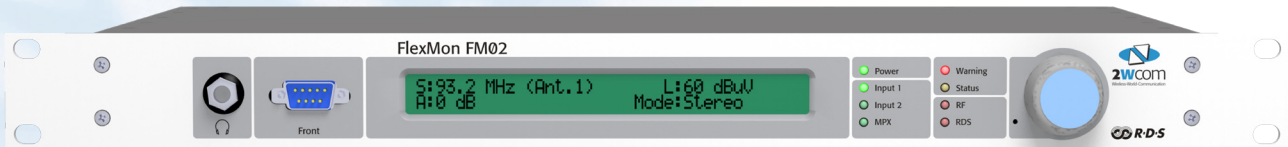


FlexMon FM02 Professional

Professional, flexible FM Monitoring Receiver
Backup-, Alarm- and Rebroadcast-Receiver



 Energy efficient,
no moving parts, no fan

RF capabilities

- Single tuner, 2 RF antenna inputs
- Large-signal characteristic: Up to 120dB μ V RF input
- Preset for 8 FM stations

FM/MPX monitoring and measurement

- Display of FM & RDS signal parameters
RF level, selected mode, pilot, MPX deviation (output level), PI, PS, TP, TA, PTY, RT, BER *Optional: ODA AIDs*
- Monitoring of one FM program at the time
- *Optional: Decoding of RDS parameters including TMC and RT+ messages (RDS Lab)*
- *Optional: RDS Logger for continuous monitoring*
- *Optional: Internal memory (up to 32 Gigabyte) for logging TMC, RT, RT+, TA ; accessible via FTP*

Audio monitoring and measurement

- Display of audio output level L+R/2 (M)

High sophisticated alarm concept

- Alarm reporting via e-mail, SNMP, Web interface, activation of relay contacts
RF level, audio, no pilot, PI, PS, no RDS sync, TA, no TA, block error rate, station change, case temp

Backup-, alarm- and rebroadcast functions

- Professional rebroadcasting
- Passive loopthrough for Audio and MPX with switch over matrix to FM signal triggered by *RDS/PTY31 (optional)*, SNMP or GPIO input:
 - Insertion of an alarm program (e.g. emergency warning)
 - Insertion of a backup program (breakdown of main input, power failure)
- RDS databridge (UECP RDS data output via DTE/UDP)

IP streaming

- MP3 live streaming via TCP/IP

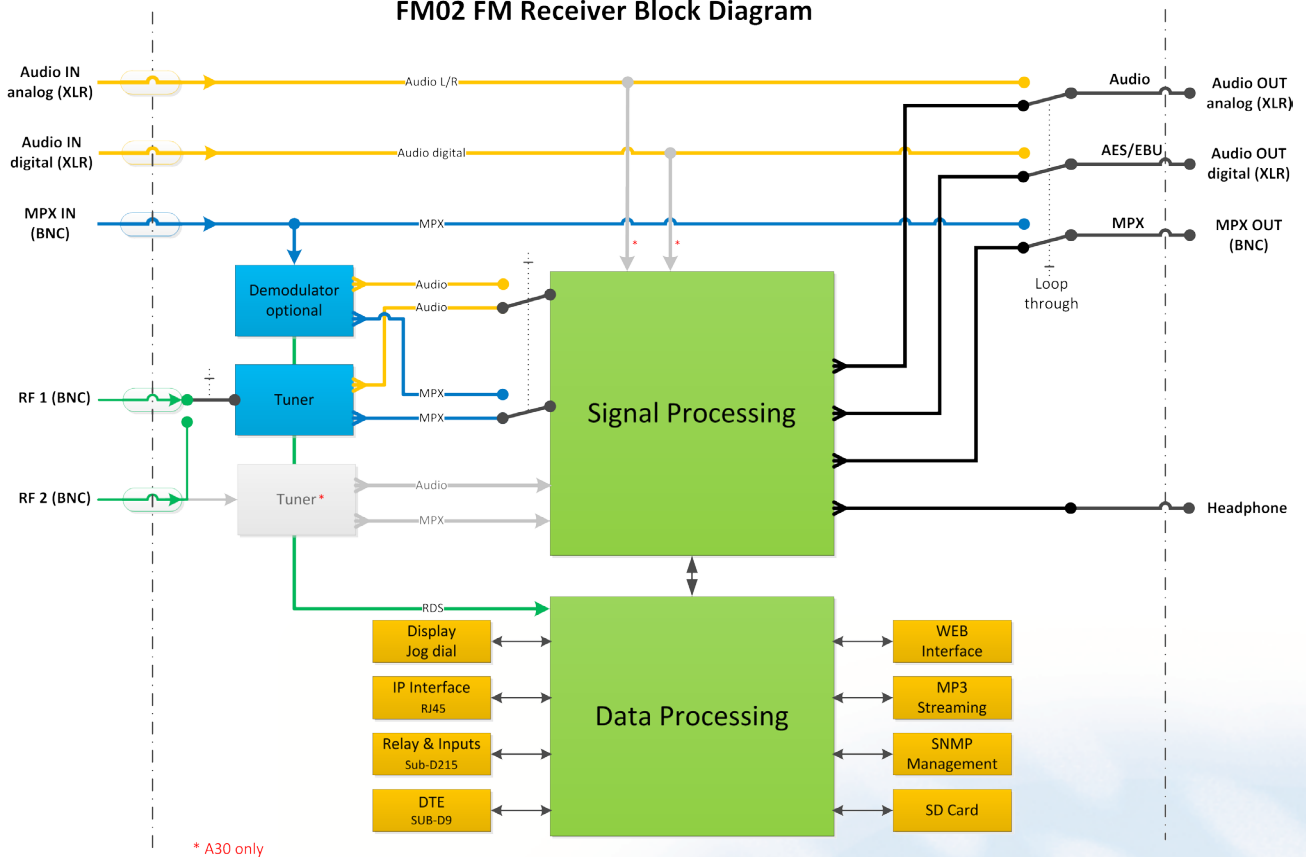
Control

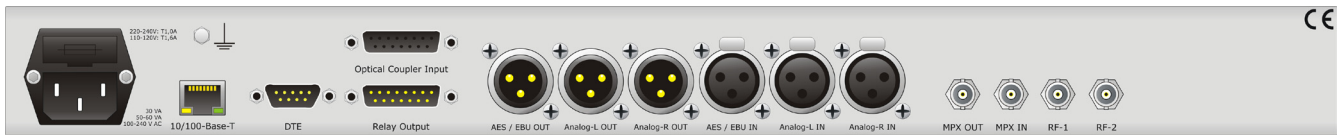
- Integrated web interface for easy setup and simply control via standard web browser

Compatibility

- Fully compatible to premium RDS decoding software RDS Lab

FM02 FM Receiver Block Diagram





FlexMon FM02 Professional – Technical Details

according to CENELEC EN 60950,
EMV EN55022 and EN55024

Inputs

RF

Impedance
Frequency Range

2 unbalanced, BNC
50 Ω
87.5...108.0 MHz
76.0...90.0 MHz (Japan)
50/100 kHz steps
35 dBμV

RF sensitivity
(S/N 40 dB, stereo)
Max. RF input

120 dBμV
Selection from RF input (internal
FM tuner) or external signal
BNC unbalanced, 1x rear
>10 kΩ

MPX (optional)

Connector
Impedance

BNC
XLR
XLR
XLR

Inputs (passive loop through)

MPX connector
AES/EBU connector
Audio L connector
Audio R connector

Measurement FM

RF level
MPX

20...120 dBμV
MPX level

Measurement RDS

RDS decoder

PI, PS, TP, TA, PTY, RT,
Optional: ODA AIDs, Content of all
group types, TMC, RT+ (via RDS
Lab tool)

RDS Block Error Rate

0...100%, resolution 1%

Measurement Audio

Audio

Peak level (L+R)/2

Outputs

Multiplex

Impedance
Level
Frequency response
Signal/Noise ratio
(75 kHz deviation)
Harmonic distortion
Stereo separation

1 unbalanced BNC, AC coupled
<20 Ω
Max. 15 dBu
20 Hz...95 kHz ±0.1 dB
Typ. 70 dB stereo
Typ. 0.05%
>48 dB

Analog Audio

Impedance
Level
Frequency response
Deemphasis
Signal/Noise ratio
(75 kHz deviation)
Harmonic distortion
Stereo separation

L/R balanced XLR
<20 Ω
Max. 15 dBu
20 Hz...15 kHz ±0.1 dB
50 (optional 75 μs)
Typ. 70 dB stereo
Typ. < 0.1%
>40 dB

Digital Audio

MP3 stream

Headphone

Connector
Impedance

AES/EBU balanced XLR
MPEG 1/2 Layer 3 output via
TCP/IP-interface

6.35 mm
600 Ω

Front panel

LCDisplay
Jog wheel
8 LED's

2x 40 characters
Impulse, ENTER button
Power, RF 1, RF 2, MPX, Warning,
Status, RDS, Pilot

Alarm functions

Controlling data

RF level, audio, no pilot, PI, PS, no
RDS sync, TA, no TA, Block error,
station change, case temp
received within x sec. / change
Potential free relays, E-mail, SNMP
via serial port or TCP/IP

Control content (RDS group)
Alarm types
Alarm report

Interfaces

Remote control input

Connector

7 inputs
15 pole sub-D female
6 standard relays (SPST)
1 change-over relays (SPDT)
(for DC: max. 30 V, 1 A, 10 W)
15 pole sub-D male
1 serial interface for setup data and
setup function (RS-232C)
Input/output setup functions

Remote control output

(Messages)

Data interfaces

TCP/IP data interface

Connector
Type
Data format

RJ45
Full duplex 10/100 BASE-T
HTTP, SNMP, SNTTP, optional: FTP

MP3-Encoder

Type
Transmission of encoded MP3 data
by TCP/IP

MPEG 1/2 Layer 3 encoder
Adjustable MPEG Encoder quality
in 3 steps
Adjustable sample rates for latest
Live-stream-Technology
Reception of Audio-Live-stream by
shoutcast compatible media player
like WinAmp or VLC
From tuner module

Internal input

General data

Power consumption
Case dimensions
Weight
Housing
Operating temp. range
Storage temp. range
Power supply

40 VA
19", 1 HU, 310/424/484 mm
5 kg
steel plate (aluminum-zinc coated)
0...+45°C
-40...+70°C
Internal, 90...260 V, 47...63 Hz

Version 25.11.2015
These data are subject to
modifications and amendments.
Errors excepted

