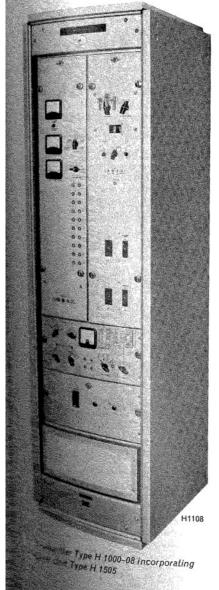
Marconi H.F Transmitters

Types H 1000, H 1100 and H 1102

1 kW Type H 1000

This transmitter incorporates a wideband distributed amplifier which requires no tuning within the h.f band of 2-0-27-5 MHz. Frequency changes are made simply by switching the drive, thus avoiding the complications normally encountered during this operation. With an appropriate drive unit the transmitter may be used for any of the normal types of modulation.



A drive unit Type H 1505 may be incorporated (Type H 1000–08), or separately mounted in Drive Assembly Type H 1620. (See page 256).

FEATURES

Any type of modulation using suitable drive. Simplicity of operation with no tuning required over the whole of the frequency range.

Instantaneous frequency changing by selection of drive frequency only.

Simultaneous transmission on two or more radiated frequencies.

A single valve failure does not normally interrupt traffic.

High standing-wave ratio can be tolerated.
A 2:1 standing wave ratio on the output feeder produces only a slight reduction in

Silicon rectifier power supplies. Built-in air cooling system.

DATA SUMMARY

Frequency range: 2.0-27.5 MHz.

Services: Any type of modulation from any drive giving a suitable output.

Power output: 1 kW mean (c.w or f.s.k), 1 kW p.e.p (i.s.b or s.s.b).

Frequency stability: Dependent on drive. Harmonic radiation: On i.s.b or s.s.b < 50 mW at 1 kW p.e.p.

Intermodulation products: Not worse than —40 dB relative to either of two equal test tones.

Hum level: Better than —50 dB relative to p.e.p.

Output impedance: 50Ω unbalanced.

Input impedance: 75 Ω unbalanced.

Maximum standing wave ratio: 2:1 above 2 MHz.

Power supply: 360-440 V (\pm 6%) 3-phase 50 or 60 Hz (\pm 2½%) 4 wire a.c.

Power consumption: 6 kW at 0.9 power factor (for 1 kW c.w output).

Dimensions:

Height 6 ft 10 in. (208 cm)
Width 2 ft (61 cm)
Depth 2 ft 4 in. (71 cm)
Weight 712 lb (324 kg)

7½ kW Types H 1100 and H 1102

The manually-tuned versions of the $7\frac{1}{2}$ kW p.e.p linear amplifier use only three tuning controls, two range switches and an attenuator.

Mechanical digital counters allow approximate setting of the tuning controls for rapid retuning.

The drive may be integral (H 1505) or from a Drive Assembly Type H 1620 or H 1609. (See page 256).

FEATURES

Self-contained, no back or side access required.

Minimum i.s.b distortion is ensured by simple fixed r.f feedback network.

All supplies use compact silicon rectifier assemblies.

Full feeder protection and output monitoring, with built-in directional coupler.

Full extended and remote control facilities available.

DATA SUMMARY

Frequency range:

H 1100 4-27.5 MHz.

H 1102 2-27·5 MHz.

Input from drive:

H 1100 0.5 W to 5 W c.w.

H 1102 0.6 W to 2 W c.w.

Remaining data as for H 1103, see page 238.

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