

SIEMENS

**20 kW Tropical Band Short Wave
Broadcast Transmitter**



The Siemens HF-Transmitter type WR Send 20 K-03 is intended for amplitude modulation with a carrier power of 20 kW and may be provided either as a single channel transmitter or for two channel operation with semi-automatic frequency changing.

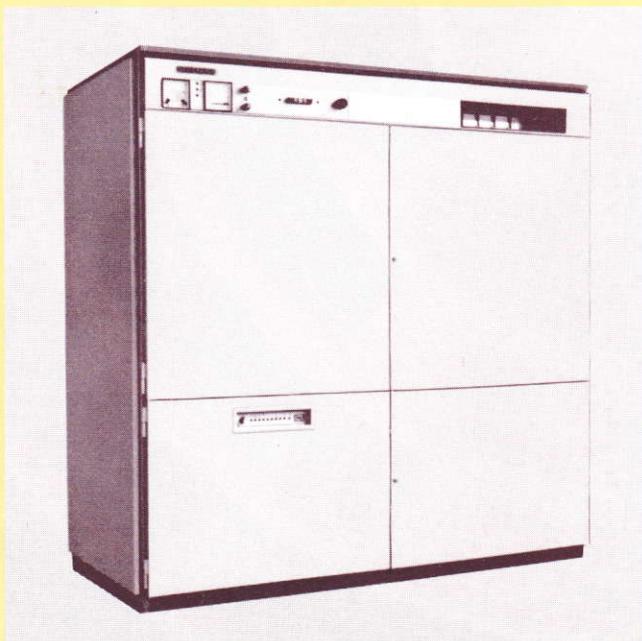
The electrical data are corresponding to the CCIR and ARD standard.

All safety equipments and control function being necessary are available.

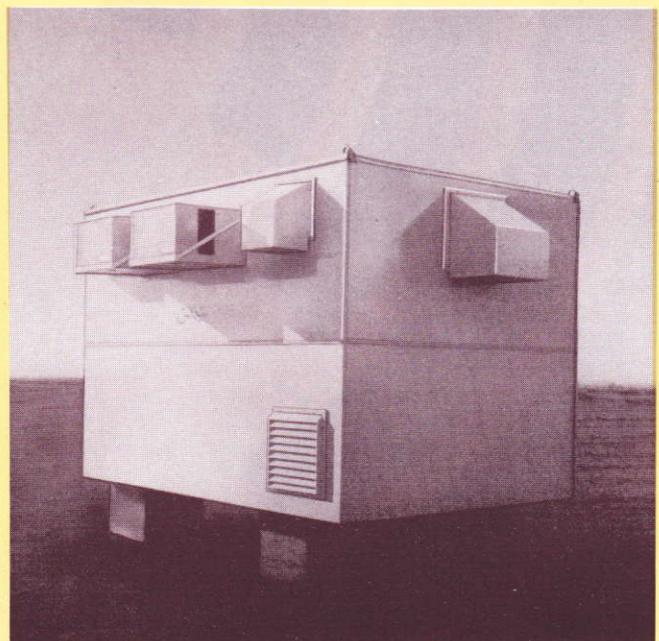
Special Characteristics

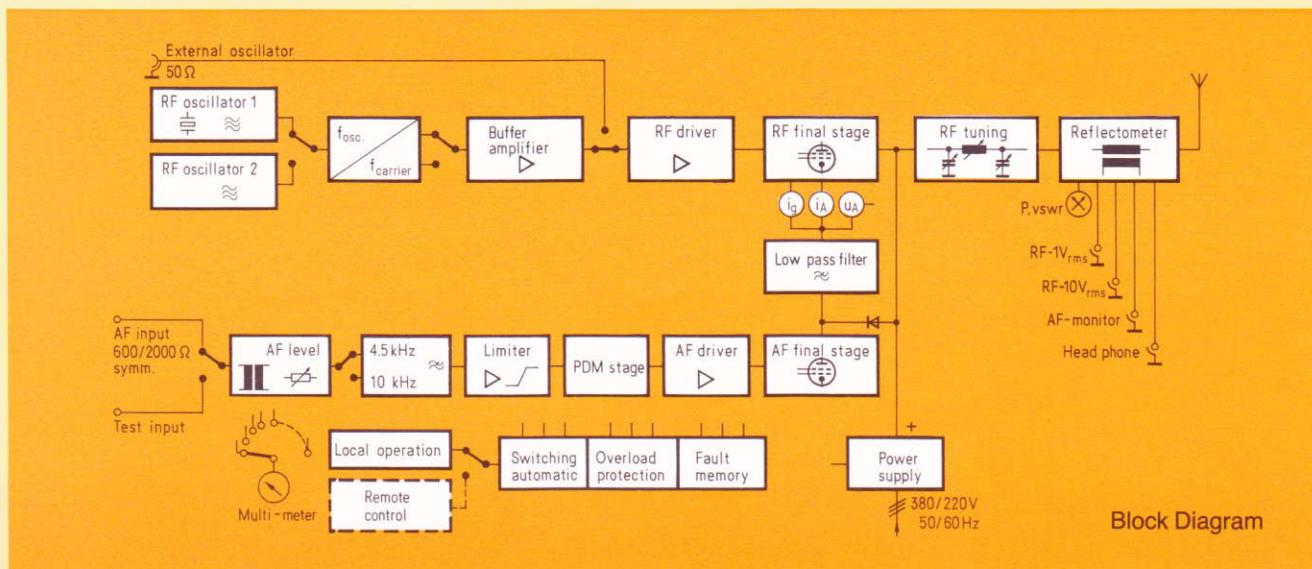
- 2 valves only (air cooled)
- Pulse duration modulation (advantage for modulation capability and efficiency)
- Automatic re-start in case of interference
- Automatic re-start in case of power failure (duration not limited)
- Fault memory
- Power reduction
- Electronic heating voltage regulator
- RFmeasuring outputs and demodulator
- Crosspointer instrument for RF output power and VSWR
- Suitable for installation in shelters and vehicles
- Small dimensions
- Reduced weight
- Simple installation and operation
- Easy maintenance
- All tuning and service work can be done from the front
- Conducted inlet and exhaust air possible
- Suitable for remote control

20 kW Short Wave Broadcast Transmitter



Containerized Broadcast Station





Block Diagram

Technical Data

Frequency range	3.2 ... 9.775 MHz (tropical bands 90, 75, 60, 49, 41 and 31 m)
Frequency stability	± 5 Hz
Power output	20 kW
Power reduction	to 10 kW
Carrier shift	4% or less with 90% modulation at 1000 Hz
RF harmonic radiation	less than 50 mW
RF non-harmonic radiation	less than 70 dB
Type of transmission	9 A3 (Amplitude modulation, broadcasting, double-side band, band-width 9 kHz)
Output impedance	50 Ohms unbalanced, RF-connector EiA
VSWR	less than 2
Audio input	2000 or 600 Ohms balanced
Input level	-4 ... + 10 dBm at 100% modulation and f= 1 kHz
Audio frequency response	100 ... 4000 Hz ± 1 dB without low pass filter
Audio frequency distortion	less than 3% at 60 ... 2250 Hz with 80% modulation
Modulation capability	100%
Noise (unweighted)	50 dB or better
Noise (weighted)	60 dB or better
Power supply	three phases 380/220 V ± 10%, 50/60 Hz, others on request
Power consumption	approx. 40 kVA at m = 0 approx. 60 kVA at m = 1
Power factor	95% or better
Tubes	1 tetrode YL 1500 (AF) 1 tetrode YL 1500 (RF)
Dimensions	1.84 m × 1.83 m × 0.84 m ≐ W × H × D
Weight	approx. 1000 kp

Terms of delivery and rights to change design reserved

SIEMENS AKTIENGESELLSCHAFT

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