



DAB 300/600

DAB TRANSMITTER

ELENOS®
World Broadcast Experience



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Technical data can be subject to change without notice.



our technologies



Icefet



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Brochure

DAB TRANSMITTER | DAB300 | DAB600

VHF TRANSMITTER DAB BAND III

The new line of digital audio broadcasting transmitters (DAB300 e DAB600) in VHF band III are comply with Elenos standard : high power in extremely compact size and a good total efficiency value for this kind of product. Low space and energy requirements are then combined with maximum signal quality, guaranteed to an high MER value (typical 33dB), to a typical shoulder attenuation of 37dB when the transmitter operates at nominal power and to the possibility to play on an adjustable crest factor and on an adaptive precorrection.

Transmissions in line with the existing DAB, DAB+ and T-DMB specifications are supported. The user can switch between two ETI (G703, G704) input signals (in any case automatically detected).

Single frequency network and multi frequency network operation are possible, also thanks to an internal or an external GPS receiver.

Equipped with protective circuits and algorithm the transmitter deliver high reliability.

A simple interaction with the machine is made possible by easy setting parameters and advanced remote control mechanisms (SNMP and WEB).

Features:

- High power in extremely compact size
- Adjustable crest factor reduction (PAPR)
- Easy setting parameters
- Internal/external GPS
- SFN/MFN network operation
- DAB, DAB+, T-DMB supported standards
- Adaptive precorrection (non linear)
- DAB modes: I, II, III, IV
- Direct to channel
- ETI G703/G704 input
- High MER
- Advanced remote control
- High reliability



Datasheet

DAB TRANSMITTER | DAB300

DAB TRANSMITTER | DAB300 | DAB600

GENERAL DATA

Frequency range	174 - 240 MHz (VHF Band III)
Output connector power	350W rms
Number of internal amplifiers	1
Maximum permissible reflection (VSWR)	1.3
RF output impedance	50 Ohm
Gain	until 63dB
Supported standards	DAB, DAB+, T-DMB
DAB modes	I, II, III, IV
DAB-specific parameters	in line with EN 300 401 v.1.4.1, EN TS 102 428 v.1.1.1, ETSI ETS 300 799 v.1.5.1
Network operation	SFN,MFN
Shoulder attenuation at nominal power (typical)	37dB
MER (typical)	33dB
Delay compensation	max 1s, step size 100ns
External reference clock	10MHz and 1PPS inputs
Dimensions	48.5 x 17.6 x 70 cm
Weight	38kg

CONNECTORS

RF output connector	7/16
Signal input	2x G703 SMA 75 Ohm NI(G703), NA5376(G704), NA5592(G704) automatically detected
GPS antenna input	SMA, internal/external

INSTALLATION REQUIREMENTS

Power supply	230 1-phase 50/60Hz VAC
Power consumption (typical)	1KW
Efficiency (typical)	35%

COOLING/NOISE/DATA

Cooling system	air cooling with 6 internal fans
Air temperature increase	17 °C
Acoustic noise	< 65 phon @ transmitter room, 2 m distance of the front of transmitter

ENVIRONMENT

Temperature range (operating)	-5°C - +45°C
Temperature range (non operating)	-20°C - +55°C
Humidity range (operating)	95% @ 40°C non-condensing
Humidity range (non operating)	90% @ 55°C non-condensing
Altitude range (operating)	< 3000 meters
Altitude range (non operating)	< 15000 meters

TELECONTROL & TELEMETRY

Telecontrol & Telemetry	advanced remote control
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DAB TRANSMITTER | DAB600

GENERAL DATA

Frequency range	174 - 240 MHz (VHF Band III)
Output connector power	700W rms
Number of internal amplifiers	2
Maximum permissible reflection (VSWR)	1.3
RF output impedance	50 Ohm
Gain	until 63dB
Supported standards	DAB, DAB+, T-DMB
DAB modes	I, II, III, IV
DAB-specific parameters	in line with EN 300 401 v.1.4.1, EN TS 102 428 v.1.1.1, ETSI ETS 300 799 v.1.5.1
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