



# SmartGen 4.1

## UECP COMPATIBLE RDS/RBDS ENCODER WITH LAN & USB CONNECTIVITY

The SmartGen 4.1 is a full-function RDS/RBDS encoder that supports both of European CENELEC and United States NRSC standards. It supports all service IDs and offers simultaneous scrolling-PS and RadioText messaging. SmartGen 4.1 is fully compatible with the latest UECP EBU SPB490 Version 7.05. The interactive function RT+ for song tagging is fully supported without a compromise. Based on the latest RDS technology, the SmartGen 4.1 is fully digital design for 24/7/365 operation. The SmartGen 4.1 is the most cost effective solution for sending TMC and EWS Services.

SmartGen 4.1 gives dynamic, on-the-fly programming access with its built-in USB, TCP/IP, UDP/IP interfaces. This connectivity permits full integration of RDS/RBDS transmissions with the station's other networked functions, including message streams for digital radio and Webcasting. The SmartGen 4.1 encoder provides a full loopthrough interface for connection to your existing broadcast chain. The SmartGen 4.1 can 'parse' scrolling text, automatically breaking phrases into word groups.

### FEATURES

- Supports European CENELEC and United States NRSC standards
- Remote configuration via ASCII or UECP through LAN or USB
- Includes the TA function for traffic message priority override
- Real time clock Schedules for Scrolling Text and text lists
- SNTP for automatic synchronization of the built-in clock
- Internal data diagnostics and transmission safeguards
- Attractive price and very good price-performance ratio
- Fully compatible with UECP EBU SPB490 Version 7.05
- Interfaces with all popular radio automation systems
- Compatible with EWS (Emergency Warning System)
- Proved and reliable hardware for 24/7/365 operating
- Embedded WEB server for interactive supervision
- 19" Professional Case for high RF immunity
- Easy Installation and Setup
- Built-in failsafe bypass relay
- PS & Radio Text Scrolling Options
- LAN & USB Programming Interfaces
- Fully Digital Synthesis of RDS signal
- MPX Loopthrough & Sidechain Modes
- Supports TMC (Traffic Message Channel)
- Very Intuitive UECP Configuration Software
- Supports RT+ for songs and content tagging
- Internal or external Pilot / MPX synchronisation
- Works with any FM exciter and stereo generator
- Built-in dedicated 19kHz source for internal sync
- Remote RDS viewer to visualize broadcasted data



## SPECIFICATIONS

Technical Specifications	
Pilot/MPX Input	Yes
MPX/RDS Output	0 to 4095 mV
Inputs/Outputs	No
Communication Port	USB, LAN
Synchronization	External (Pilot or MPX) / Internal / Auto
Synchronization Monitoring	Yes
RDS Level adjustment	Digitally controlled
Phase adjustment	Yes, 0 + 359.9°
Separate outputs for RDS+MPX and for RDS only	No
Command to activate the RDS SCA	Yes
Side Chain Mode, Loop through mode, Bypass feature	Yes
RDS Subcarrier	100% Digitally Generated Shape / Bypass: 0 dB
Pilot Sync Input Level: -50dBu to +12dBu / Frequency: 19kHz, ±3Hz	
EN50067 compliant	Yes
Accurate Clock Time (CT) Sync with Internet Connection	Yes
Remote TA actuation for Traffic Announcements	Yes
GPS module for automatic synchronization of the built-in clock	No
Fully independent RDS decoder for self-monitoring purposes	No
Firmware can be upgraded in the field	Yes
Front-panel LCD displays all programmed data	No
Data may be entered on-site with Front-panel Buttons	No
Operating Temperature	-15°C + 55°C

Communication	
Communication Interfaces	USB, LAN
Connection with Automation Software	Yes
Network Connectivity	2 TCP ports; 2 UDP ports
Scheduler	Yes
Configuration	Embedded Web Server, SmartGen Manager
Password Protection	Yes
ASCII Protocol	Yes
UDP, TCP, HTTP, SNMP	Yes
Alert notifications on user-defined events via SNMP or E-mails	No
Embedded SNMP agent permitting active management tasks	No
Custom HTML formatted E-mail templates with dynamic variables	No
Supported Network Protocols:	HTTP, SNMP, UDP, TCP, UPnP
UECP Protocol	Fully compliant with EBU SPB490 Ver.7.05
PI <=> CALL Calculator	Yes
Remote Display	Yes

RDS Features	
Group supported	All
Group Sequence	Configurable
PS	4 DSN x 4 PSN
PI	4 DSN x 4 PSN
PTY	RDS/RBDS
AF Method A	25
AF Method B	up to 50
RT	Yes, 5 messages
RT rate adjustment	Group Sequence
RT+ for songs and content tagging	Yes
TP	Yes
TA Control	Command, Software
PTYN	Yes
EON	4 PSN
CT	Yes
TMC, EWS, IH, TDC	Yes
Free Format Groups (FFG)	Yes
Open Data Application (ODA)	Yes
64-character Dynamic PS shown on all RDS/RBDS Radios	Yes
Auto "parses" long messages for best text display	Yes
Scrolling by character	from 1 up to 8
Scrolling by word, Auto centering, Truncate long words	Yes

Operating conditions	
Temperature	-15°C to 55°C
Humidity	< 95%, non-condensing
Altitude	0 to 5000m above sea level

Power	
Voltage	Internal 100 - 240V; 50 - 60Hz
Power Consumption	5VA
Connector	IEC320, Fused and EMI-suppressed

Size and Weight	
Dimensions (W;H;D)	485 x 44 x 180 mm
Shipping Weight	540 x 115 x 300 mm / 2.050 kg
HS Code	8527212000



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