



# SmartGen 6.0

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

Manufactured to meet the highest standards in broadcasting, SmartGen 6.0 encoder furnishes all the mandatory for this high class equipment features, at competitive price. Since all DEVA's products are manufactured to be user friendly in terms of operation, SmartGen 6.0 comes with simple and reliable programming software: "SmartGen RDS/RBDS Encoders Manager" and a password protected WEB interface for remote connection.

The local (RS232, USB) and remote (TCP/IP, UDP/IP) interfaces permit fast and full integration of the RDS/RBDS encoder to the station's other functions, including message streams for digital radio and Webcasting. The LCD (2x40) text display and Intuitive Navigation menu are used for on-site navigation through the menus, quick access to the parameters and the functions and for altering of their values. In addition, the display visualizes the incoming raw data from the station, just as the radio of your listeners does.

The need of highly-accurate time source is satisfied not only by the supported SNTP but also by the built-in GPS Module. The used GPS technology provides means for synchronizing the unit with UTC and makes the sub-second timekeeping possible and easy to achieve.

Another impressive feature of SmartGen 6.0 is the SNMP agent software component, which reports information via SNMP to one or more administrative computers (managers). SmartGen 6.0 complies with SNMPv2C. The function SNMP traps or E-mail notification on user-defined alerts is also available.

SmartGen 6.0 is supplied with two separate outputs – one for RDS+MPX and one for RDS only. The two General Purpose Inputs are with user-defined functionality, allowing easy integration of SmartGen 6.0 to the station's needs. The four General Purpose Outputs are also user-defined and allow easy management of external devices, when needed.

Based on the latest RDS technology, SmartGen 6.0 guarantees fully digital synthesis of the RDS signal, with excellent quality and spectral purity. This advanced device is a cost-effective solution for sending of TMC, EWS Services and song tagging via the supported RT+ function. The device can 'parse' scrolling text, automatically breaking the phrases into word groups.

Supporting all RDS Applications, in conformity with the European CENELEC and the United States NRSC standards, SmartGen 6.0 is fully compatible with UECP EBU SPB490 Version 7.05.

In line with the latest technology, SmartGen 6.0 is proved and reliable hardware for 24/7/365 operation.

### FEATURES

- 4 x user-defined GPO, allowing easy management of external devices when needed
- Supported Network Protocols: HTTP, FTP, SNMP, SMTP, UpNP, UDP and TCP
- Remote configuration via ASCII or UECP protocols through RS232, LAN, USB
- Fully Digital Synthesis of RDS signal with excellent quality and spectral purity
- SNTP & GPS module for automatic synchronization of the built-in clock
- Front panel LCD Display and Buttons for operating without a computer
- Alert notifications on user-defined events via SNMP traps or E-mails
- Supports European CENELEC and United States NRSC standards
- Custom HTML formatted E-mail templates with dynamic variables
- Embedded SNMP agent permitting active management tasks
- Fully independent RDS decoder for self-monitoring purposes
- Includes the TA function for traffic message priority override
- Real time clock Schedules for Scrolling Text and text lists
- 2 x General Purpose Inputs with user-defined functionality
- Attractive price and very good price-performance ratio
- Internal data diagnostics and transmission safeguards
- Interfaces with all popular radio automation systems
- Proved and reliable hardware for 24/7/365 operating
- Easy Installation and Setup
- Built-in failsafe bypass relay
- PS & Radio Text Scrolling Options
- LAN, USB & 2 x RS-232 Interfaces
- MPX Loophrough & Sidechain Modes
- Full support of Open Data Applications
- Supports TMC (Traffic Message Channel)
- Very Intuitive UECP Configuration Software
- 19" Professional Case for high RF immunity
- Supports RT+ for songs and content tagging
- Internal or external Pilot / MPX synchronization
- Works with any FM exciter and stereo generator
- Built-in dedicated 19kHz source for internal sync
- Embedded WEB server for interactive supervision
- Separate outputs for RDS+MPX and for RDS only
- Remote RDS viewer to visualize broadcasted data
- Compatible with EWS (Emergency Warning System)
- Fully compatible with UECP EBU SPB490 Version 7.05



## SPECIFICATIONS

Technical Specifications	
Pilot/MPX Input	Yes
MPX/RDS Output	0 to 4095 mV
Inputs/Outputs	2 x GPI, 4x GPO user-defined
Communication Port	2xRS232, USB, LAN
Synchronization	External / 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	Yes
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	Yes
Fully independent RDS decoder for self-monitoring purposes	Yes
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	2xRS232, 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	Yes
Embedded SNMP agent permitting active management tasks	Yes
Custom HTML formatted E-mail templates with dynamic variables	Yes
Protocols	HTTP, FTP, SNMP, SMTP, UPnP, UDP, TCP
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 8 PSN
PI	6 DSN x 8 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	8 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	100 - 240V; 50 - 60Hz
Power Consumption	15VA
Connector	IEC320, Fused and EMI-suppressed

Size and Weight	
Dimensions (W;H;D)	485 x 44 x 178 mm
Shipping Weight	540 x 115 x 300 mm / 2.455 kg



WE NEVER SPARE EFFORTS AND RESOURCES TO TURN OUR IDEAS INTO SUCCESSFUL PRODUCTS