board.
- (j) Aerial and mast gear.
- (k) Cables and connectors.
- (l) Power generator in trailer (optional).

# Data Summary

GENERAL

#### Services:

CW on/off telegraphy (A1) FS telegraphy (F1)

SSB telephony (A3a)

ISB telephony (A3b)

DSB telephony (A3)

Frequency range: 2·1-21·999 Mc/s.

#### Dimensions:

| Height        | Width     | Depth       | Weight   |
|---------------|-----------|-------------|----------|
| Transmitter 1 | Type HS 2 | 7           |          |
| 4 ft 61 in.   | 2 ft      | 2 ft 5 in.  | 300 lb   |
| (138 cm)      | (61 cm)   | (74 cm)     | (136 kg) |
| Receiver Typ  | e HR 27   |             |          |
| 3 ft 113 in.  | 2 ft      | 2 ft 13 in. | 300 lb   |
| (121 cm)      | (61 cm)   | (66 cm)     | (136 kg) |

# TRANSMITTER TYPE HS 27

## Power output:

| Service        | Power output               |         |     |       |  |
|----------------|----------------------------|---------|-----|-------|--|
|                | 2·1-15 Mc/s 15-21·999 Mc/s |         |     |       |  |
| A1             | 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 cumplies |                            | 200 250 | 17  | (1600 |  |

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

Power consumption: 1.5 kVA.

RECEIVER TYPE HR 27

Noise factor: Not greater than 8 dB from 2·1–10 Mc/s. Not greater than 12 dB from 10 to 21·999 Mc/s.

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

Power consumption: 400 VA.

#### Marconi

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