



# SmartGen 5.0

## UECP COMPATIBLE RDS/RBDS ENCODER WITH LAN, USB & RS-232 CONNECTIVITY

The SmartGen 5 encoder has all the features you would ever need from an RDS encoder at a fantastic price. SmartGen 5 supports all RDS Applications in conformity with European CENELEC and United States NRSC standards and is fully compatible with UECP EBU SPB490 Version 7.05

The interactive function RT+ for song tagging is fully supported without a compromise. The SmartGen 5 can 'parse' scrolling text, automatically breaking phrases into word groups. Based on the latest RDS technology, the SmartGen 5 is fully digital design for 24/7/365 operation. The SmartGen 5 is cost effective solution for sending TMC and EWS Services. The front-panel LCD displays setup parameters without the need for an on-site computer, and also shows incoming raw data from station automation as well as exactly what the listener sees on his radio.

Supplied with free of charge, dedicated programming software "SmartGen RDS/RBDS Encoders Manager" this encoder programming is simple and foolproof like never before. SmartGen 5 comes along with Embedded WEB Server for remote and easy programming and supervision. SmartGen 5 gives dynamic programming access with its built-in RS232, USB, TCP/IP, UDP/IP interfaces. This connectivity permits full integration of RDS/RBDS transmissions with the station's other networked functions like message streams for Webcasting or Digital Radio. The SmartGen 5 encoder provides a full loopthrough interface for connection to your existing broadcast chain.

### FEATURES

- Front panel LCD Display and Buttons for operating without a computer
- Remote configuration via ASCII or UECP through RS232, LAN, USB
- Supports European CENELEC and United States NRSC standards
- Displays outgoing scrolling messages exactly as seen by listener
- 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
- Attractive price and very good price-performance ratio
- Fully compatible with UECP EBU SPB490 Version 7.05
- Internal data diagnostics and transmission safeguards
- 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
- Remote RDS viewer to visualize broadcasted data
- 4 General Purpose Outputs
- Easy Installation and Setup
- Built-in failsafe bypass relay
- LAN, USB & RS-232 Interfaces
- PS & Radio Text Scrolling Options
- Fully Digital Synthesis of RDS signal
- MPX Loopthrough & Sidechain Modes
- Supports TMC (Traffic Message Channel)
- Very Intuitive UECP Configuration Software
- 19" Professional Case for high RF immunity
- Supports RT+ for songs and content tagging
- Tally port for Traffic Announcement switching
- Internal or external Pilot / MPX synchronisation
- Works with any FM exciter and stereo generator
- Built-in dedicated 19kHz source for internal sync



## SPECIFICATIONS

Technical Specifications	
Pilot/MPX Input	Yes
MPX/RDS Output	0 to 4095 mV
Inputs/Outputs	4 GPO, TA Input
Communication Port	RS232, 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	Yes
Data may be entered on-site with Front-panel Buttons	Yes
Operating Temperature	-15°C ± 55°C

Communication	
Communication Interfaces	RS232, 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	6 DSN x 4 PSN
PI	6 DSN x 4 PSN
PTY	RDS/RBDS
AF Method A	25
AF Method B	up to 100
RT	Yes, 10 messages
RT rate adjustment	Group Sequence
RT+ for songs and content tagging	Yes
TP	Yes
TA Control	Command, Contact closure, 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, 115V or 230V
Power Consumption	10VA
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 / 2.445 kg



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