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1000W H.F. DIGITAL TRANSCEIVER MODEL TR-610-R



- Digital design.
- VMOS Amplifier.
- 1000W R.M.S. power.
- Frequency range 1.6 - 30MHz.
- Resolution 1Hz.
- Stability 1ppm
- Memorizes up to 255.
- Memorizes all the parameters.
- J3E (BLS, BLI), A1A, J2A, F1B, H3E modes.
- 3KHz, 1.8KHz filters, G.M.D.S.S.
- Local/Remote operation through RS232.
- Monitoring of incident power, reflected power and line measure.
- VSWR tolerance: Infinite.
- Voice over ip (VoIP) or input line 600Ω.

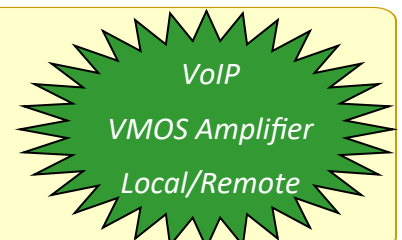
Options:

- A.L.E.: Automatic search of the best communication channel.
- High Speed Data Modem: 9600 bps in HF for sending text, fax, images.



The TR-610-R Transceiver is the only equipment in the world in which its receiver is completely digital from its RF input.

The transmitter is completely digital from the audio input signal up to the RF amplifier.



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TECHNICAL CHARACTERISTICS

TRANSMISSION

Output power	1000W. R.M.S. ± 1 dB.
Power Reduction	-3dB; -6dB; -10dB.
Incident and Reflected Power measurement.	
Micro; Line; Data; Manipulator.	
Tuning power for antenna automatic coupler.	
Completely digital design (except RF power amplifier and Power Supply).	
Harmonics radiation	-50dBc.
Spurious radiation	-60dBc.
Side band non-desired attenuation	-60dB.
Output impedance	50 Ω .
Antenna connector type	N.
Continuous operation regime.	
Voice over ip (VoIP) or line input	600 Ω .
Audio response	300-3000Hz.
VSWR tolerance	Infinite.

RECEPTION

Operating frequency	100KHz - 30MHz.
Selectivity:	6KHz; 3KHz; 1.8KHz; GMDSS Filter (1700hz).
Design with high selectivity filter F.I.R. type.	
A.G.C. increase time	1ms.
A.G.C. decrease time	5ms; 10ms; 50ms; 100ms; 500ms; 1s; 5s; 10s.
A.G.C. manual threshold adjustable from 1 μ V. up to 500 μ V.	
Possibility of silence Rx.	
Built with adjustable Squelch.	
Digital selective pre-selector adjusted automatically to the reception frequency.	
Rx input selection:	Bypass Digital Pre-selector Pass band filters
Amplifier selection of +10dB. Ip=+45.	
Sensibility:	0.50 μ V for 10dB sinad (-113dBm)
Independent outputs:	line and speaker.
Dynamic range	-119dB up to 0dB.

POWER SUPPLY

Power supply voltage:	
Single-phased power	220V _{AC} $\pm 10\%$.
Three-phased (optional)	380V _{AC} $\pm 10\%$.
Power supply frequency	50/60Hz.
Power used	Rx: 425W, Tx: 2.2Kw.

MECHANICAL SPECIFICATIONS

Mechanical composition:	
Digital Transceiver	TR-630-I.
Linear Amplifier	AL-630-A.
Power Supply	FA-630-A.
Dimensions:	
Width	600mm.
Height	1000mm.
Depth	800mm.
Built	Anticorrosion aluminium.
Total weight	110Kg.

CONFORMITIES

EN61000-3-2 (Electromagnetic compatibility).
 EN61000-3-3 (Electromagnetic compatibility).
 89/336/CEE (Electromagnetic compatibility).
 73/23/CEE (Low voltage directive).
 ETSI EN301929-1.
 ETSI EN300773-1.
 UIT-R M.625-3

ENVIRONMENTAL SPECIFICATIONS

Operation temperature	0 to 50°C.
Environmental humidity	95%.

ACCESORIES PROVIDED

Control Commands for RS232.
 Operation Software for PC.

ACCESORIES NOT PROVIDED

Radiant system.
 A.L.E.
 High speed data modem.
 Control processor computer.