# **RF**mondial



# **RF-Series Product Line Option FM**

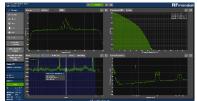
#### Overview

RF-Series Product Line Option FM is an add-on for the professional digital radio monitoring and measurement receivers RF-DAB and RF-SE.

#### Specification

#### **Common Features**

- Stand-alone monitoring receiver for reception analysis and content verification
- NTP synchronization
- Field proven demodulator
- Browser based configuration and services decoding. No installation of software necessary.
- Multi-decoder configuration possible
- Proven long-term stability
- · Firmware update via remote GUI
- Extendible to work with RFarchiver for long-term content logging



#### Compliant to ITU-R SM.1268-5

#### FM Decoder

- · Decoding status
- · Display of services
- Audio decoding of a single service
- Streaming of audio as WAV
- Full ensemble ADI output to Ethernet
- DCP/ADI output via Ethernet
- (including multicast support)

## **Remote Control**

- Full remote control via Ethernet
- Browser-based user interface
- SNMP (Get, Set, Treewalk)
- Control via DCP/UDP

## Advanced GUI

The advanced graphical user interface (GUI) is designed to provide the full experience of a modern and professional measurement device:

- State-of-the-art HTML5 technology
- No software / plug-in installation necessary

- Same browser based advanced GUI remotely and locally (if available)
- Touchscreen and mouse capability
- Adapts to different screen sizes

#### Options

Several options can be added to the standard version.

#### Local GUI and Audio (LGA)

The option LGA enhances the device for local monitoring via a connected touchscreen and one digital AES/EBU XLS audio outputs:

- Displayport / HDMI output
- Touch functionality via USB
- Local AES/EBU XLR audio output
- Requires ET2 option

## **Mask Measurement (MAM)**

• Spectrum mask compliance

#### **RF Measurements (RFM)**

Either four window view or full screen display of diagrams.

Relevant measurement values are available on SNMP.

# A comprehensive bandscan is implemented.



High quality measurements on various stages of the reception and decoding chain:

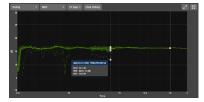
- Spectrum and spectrum waterfall
- RF input power (storable offset)
- Frequency offset
- SNR Mono / SNR Pilot
- Baseband power
- Modulation index
- Amplitude variation of the IQ baseband signal
- MPX power spectrum
- MPX frequency deviation CCDF, maximum, 65/75/77kHz probability
- Error rate of synchronization, and RDS CRC
- PS, PI, RT, TA, CT, TP, PTY, AF, DI, MS decoding

 In combination with the ALM option comprehensive monitoring of RDS is possible

# Long-term logging / analysis (LOG)

The option LOG provides all RF measurements and content information to be logged for 31 days:

- Display of measurements and statistics over time
- Time interval extension possible



#### IQ file logging / playback (IQF)

The option IQF provides RF input signal logging to IQ file as well as baseband file replay:

- Logging of baseband IQ to file
- Playback of baseband IQ files with all analysis possibilities
- Playback of arbitrary sample-rate baseband WAV-files
- Extended storage (optional)
- Requires RFM option

## Alarm System (ALM)

The option ALM enhances the receiver to a flexible, multi-level, built-in alarm system:

- Configurable thresholds
- Measurements/content parameters, e.g. MER, input level, BER, audio level, single stream data rate, announcements, detailed data services parameter
- Monitoring on multiplex and subchannel level possible
- Alarm and status signaling via SNMP (Traps, Informs)

