

# Audio & RDS Equipments

## > RDS coder systems

TRDS4002-LUXOR-B  
TRDS4002-LUXOR-C  
TRDS4002-LUXOR-D



TRDS4002-LUXOR-B front view



TRDS4002-LUXOR-D front

## Features

- > **PRIMARY APPLICATION:** the **TRDS4002-LUXOR** is a RDS encoder designed to support all popular services provided by UECP SPB490 including dynamic services like TMC, TDC, IH, EWS and RT+, and it uses fully digital technology to guarantee a very high quality of modulation and spectral purity.
- > **TECHNICAL FEATURES:** the **TRDS4002-LUXOR** is fully digital and it uses only high quality components like A/D and D/A converters at 24 bit and numerical processing at 32 bit. Using the WINRDS+ software you can assign station and apparatus codes in order to be able to selectively program any **TRDS4002-LUXOR** remotely such as satellite, LAN or Internet. The firmware can be updated via serial port without need for hardware settings and without interruption of service.
- > **INPUT/OUTPUT INTERFACE:** it can integrate an advanced BYPASS system between MPX input and outputs that ensure the service also in the event of failures (version **TRDS4002-LUXOR-C**).
- > **HARDWARE FEATURES:** the system housed in lightweight and rugged stainless steel rack cases having the dimension of 1 HE.

## Caratteristiche

- > **PRIMARY APPLICATION:** il **TRDS4002-LUXOR** è un codificatore RDS progettato per supportare tutti i servizi più diffusi previsti dal protocollo UECP SPB490 compresi i servizi dinamici TMC, TDC, IH, EWS e RT+ ed utilizza tecnologia totalmente digitale in grado di garantire una qualità di modulazione ed una purezza spettrale elevatissime.
- > **TECHNICAL FEATURES:** il **TRDS4002-LUXOR** è completamente digitale ed utilizza esclusivamente componenti di alta qualità come convertitori A/D e D/A a 24 bit ed elaborazioni numeriche a 32 bit. Utilizzando il software WINRDS+ è possibile assegnare dei codici di stazione e di apparato al fine di poter programmare selettivamente qualsiasi **TRDS4002-LUXOR** in remoto ad esempio via satellite, lan o internet. Il firmware è aggiornabile tramite porta seriale senza la necessità di settaggi hardware e senza interruzione del servizio.
- > **INPUT/OUTPUT INTERFACE:** può integrare un sistema evoluto di BYPASS fra ingresso MPX e uscite garantisce il servizio anche in caso di avarie (versione **TRDS4002-LUXOR-C**).
- > **HARDWARE FEATURES:** il sistema è realizzato in un contenitore rack in acciaio inox incredibilmente leggero e robusto in dimensioni di 1 HE.

## Technical specifications

Parameter		Value	TRDS4002-LUXOR
<b>GENERALS</b>			
Overall Dimensions	L x H x W	483 x 44 x 280 mm	
Weight		3,5 kg	
Operating Temperature		From -10 °C to + 50 °C	
Operating Humidity		95% non condensing	
A/D & D/A conversion		24 bit	
DSP elaboration		32 bit, fixed point	
RDS function	EN50067	PTY, PTYN, TA, TP, MS, DI, PI, PS, AF, PIN, EON, RT, TDC, TMC, EWS, IH, CT	
	Command formats	UECP - SPB490 Ver.6.1 / 2003	
	Frequency	57 KHz ±1,5 Hz (Internal/External Reference)	
	57 kHz carrier attenuation	> 75 dB	
	Phase 57 kHz	Adjustable up to 360° in 0.33° increments	
Out of Band Emission		> 100 dB	
<b>POWER REQUIREMENTS</b>			
AC Power Input	AC Supply Voltage	115 / 230 VAC ±10%	
	Connector	VDE IEC Standard	
<b>INPUTS</b>			
MPX	Connector	BNC unbalanced (female)	
	Impedance	10k Ω	
	Input level	Gain 0dB / Max. +20 dBu	
PILOT	Connector	BNC unbalanced (female)	
	Impedance	10K Ω	
	Input level	Gain 0dB / Max. +20 dBu (Sinusoid. or TTL)	
<b>OUTPUTS</b>			
1 & 2	Connector	BNC unbalanced (male)	
	Impedance	50 Ω	
	Output level	+20 dBu – adjustable via software	
<b>CONNECTORS</b>			
RS232 serial port	Connector	3x DB9 (female)	
	Connection rate	From 1200 to 115200 Baud 8,N,1	
REMOTE input	Connector	DB25 (male): 8 Input + 8 Output (Optional)	
Ethernet	Connector	RJ45 (female): WEB & SNMP v1.0 (Optional) SNMP V 2.C (Model TRDSP 4002 LUXOR-D)	
WEB Server		built-in for Model TRDSP 4002 LUXOR-D	

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>Versions for TRDS4002-LUXOR family – Versioni per TRDS-4002-LUXOR family</b>	
TRDS4002-LUXOR-B	Radio Data System encoder. Encoder RDS (Radio Data System).
TRDS4002-LUXOR-C	Radio Data System encoder with MPX bypass function . Encoder RDS (Radio Data System) con funzione by-pass per MPX.
TRDS4002-LUXOR -D	Advanced Radio Data System dynamical encoder with SNMP V 2 control Radio Data System encoder dinamico avanzato con controllo SNMP V2