FM Exciter EX-FM-35S / FM Transmitter RT-FMS-101



Specifications

Operating frequency range 87.5 - 108 MHz, setting in 10 kHz steps

Frequency stability $\leq \pm 50 \text{ Hz}$

RF output power 20/100W ± 1 dB, adjustable, ALC mode

Output connector N female, 50 ohm

Probe -30dB, directional coupler, BNC female

Hamonics supperession \leq -70 dB Spurious emission \leq -70 dB

Residual AM ≤ 0.10%, synchronous

≤ 0.15%, asynchronous

S/N ratio mono ≤ -80 dB

stereo ≤ -75 dB

Pre-emphasis 50 μ s \pm 0.1 dB

Amplitude frequency response: stereo L-R ± 0.2 dB, 30 Hz – 15 kHz

AUX/RDS \pm 0.1 dB, 30 Hz - 100 kHz

Total harmonic distortion (THD) ≤ 0.05%

Stereo separations \leq -56 dB, 30 Hz – 15 kHz

≤ -65 dB @ 1 kHz

Pilot tone 19 kHz \pm 0.5 Hz

Audio inputs L,R 0 ± 6 dB, XLR male, balanced , 600 ohm ± 10%

AUX/RDS input 0 ± 12 dB, > 2 kohm, BNC female

19 kHz output 1 Vpp, ≥ 2 kohm, BNC female

Control and settings All settings are available on the front panel

Protection automatically reduce RF output power if VSWR > 2

standby RF Output if:

• the PLL frequency synthesizer is unlocked

heatsink temperature > 70 °C

power supply overload

recover automatically after fault condition is removed

Operating condition

Temperature range +5 ... +45 °C

Humidity 80% non condesing

AC power supply 220 Vac +10/-15%; $50 \pm 2 \text{ Hz}$

Power consumption 100/200 VA max

Cooling forced air

Dimension 1U 19" (44.4x482.6x405mm)

Weight 6.5 kg

Options

Standard AES/EBU digital stereo audio interface available as option.

Input connector XLR male, balanced, 110 ohm

automatic switching between analogue and digital input

Audio data 24 bit

Sampling frequency 32, 44.1, 48, 96 kHz

Dynamic range 120 dB

Integrated IP RDC (Remote Device Control) unit provides full control over equipment (or group of equipment) and additional features: control of all parameters related to operation, password protection, remote turn on/of, management of device history. The IP RDC unit allows integration into telemetry system or other supervisory systems.

Local network RS-485 interface, up to 14 devises

Ethernet connector RJ-45
Internet Protocol SNMP
Data communication HTTP

Web page contains the name of facility installation, description of the transmitters, device names and main parameters, device history.

RDS coder (Radio Data System) generates a high quality signal to full EBU/Cenelec specifications. The data signals are carried on a sub-carrier which is added to the stereo pilot-tone system.

RDS sub-carrier 57 kHz ± 2 Hz

Modulation DSB with suppressed carriers

Bandwidth $\pm 2.4 \text{ kHz}$ Carrier suppression $\leq -50 \text{dB}$

RDS data input RS-232 interface

Standard supported EBU/CENELEC Specification EN 50067

Software include:

FM Manager generates detailed information about the transmitting station.

FORA Server, Init Coder - helper programs and data initialization.

Documentation content detailed user manual. Please, carefully read this manual before connecting the RDS encoder.

Dynamic PS automatically generates dynamic data, scrolls song tittle and any other information. **RDS Manager** support remote control and settings.