

solid state transmitter

> Compact series



TX7K5SS/62D065B front view

TX7K5 COMPACT

5X PJ1600LIGHT



REDUNDANCY

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 **7,5 kW** also incorporating low-cost compact excitors. 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 **7,5 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:** optionalmente, un potente e completo sistema di telemetria correderà l'apparato.

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Technical specifications

TX7K5SS/62D065B

Parameter	Value
GENERALS	
RF Output Power	7,5 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	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)
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

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These are general specifications. They show typical values and are subject to change without notice.

CE 99/5/CE Revision: 11/16

Ordering Information

Code - Codice	Description - Descrizione
Options for TX7K5 COMPACT – Opzioni per TX7K5 COMPACT	
TX7K5SS/62D065B	FM plug-in transmitter, 7,5kW (composed of HC5 + 5x PJ1600LIGHT + SCML1+1SL/V2 + 2x PTX150DDS). <i>Trasmettitore compatto FM, 7,5kW (composto da HC5 + 5x PJ1600LIGHT + SCML1+1SL/V2 + 2x PTX150DDS).</i>
TX7K5SS/40D065B	FM plug-in transmitter, 7,5kW (composed of HC5 + 5x PJ1600LIGHT + SCML1+1SL/V2 + 2x PTX150LCDDSP). <i>Trasmettitore compatto FM, 7,5kW (composto da HC5 + 5x PJ1600LIGHT + SCML1+1SL/V2 + 2x PTX150LCDDSP).</i>
TX7K5SS/27D065B	FM plug-in transmitter, 7,5kW (composed of HC5 + 5x PJ1600LIGHT + SCML1+1SL/V2 + 2x PTX150LCD). <i>Trasmettitore compatto FM, 7,5kW (composto da HC5 + 5x PJ1600LIGHT + SCML1+1SL/V2 + 2x PTX150LCD).</i>
TX7K5SS/04D065B	FM plug-in transmitter, 7,5kW (composed of HC5 + 5x PJ1600LIGHT + SCML1+1SL/V2 + 2x TEX150LCD/S). <i>Trasmettitore compatto FM, 7,5kW (composto da HC5 + 5x PJ1600LIGHT + SCML1+1SL/V2 + 2x TEX150LCD/S).</i>
TX7K5SS/62S065	FM plug-in transmitter, 7,5kW (composed of HC5 + 5x PJ1600LIGHT + PTX150DDS). <i>Trasmettitore compatto FM, 7,5kW (composto da HC5 + 5x PJ1600LIGHT + PTX150DDS).</i>
TX7K5SS/40S065	FM plug-in transmitter, 7,5kW (composed of HC5 + 5x PJ1600LIGHT + PTX150LCDDSP). <i>Trasmettitore compatto FM, 7,5kW (composto da HC5 + 5x PJ1600LIGHT + PTX150LCDDSP).</i>
TX7K5SS/27S065	FM plug-in transmitter, 7,5kW (composed of HC5 + 5x PJ1600LIGHT + PTX150LCD). <i>Trasmettitore compatto FM, 7,5kW (composto da HC5 + 5x PJ1600LIGHT + PTX150LCD).</i>
TX7K5SS/04S065	FM plug-in transmitter, 7,5kW (composed of HC5 + 5x PJ1600LIGHT + TEX150LCD/S). <i>Trasmettitore compatto FM, 7,5kW (composto da HC5 + 5x PJ1600LIGHT + TEX150LCD/S).</i>

