



DAB+ Air-Cooled Transmitters

MAIN CHARACTERISTICS:

- 50V Latest Generation Power Devices
- Highly Reliable Forced-air Cooling System
- Wired GPIO and Serial (RS232 or RS485)
- Remote Control
- All Operating Parameters monitored through front-panel display
- MER ≥ 30 dB

OPTIONS:

- Output Cavity Filter
- Dual Drive Configuration
- N+1 Configuration

The Eletttronika **DAB+ air-cooled transmitters** line allows to implement low/medium/high power broadcasting sites with optimal space requirement. In a single 42U 19" rack a DAB+ Transmitter up to 2.3kW before the output mask cavity filter can be delivered. Higher Powers are available upon customer's request. The operating temperature of the power amplifiers is optimally guaranteed by an extremely noiseless forced-air cooling system, simultaneously enabling total reliability and compact rack layout.

The amplifier drawers are equipped with high-efficiency AC switching power supplies, designed to guarantee a power factor close to one with every load condition.

The high modularity, high power density, low weight, fully comply with the most demanding installation requirements. Furthermore, the high efficiency allows a very low and easy predictable operating cost. Thanks to the unsurpassed Digital Precorrection system of the MAIA DAB+ exciter and to the high linearity of the amplifiers, achieved with the use of latest-generation 50V power devices

technology, the coverage and quality performance of the radiated DAB+ signal are simply excellent.

A careful design, approached with strongly oversized components and parts and guaranteeing the presence of at least two items for each critical component, allows an intrinsic "native redundancy" concept (Power Devices, Power Supplies, Cooling System) saving space and maximizing MTBF values.

The presence of a central Control Unit that collects all the operating parameters from the amplifiers and from the antenna system provides a single control point able to access to all power devices currents, power supplies voltages, temperatures of the heat sinks, amplifiers output powers together with the RF power reading of the output antenna system. A multifunction display on the Control Unit allows to monitor in real-time all the operating parameters of the DAB+ Transmitter.

All the transmitter in this series are remotely controllable by wired telemetry connection, by serial communication, or with Web Server and SNMP interface.

Technical characteristics

Amplifier Type:	DAT-1V	DAT-2V	DAT-3V	DAT-4V
Output Power before mask filter [W]	200	400	600	800
Amplifier Gain [dB]	23dB ±1	23dB ±1	23dB ±1	23dB ±1
Power Supply Voltage	1P+N 230V ±15%	1P+N 230V ±15%	1P+N 230V ±15%	1P+N 230V ±15%
Power Supply Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Power Factor	> 0,98	> 0,98	> 0,98	> 0,98
Output Connector	EIA 7/16	EIA 7/16	EIA 7/16	EIA 7/16
Power Consumption [VA], typical	850	1650	2450	3150
Recommended External Breaker Value	10A 2 Poles	16A 2 Poles	20A 2 Poles	25A 2 Poles
Rack	20U	20U	20U	20U
Rack Size [W/D/H mm]	565/600/1000	565/600/1000	565/1000/1000	565/1000/1000
Airflow [m3/h]	800	800	800	800
Weigth [kg]	100	105	140	145
DAB/DAB+ Exciter Model	MAIA 5W	MAIA 5W	MAIA 5W	MAIA 5W

Amplifier Type:	2xDAT-3V	2xDAT-4V	3xDAT-3V	3xDAT-4V
Output Power before mask filter [W]	1100	1500	1700	2300
Amplifier Gain [dB]	23dB ±1	23dB ±1	23dB ±1	23dB ±1
Power Supply Voltage	3P+N 400V ±15%	3P+N 400V ±15%	3P+N 400V ±15%	3P+N 400V ±15%
Power Supply Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Power Factor	> 0,98	> 0,98	> 0,98	> 0,98
Output Connector	EIA 7/8	EIA 7/8	EIA 7/8	EIA 1"+1/8
Power Consumption [VA], typical	5000	6300	7500	9500
Recommended External Breaker Value	20A 4 Poles	25A 4 Poles	25A 4 Poles	32A 4 Poles
Rack	28U	28U	42U	42U
Rack Size [W/D/H mm]	565/1000/1330	565/1000/1330	565/1000/2010	565/1000/2010
Airflow [m3/h]	1500	1500	3000	3000
Weigth [kg]	260	280	350	400
DAB/DAB+ Exciter Model	MAIA 25W	MAIA 25W	MAIA 25W	MAIA 25W

Note: Higher Powers available on request

Specifications and characteristics are subject to change without notice Rev.3/9.12

OPTIONS

Non Critical Mask output filter
Critical Mask output filter



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