20 kW Medium Wave Broadcast Transmitter



The Siemens MF-Transmitter type WR Send 20 M-03 for broadcasting in amplitude modulation works with a carrier power of 20 kW. As per demand it can be driven by an oscillator adjusted to a specified frequency or by a synthesizer. 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 for operation and adjustment
- Electronic heating voltage regulator
- RFmeasuring outputs and demodulator

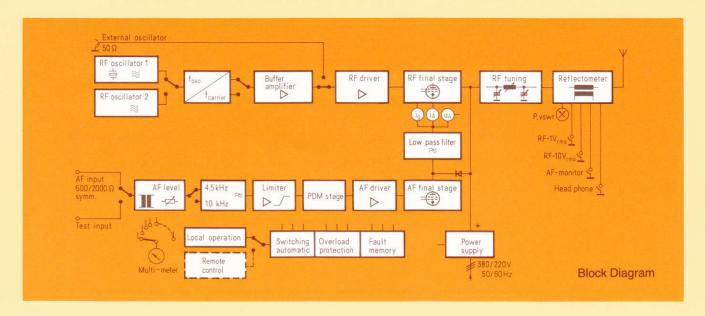
- Crosspointer instrument for RF output power and VSWR
- Suitable for installation in shelters and vehicles
- Small dimensions
- Reduced weight
- Simple installation and operation
- Easy maintenance
- All tuning and service work can be done from the front
- Conducted inlet and exhaust air possible
- Suitable for unmanned operation

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Mobile Broadcast Station





Technical Data

Frequency range	5251605 kHz
Frequency stability	± 5 Hz
Power output	20 kW
Power reduction	to 10 kW
Carrier shift	3% 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 or 20 A3 (Amplitude modulation, broadcasting, double-side band, band-width 9 or 20 kHz)
Output impedance	50 Ohms unbalanced, RF-connection 13/30
VSWR	less than 1.5
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 \pm 1 dB 60 10000 Hz \pm 2 $-$ 3 dB $\}$ without low pass filter
Audio frequency distortion	less than 3% at 60 120 Hz less than 2% at 1202250 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 \pm 10%, 50/60 Hz
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 \times 1.83 m \times 0.84 m $\hat{=}$ W \times H \times D
Weight	approx. 1000 kp

