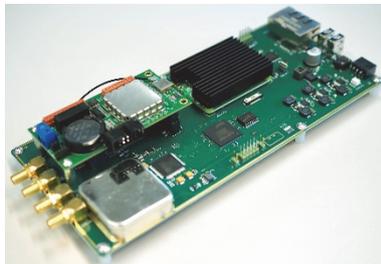


Product Line DAB Modulator / Exciter LV5e

General

The RFmondial LV5e is designed for enabling transmitter manufacturers to enter the DAB broadcast market or for providing existing manufacturers an alternative source for their production. Next to an OEM fully digital broadcast exciter it provides integrated field proven monitoring capabilities.



Basic Features

- Highly reliable embedded platform
- VHF Band III 174 - 230 MHz (extended range on request)
- DAB+ modulation according to ETSI EN 300 401 v2.1.1 from input EDI streams according to ETSI TS 102 693 v1.1.2.

Operation

Synchronization

- External 10 MHz and 1 PPS
- NTP or NMEA for absolute time

Configuration and Monitoring

- Advanced HTML5 GUI
- SNMP (set/get/informs)
- MQTT
- SCPI (serial/IP)
- Integrated alarm system

Transmission Features

- SFN (Single Frequency Network)
- MFN (Multiple Frequency Network)
- Crest Factor Reduction: configurable PAPR reduction and limiting

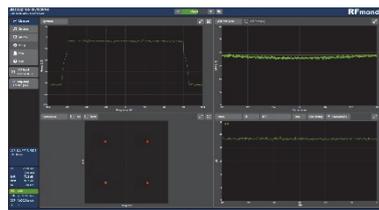
- State of the art pre-distortion and power-amplifier linearization

Reliability & Fallback

- Multi-EDI & Monitoring Failover: Priority-based automatic seamless switchover between redundant EDI inputs
- Local EDI-Backup: If all EDI inputs fail, a backup EDI-stream is played from local storages

Monitoring

RF Monitoring Features



Integrated RF monitoring capability, based on proven RF-DAB monitoring and measurement receiver technology.

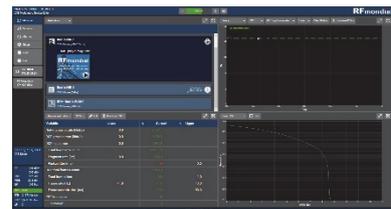
- MER over Carrier
- Constellation
- Spectrum
- Shoulder left/right
- PAPR CCDF
- Absolut SFN timing
- RF level
- Display of RF measurements over time

DCP/EDI Monitoring Features

Integrated DCP/EDI monitoring capability, based on proven RF-DAB monitoring and measurement receiver technology.

- Net/gross bitrates
- Frame/fragment rates
- Frame counts/loss
- Packet jitter
- Assembly duration
- DCP configuration

Service Decoder



- Audio decoding and streaming of as AAC
- Decoding of data services

Interfaces

Input Interfaces

- 1x Ethernet (1 Gbit) for GUI and/or 1st EDI
- 1x Ethernet (100 Mbit) for GUI and/or 2nd EDI
- 10 MHz, SMA 50 Ω , 0.16 - 5 V
- 1 PPS, SMA 50 Ω , TTL
- RS232/RS485 (status / control)
- 4x USB
- 2x GPIO (isolated)
- 8x GPIO TTL
- RF feedback, SMA 50 Ω (max. 0 dBm)

Output Interfaces

- RF output, SMA 50 Ω (max. 0 dBm)
- Attenuation max. -30 dB (0.1 dB steps)
- 8x GPIO TTL

Hardware

Electrical

- DC 12 – 36 V
- Power consumption: <15 W

Mechanical

- Dimensions: 220 x 100 x 34 mm
- Weight: 0.3 kg
- Temperature range: 5° - 45°C
- Humidity: 20 - 80% non-condensing

Ordering information

LV5e-DAB: DAB+ OEM Exciter Module	
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