The RIZ OR 10 SD is a member of the new series of RIZ totally solid state transmitters. Reliable solid state technology provides enhanced overall efficiency and exceptional audio performance.

This RIZ solid state SD series continue a tradition of providing broadcasters superior value, performances and long term reliability.

Transmitter incorporates multiple protection systems, which prevent failures due to transients from atmospheric and man made sources.

Maximum safety is provided for operating and maintenance personnel in compliance with IEC215 safety standards.

This transmitter as all other RIZ transmitters is designed in accordance with IEC standards and ITU recommendations for this type of service.

- Dual exciter section
- Frequency agility (max tuning time 2 min)
- Simple cost effective maintenance
- Solid state hot-swap modules
- FM-like audio performance
- High overall efficiency
- Compact design
- Microprocessor, DSP and EPLD technology
- Mobile or stationary versions available
- Digital broadcasting compatibility (DRM)
10 kW MW Broadcast Transmitter

TECHNICAL DATA

OPERATING CONDITIONS:

Power Supply
- Mains voltage: 3 x 380V +5%, -10%, 4 wires
- Power input (fm=1kHz/m=1): 19.7kVA
- Mains frequency: 50Hz ±2Hz; 60Hz (as option)
- Power factor: > 0.95

Modulator Input
- Input impedance: 2000 balanced, standard, 600 balanced, as option
- Input level (for fm=1kHz,m=1): -10dBm +10dBm; (0dBm=0.775V across 600 )

Transmitter Output
- RF output load impedance: 50 unbalanced, standard, 1-5/8" EIA Flange
- Other impedances on request

Climatic Conditions
- Temperature in transmitter hall: +1 to +45°C
- Max. altitude above sea level: 2000m
- Relative humidity: < 95%, non condensing

ELECTRICAL CHARACTERISTICS:

Frequency range: 525 - 1605kHz
RF Output Power: 10kW
Frequency stability: ±10Hz, ±2Hz at typical conditions
Frequency source: DDS Synthesizer
Modulation principle: Pulse Duration Modulation
Positive peak modulation capability: 125 %

Signal to Noise Ratio and Spurious Emission
- Unweighted: > 60dB Reference level m=100% fm=1kHz sine, mains voltage sine < 50mW (according to ITU)

Carrier Shift and Overall Efficiency
- Carrier shift at m=90% with fm=1kHz sinewaved and at constant mains voltage referred to the unmodulated carrier: < 1%
- Overall Efficiency: > 80%

Audio characteristics
- Amplitude-Freq. response 30Hz to 10kHz: ±1dB
- Nonlinear Distortion 30Hz to 10kHz: < 1%
- The ratio of input to output as function of modulation depth up to m=80% does not differ by more than: ±0.5dB

*Data subject to change without notice