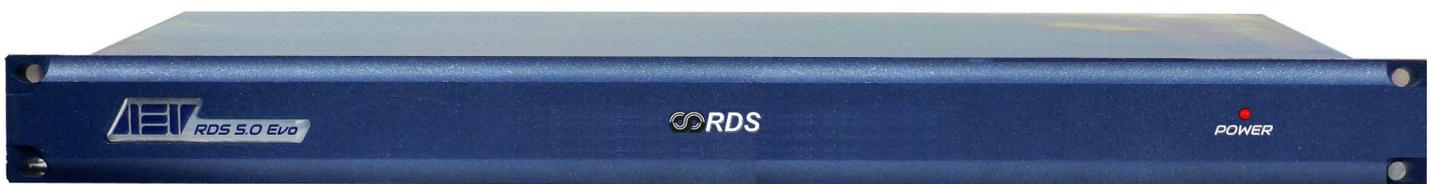




# *RDS Evo*

## *AEV BROADCAST*

### *Digital Radio Data System*



DSP powered

Radio Data System encoder

RDS decoder integrated

RDS with dynamic data management

Software PC control

Ethernet control

RJ45

GPIO port



The new RDS Evo encoder is powered with the latest generation **DSP**, responds to the new operational needs of signal management for FM stations.

**Inputs section** MPX and RDS signals coming from outside.

The RDS Evo is also fully equipped with an **RDS signal decoder**; through this section it is possible to decode the data of an external RDS signal, decide which ones to keep and which to modify locally, and then regenerate the RDS data package to be supplied to the local FM transmitter. The RDS Decoder also allows the PI code contained in the external RDS signal to be monitored, if the PI code is different from the one programmed, it is possible to activate the exchange from the external MPX signal and the internally generated one.

**The GPIO** port takes the status of the machine's inputs to the outside, for a simple interface with the transmitters's telemetry.

The machine can be controlled via ethernet thanks to the **internal web server**, this solution frees the user from installing PC software; in addition, the Web Server can be set as CLIENT, in case of insertion in a LAN network, or as a SERVER, if you want to directly connect a PC with an Ethernet network cable.

It is possible to activate a **password** that limits access to the machine, inhibiting the modification of the setup parameters to unauthorized personnel.

## Technical Specifications

### RDS Generator

RDS signal:	Standard specif. EBU Doc. Tech. 3244-E and Cenelec En 50067
Coding:	Differential and Biphase
Modulation	DSB-suppressed carrier
Frequency	57 KHz
Central Frequency (RDS carrier frequency):	57 kHz $\pm$ 6 Hz
Bandwidth	$\pm$ 2.4 KHz (at -60 dB)
RDS injection into MPX signal	- infinite $\div$ - 16 dB
RDS output level	0 – 500 mVpp range
RDS Pilot (57 kHz) Carrier Phase Setting:	Providing that it is not done from front it will be in (with respect to mpX pilot reference ) minimum 0° – 90°
Input Impedance	>600 $\Omega$
Output Impedance	<100 $\Omega$
Connector	BNC grounded to chassis
Data Synchronization	
Terminal Interface:	LAN
Data Input	Full duplex
Connector	RJ45
RDS Data management Microprocessor	controlled 128 Kbyte
Non volatile memory RAM data retention	20 years.
Configuration Software	Embedded web server & dedicated Software
Configuration/monitoring	SNMP
Connection with automation software	TCP/IP
Communication port	Ethernet port
Remote logic I/O	MS, TA, RDS OFF Cmos level
Connector	15 pin subminiature cannon female
General Data	
Power requirement	87 $\div$ 265 VAC 50 $\div$ 60 Hz
Consumption	8 VA
Dimension (WxHxD)	48.3 x 24 x 4.4 cm 1 rack unit
Weight	2,5 Kg. (5.5 Lbs)
Operating Temp.	0 $\div$ 50° C