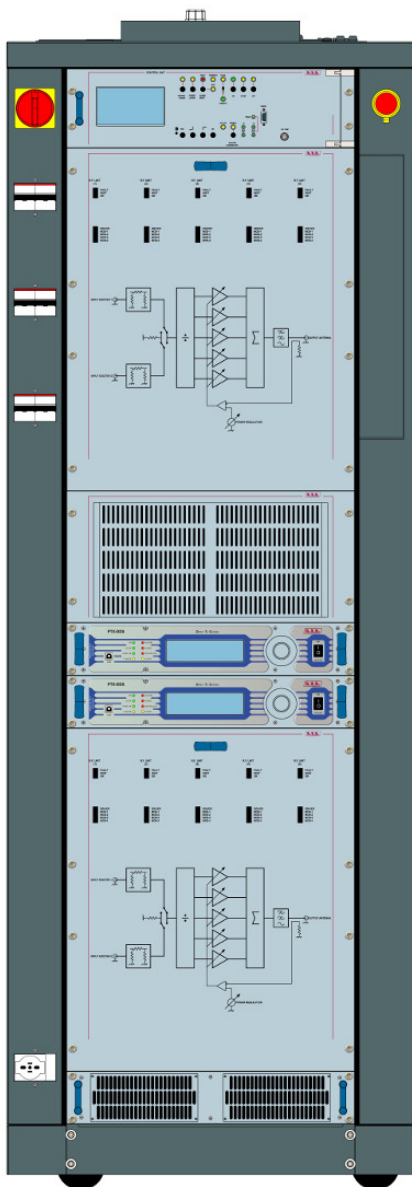


solid state transmitter

> Plug-in Compact series



TX20KSS/60D41 front view

TX20K PLUG-IN CA



Features

- > Tunable over entire FM band (87.5 – 108 MHz), without tuning.
- > Overall efficiency better than 70%.
- > Hot-pluggable and broadband power amplifier modules.
- > Each module features switching mode power supply to control and stabilize power supply voltage.
- > Each amplifier module provides Automatic Power Control.
- > Suitable for mono & stereo broadcast operations.
- > Protection against high VSWR, overdrive, overcurrent and overtemperature.
- > Compliance to IEC safety standards.
- > Compliance to ETSI – CCIR – FCC standards.
- > Entire transmitter can be switched off through an emergency button.
- > High redundancy guaranteed by 10 power modules of 2.2 kW RF power.
- > All measurement and working parameters are displayed on front panel.
- > Remotely controllable by telemetry system.
- > Design for 24/7 non-stop operation.
- > The transmitter include an integrated system for automatic and manual switching between two excitors. In Automatic mode the changeover is activated when active power of exciter falls below 3dB.

Caratteristiche

- > Sintonizzabile su tutta la banda FM (87.5 - 108 MHz), senza messa a punto.
- > Efficienza complessiva migliore del 70%.
- > Moduli amplificatori di potenza di tipo hot-plug e a banda larga.
- > Ogni modulo include un alimentatore switching che regola e stabilizza la tensione di alimentazione.
- > Ogni modulo amplificatore offre la funzione di Controllo della Potenza Automatica.
- > Adatto per trasmissioni in banda larga sia stereo che mono.
- > Protezione contro alto ROS, sovrapiotaggio, sovracorrente e sovratemperatura.
- > Conformità alle norme di sicurezza IEC.
- > Conformità agli standard ETSI - CCIR - FCC.
- > Tutto il trasmettitore può essere disattivato tramite un pulsante di emergenza.
- > Alta ridondanza garantita da 10 moduli di potenza di 2,2 kW di potenza RF.
- > Tutte le misure ed i parametri di lavoro vengono visualizzati sul pannello frontale.
- > Controllabile da remoto attraverso il sistema di telemetria.
- > Progettato per funzionamento no-stop 24/7.
- > Il trasmettitore comprende un sistema integrato per la commutazione automatica e manuale tra due eccitatori. In modalità automatica lo scambio si attiva quando la potenza attiva di eccitazione scende al di sotto dei 3dB.



Via del Fonditore, 2/2c • Zona Industriale Roveri • 40138 Bologna • Italy
Phone: +39 051 6010506 • Fax: +39 051 6011104 • info@RVR.it • www.RVR.it



solid state transmitter

BROADCAST
EQUIPMENT

Technical specifications

Parameters	Values
GENERALS	
RF Output Power	20.5 kW
Frequency Range	87.5 – 108 MHz
Frequency Stability	> 1 ppm
Frequency programmability	By software, with 1, 10, 100 , 1000 kHz steps
Nominal Frequency Deviation	±75 KHz (peak)
Maximum Frequency Deviation	±150 KHz (peak)
Class of Emission	180KF8E Direct to Channel
Modulation Mode	Mono, Stereo, Multiplex, SCA, RDS, Aux
Stereo transmissions	Acc. to ITU-R / Rec. 450 (Pilot tone)
RF Output Impedance	50 Ω, Unbalanced
RF Output Connector	3-1/8" EIA Flange
VSWR	1.4:1 with automatic fold-back at higher VSWR
Pre-emphasis Mode	0/50 (CCIR) μs, 75 (FCC) μs
Asynchronous AM S/N Ratio	Typically >70dB
Synchronous AM S/N Ratio	Typically > 55dB
Harmonics suppression and Spurious	Typically < 85dB
Overall efficiency	Typically > 70%
RF Harmonics	Exceeds ETSI/CCIR/FCC requirements
RF Spurious	Exceeds ETSI/CCIR/FCC requirements
Analogue Input level {±75 KHz (peak) deviation }	-12.5 dBu - +12.5 dBu (adjustable)
Digital Input level {±75 KHz (peak) deviation }	-20.0 dBFS – 0 dBFS (adjustable)
MONO OPERATION	
S/N ratio	Typically > 83dB
Total Harmonic Distortion + Noise	Typically < 0.03%
Inter Modulation Distortion SMPTE	Typically < 0.02%
Frequency Response	Typically ±0.2dB
Audio Input Impedance	600 Ω or 10 kΩ
MPX OPERATION	
Composite S/N ratio	Typically > 80dB
Total Harmonic Distortion + Noise	Typically < 0.05%
Inter Modulation Distortion	Typically < 0.05%
Frequency Response	Typically ±0.2dB
Audio Input Impedance	10 kΩ
STEREO OPERATION	
Stereo FM S/N Ratio	Typically > 83dB
Total Harmonic Distortion + Noise (L or R)	Typically < 0.02%
Inter Modulation Distortion SMPTE (L or R)	Typically < 0.02%
Frequency response (L or R)	Typically ±0.2dB
Linear Cross Talk	Typically > 50dB
Non-linear Cross Talk	Typically > 50dB
Stereo Separation (Sine Wave)	Typically > 70dB
Audio Input Impedance	600 Ω or 10 kΩ
Digital Input Impedance	110 Ω

All pictures are RVR's property and they are only indicative and not binding. The pictures can be modified without notice.
These are general specifications. They show typical values and are subject to change without notice.

CE ⓘ 99/5/CE Revision: 1/14

Ordering Information

Example Code	Description
TX20KSS/60D41	FM plug-in transmitter, 20kW (composed of 1x PJ20KPS-CA + 2x PTX30DDDS)
TX20KSS/41D41	FM plug-in transmitter, 20kW (composed of 1x PJ20KPS-CA + 2x PTX30LCDDSP)
TX20KSS/20D41	FM plug-in transmitter, 20kW (composed of 1x PJ20KPS-CA + 2x PTX30LCD)
TX20KSS/60S41	FM plug-in transmitter, 20kW (composed of 1x PJ20KPS-CA + PTX30DDDS)
TX20KSS/41S41	FM plug-in transmitter, 20kW (composed of 1x PJ20KPS-CA + PTX30LCDDSP)
TX20KSS/20S41	FM plug-in transmitter, 20kW (composed of 1x PJ20KPS-CA + PTX30LCD)



Via del Fonditore, 2/2c • Zona Industriale Roveri • 40138 Bologna • Italy
Phone: +39 051 6010506 • Fax: +39 051 6011104 • info@RVR.it • www.RVR.it

