



# Model DB9410-SFN

## PROFESSIONAL MPX OVER IP DECODER WITH $\mu$ MPX & SFN SUPPORT

The DB9410-SFN is a next-generation, MPX over IP Decoder engineered to deliver reliable and efficient audio transmission for professional FM broadcasting. Utilizing the purpose-built MicroMPX ( $\mu$ MPX) algorithm developed by Thimeo, the DB9410-SFN ensures high-quality audio reproduction with remarkably low network bandwidth starting from just 320 kbps. Designed specifically for FM MPX transport, MicroMPX preserves the integrity of the stereo signal and RDS data while significantly reducing IP requirements, making the DB9410-SFN ideal for applications over narrowband or public IP links.

In addition to its advanced decoding capabilities, the DB9410-SFN introduces full Single Frequency Network (SFN) support, enabled through ultra-precise GPS timing synchronization. By aligning audio and MPX output timing with sub-microsecond accuracy, the unit ensures perfectly phase-coherent transmissions across multiple synchronized transmitters. This eliminates interference in overlap regions and guarantees seamless coverage extension, an essential requirement for modern SFN-based broadcast networks. The GPS-locked timing reference allows the DB9410-SFN to deliver deterministic delay, stable long-term synchronization, and highly reliable operation, even in complex multi-transmitter deployments.

Compact yet powerful, the DB9410-SFN fits seamlessly into any broadcast infrastructure. LED indicators on the front panel provide instant system status, while an intuitive HTML5-based web interface allows complete configuration and monitoring from any desktop or mobile browser. For added convenience and control flexibility, the device supports remote access via HTTPS, FTP, NMS, and SNMP protocols empowering engineers to manage systems from virtually anywhere.

Engineered with DEVA's hallmark attention to detail and reliability, the DB9410-SFN delivers pristine audio quality thanks to top-grade DAC components and precision signal processing. It supports both Digital AES192 and Analog MPX outputs, ensuring compatibility with a wide range of FM transmitters and studio setups. Whether deployed at a single transmission point or within a larger network, the DB9410-SFN guarantees low-latency, uninterrupted signal decoding across all environments.

The DB9410-SFN stands as a testament to DEVA's commitment to innovation and customer-driven design, offering an advanced, cost-effective solution for MPX over IP distribution. Its support for  $\mu$ MPX sets it apart as a future-ready decoder that meets the growing need for efficient, high-performance broadcast tools.

Choosing DEVA's DB9410-SFN means choosing reliability, flexibility, and the confidence that comes with decades of expertise in broadcast technology.



## FEATURES

- High quality FM MPX decoding function
- High end DAC converter for optimal quality
- Ultra low latency, all-digital DSP based design
- Remotely upgradable firmware to ensure improved operation
- Headphone audio output
- Intuitive Embedded WEB server for interactive supervision
- Full online remote control of all parameters via IP
- Configuration via web user interface for easy setup
- Optional Redundant 230V or 48V (DC) power supply
- Forward Error Correction to reduce bit errors in data stream
- USB flash drive for Audio Backup Storage
- SNMP v2c agent permitting full device management
- Apple and Android devices support
- SNTP for automatic synchronization of the built-in clock
- Protected access to the device settings
- LAN port for full TCP/IP remote control and monitoring
- Attractive price and very good price-performance ratio
- Proved and reliable hardware for 24/7/365 operating
- 1U Rack mountable Aluminum Case for high RF immunity
- Easy Installation and Setup

## SPECIFICATIONS

### Audio Decoder

Codec	µMPX or raw PCM
Sample rates	192 kHz and 216 kHz, 24 bits
Signal Processing	24 Bit AD/DA conversion

### PCM

Bit depth	12 - 16, 20, 24 bit
FEC	RIST, ProMPEG FEC #3, release 2
Bandwidth	2.4 - 4.6 Mbps (no FEC)

### µMPX

Bitrates	320, 384, 448, 576, 800 kbit/s
FEC	µMPX FEC, RIST, Pro-MPEG FEC #3 release 2
Bandwidth	320 - 800 kbps (no FEC)

### Analog MPX Output

Connector	BNC
Type	Unbalanced
Level	+14 dBu (max. +16 dBu)
Sample rate	192 kHz and 216 kHz, 24 bits
Dynamic range	121 dB

### Digital MPX AES192 Output

Connector	RJ-45, balanced, EMI suppressed
Standard	AES3
Sampling Rate	up to 192kHz, 24 bits

### GPS Port

Connector	DB15, Male
Protocol	NMEA 0183, 9600bps
Sync	1 PPS, Square Wave, TTL Compatible

### Front panel

Status Indicators	4 LEDs
Headphones	1/8" (3.5mm) phones jack
USB	Type A for Backup audio player

### User interface

SNMP	ver.2c, ver.3
Web interface	Full control and Status information

### Network

Connector	RJ-45
Type	Ethernet, 1000Mbps
Device discovery	UPnP support

### Operating conditions

Temperature	-15°C to 55°C
Humidity	< 95%, non-condensing
Altitude	0 to 5000m above sea level

### Power

Voltage	100-240V / 50-60 Hz
Power Consumption	12VA
Connector	IEC320, Fused and EMI-suppressed

### Optional Redundant Power Supply

Option 1: RSPS-AC	90 - 260V AC (nominal 100 - 240V AC) 47 - 63 Hz (nominal 50 - 60 Hz)
Option 2: RSPS-DC	36 - 72V DC (nominal 48V DC)

### Size and Weight

Dimensions (W;H;D)	485 x 44 x 180 mm
Shipping Weight	540 x 115 x 300 mm / 2.673 kg



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