

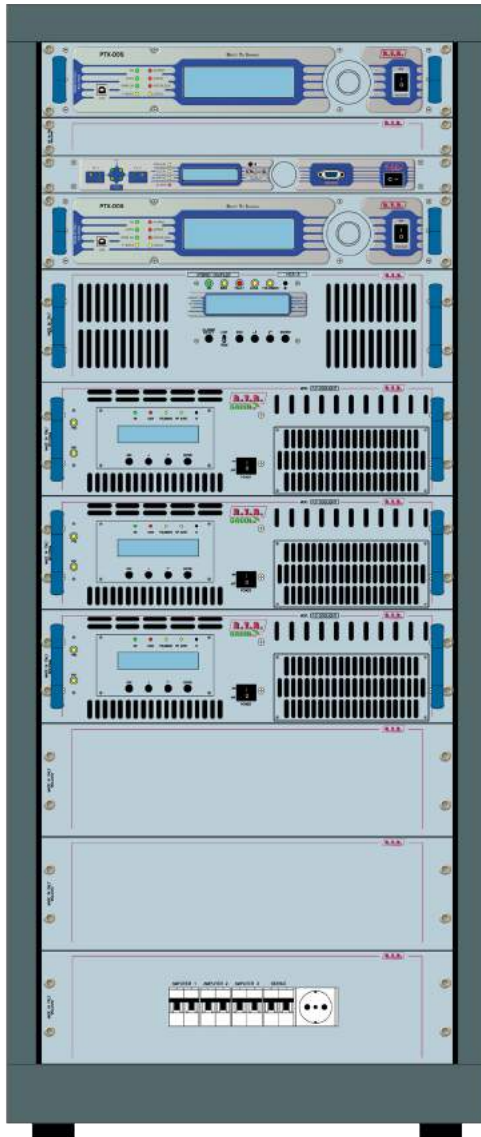
# solid state transmitter

> Compact series



## TX03K COMPACT

3X PJ1000LIGHT ●●●○○○  
REDUNDANCY



TX03KSS/61D113B front view

### Features

- > **HARDWARE FEATURES:** compact design and an excellent price/performance ratio make these transmitters ideal for mid-power applications. Modular concept makes for redundant "N+1" configurations to customer specifications suited for all applications.
- > **POWER & QUALITY:** modular design concept supports configurations in a broad range of power ratings up to 3 kW also incorporating low-cost compact exciters. Design solutions ensure the utmost RF efficiency and output power stability with automatic gain control. In addition, by integrating LDMOS technology, is guaranteed an high efficiency.
- > **RELIABILITY & REDUNDANCY (business continuity):** the compact transmitter series also offers high reliability, with such features as dual power supply for amplifiers and limited power-operation in the event one of the power modules fails.
- > **USER-FRIENDLY FEATURES:** user-friendly software and a simple, intuitive HM interface let you easily set up and control all machine operating parameters.
- > **EASE OF MAINTENANCE:** accessibility and ease of maintenance are ensured by advanced modular engineering concepts incorporated in the transmitter and by its lightweight components.
- > **REMOTE CONTROL:** the device comes with a powerful and complete telemetry system, available optionally.

### Caratteristiche

- > **HARDWARE FEATURES:** la compattezza degli apparati e l'ottimo rapporto prezzo/prestazioni, rendono ottimale l'utilizzo di questi trasmettitori in applicazioni di media potenza. Grazie alla modularità del sistema è possibile realizzare composizioni ridondanti "N+1" su specifiche richieste del cliente e per ogni tipologia di applicazione.
- > **POWER & QUALITY:** la modularità del sistema permette configurazioni con molteplici tagli di potenza fino a 3 kW prevedendo anche l'inserimento di eccitatori della famiglia low-cost compact. Le soluzioni progettuali adottate assicurano massima efficienza RF e stabilità della potenza di uscita con il controllo automatico del guadagno. Inoltre integrando tecnologia LDMOS si garantiscono rendimenti elevati.
- > **RELIABILITY & REDUNDANCY (business continuity):** anche la famiglia dei trasmettitori compatti possiede un' alto livello di affidabilità: nel caso in cui uno dei moduli di potenza si guasti l'apparato continua l'operatività a potenza ridotta.
- > **USER-FRIENDLY FEATURES:** un software con interfaccia semplice ed intuitiva permette di configurare e controllare in maniera elementare tutti i parametri di esercizio della macchina.
- > **EASE OF MAINTENANCE:** l'accessibilità e semplicità di manutenzione è garantita da una avanzata ingegnerizzazione modulare del trasmettitore e dal peso contenuto degli apparati di cui è composto.
- > **REMOTE CONTROL:** opzionalmente, un potente e completo sistema di telemetria correda l'apparato.

# solid state transmitter

## Technical specifications

Parameter	Value
<b>TX03KSS/61D113B</b>	
<b>GENERALS</b>	
RF Output Power	3 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	1-5/8" 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)
<b>MONO OPERATION</b>	
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
<b>MPX OPERATION</b>	
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
<b>STEREO OPERATION</b>	
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.

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## Ordering Information

Code -Codice	Description - Descrizione
<b>Options for TX03K COMPACT – Opzioni per TX03K COMPACT</b>	
TX03KSS/61D113B	FM compact transmitter, 3kW (composed of HC3 + 3x PJ1000LIGHT + SCML1+1SL/V2 + 2x PTX100DDS). Trasmettitore compatto FM, 3kW (composto da HC3 + 3x PJ1000LIGHT + SCML1+1SL/V2 + 2x PTX100DDS).
TX03KSS/42D113B	FM compact transmitter, 3kW (composed of HC3 + 3x PJ1000LIGHT + SCML1+1SL/V2 + 2x PTX60LCDDSP). Trasmettitore compatto FM, 3kW (composto da HC3 + 3x PJ1000LIGHT + SCML1+1SL/V2 + 2x PTX60LCDDSP).
TX03KSS/23D113B	FM compact transmitter, 3kW (composed of HC3 + 3x PJ1000LIGHT + SCML1+1SL/V2 + 2x PTX60LCD). Trasmettitore compatto FM, 3kW (composto da HC3 + 3x PJ1000LIGHT + SCML1+1SL/V2 + 2x PTX60LCD).
TX03KSS/03D113B	FM compact transmitter, 3kW (composed of HC3 + 3x PJ1000LIGHT + SCML1+1SL/V2 + 2x TEX100LCD/S). Trasmettitore compatto FM, 3kW (composto da HC3 + 3x PJ1000LIGHT + SCML1+1SL/V2 + 2x TEX100LCD/S).
TX03KSS/61S113	FM compact transmitter, 3kW (composed of HC3 + 3x PJ1000LIGHT + PTX100DDS). Trasmettitore compatto FM, 3kW (composto da HC3 + 3x PJ1000LIGHT + PTX100DDS).
TX03KSS/42S113	FM compact transmitter, 3kW (composed of HC3 + 3x PJ1000LIGHT + PTX60LCDDSP). Trasmettitore compatto FM, 3kW (composto da HC3 + 3x PJ1000LIGHT + PTX60LCDDSP).
TX03KSS/23S113	FM compact transmitter, 3kW (composed of HC3 + 3x PJ1000LIGHT + PTX60LCD). Trasmettitore compatto FM, 3kW (composto da HC3 + 3x PJ1000LIGHT + PTX60LCD).
TX03KSS/03S113	FM compact transmitter, 3kW (composed of HC3 + 3x PJ1000LIGHT + TEX100LCD/S). Trasmettitore compatto FM, 3kW (composto da HC3 + 3x PJ1000LIGHT + TEX100LCD/S).