# NAVTEX TRANSMITTER

## JRS-800 series



JRS-813(1kW PEP )



JRS-853(5kW PEP )

## FEATURES

- High power efficiency（PTAM）
- Fully solid state design
- RF waveform processed in DSP and FPGA technology
- Frequency-synthesized exciter with DDS technology
- Six channel operation with two frequency（490kHz and 518kHz）
- FSK telegraphy（Built-in NAVTEX modulator）
- Built-in testing program
- Local/remote control

## GENERAL

The JRS-800 series MF transmitter is primarily designed for NAVTEX broadcasting service. The JRS-813/853 MF transmitter can provide an output power of 1kW/ 5kW peak envelope power(PEP),respectively. Operating modes include telegraphy (CW), frequency shift keying (FSK) . The transmitter employs a phase to amplitude modulation (PTAM) system unique to JRC while the power amplifier employs a class D amplification system. All RF signals, therefore, are amplified in the switching mode so that high power efficiency and high output stability are available. The transmitter is designed in compliance with related the ITU-R recommendations.

## SPECIFICATIONS

| | JRS-813 | JRS-853 |
|---|---|---|
| Frequency(kHz) | 490 and 518 | |
| Programmable channels | 6 channels | |
| Frequency deviation (Hz) | ±10 | |
| Frequency stability | Within ±1×$10^{-8}$/day | |
| Output power(kW PEP) | 1 | 5 |
| Power reduction | Full: 100% , Medium: 40% ～ 60% , Low: 20% ～ 30% | |
| Mode of emission | FSK*,CW | |
| RF output load | 50 ohms unbalanced, VSWR 3:1 max | |
| Channel switching time(sec) | 0.5 or less | |
| Harmonics and spurious(dB) | -60 or less | |
| Occupied band width | FSK: 304 Hz or less<br>CW: 250 Hz or less | |
| Audio input(Analog) | - 20dBm to +10dBm, 600 ohms balanced | |
| Telegraphy key speed | FSK: 100 bauds or less<br>CW: 50 bauds or less | |
| Power requirements | 50/60Hz | |
| (Single phase) | 200 - 240VAC | Not available |
| (3 phase) | Not available | 200 - 240VAC, 380 - 440VAC |
| (Power consumption) | 2.5kVA or less | 9kVA or less |
| Remote control | LAN, MODEM（2W ／ 4W） | |
| Environmental | Temperature: 0 ℃ to 50 ℃, Humidity: 95% or less at 40 ℃ | |
| Dimension(mm) | H1250×W570×D810 | H1950×W570×D810 |
| Weight(kg) | 150 | 350 |

*NOTE:In the FSK mode with MODEM control, a FSK signal of 1700Hz± 85Hz from external system is used.
In the FSK mode with LAN control, a built-in NAVTEX mudulator is used.

• Specifications may be subject to change without notice.

***For further information, contact:***

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