

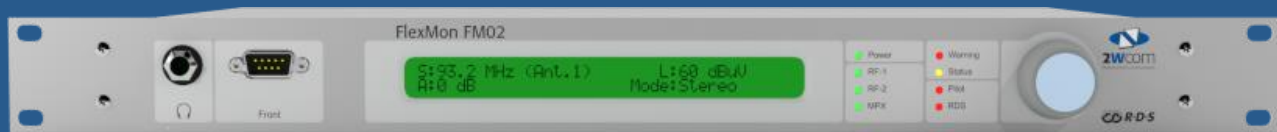
FlexMon FM02

Professional

FM monitoring, backup-, alarm and rebroadcast-receiver



FlexMon FM02 Professional



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 function

- ▶ Professional rebroadcasting
- ▶ Passive loop through 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 data bridge (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



Technical details 1/2



Inputs

RF	2 unbalanced, BNC
Impedance	50 Ω
Frequency range	87.5...108.0 MHz 76.0...90.0 MHz (Japan) 50/100 kHz steps
RF sensitivity (S/N 40 dB, stereo)	35 dB μ V
Max. RF input	120 dB μ V Selection from RF input (internal FM tuner) or external signal
MPX (optional)	
Connector	BNC unbalanced, 1x rear
Impedance	>10 k Ω

Inputs (passive loop through)

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

RDS/ancillary data

Data output format	UECP (Ver. 6.+ compliant), transparent (other formats possible)
Data output	Via serial interface or TCP/IP

Measurement FM

RF level	20...120 dB μ V
MPX	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
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Outputs

Multiplex	1 unbalanced BNC, AX coupled
Impedance	<20 Ω
Level	Max. 15 dBu
Frequency response	20 Hz...95 kHz \pm 0.1 dB
Signal/Noise ratio (75 kHz deviation)	Typ. 70 dB stereo
Harmonic distortion	Typ. 0.05%
Stereo separation	>48 dB
Analog Audio	L/R balanced XLR
Impedance	<20 Ω
Level	Max. 15 dBu
Frequency response	20 Hz...15 kHz \pm 0.1 dB
Deemphasis	50 (optional 75 μ s)
Signal/noise ratio (75 kHz deviation)	Typ. 70 dB stereo
Harmonic distortion	Typ. < 0.1%
Stereo separation	>40 dB
Digital audio MP3 stream	AES/EBU balanced XLR MPEG 1/2 layer 3 output via TCP/IP-interface

Technical Details 2/2

Headphone

Connector	6.35 mm
Impedance	600 Ω

Front panel

LCDisplay	2x 40 characters
Jog wheel	Impulse, ENTER button
8 LED's	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
Control content (RDS group)	received within x sec. / change
Alarm types	Potential free relays, E-mail, SNMP
Alarm report	via serial port or TCP/IP

Interfaces

Remote control input	7 inputs
Connector	15 pole sub D female
Remote control output	6 standard relays (SPST) 1 change-over relays (SPDT) (for DC: max. 30 V, 1 A, 10 W)
(Messages)	15 pole sub-D male
Data interfaces	1 serial interface for setup data and setup function (RS-232C)
TCP/IP data interface	Input/output setup functions
Connector	RJ45
Type	Full duplex 10/100 BASE-T
Data format	HTTP, SNMP, SNTP, optional: FTP

MP3-encoder

Type	MPEG 1/2 Layer 3 encoder
Transmission of encoded MP3 data by TCP/IP	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	40 VA
Case dimensions	19", 1 HU, 310/424/484 mm
Weight	5 kg
Housing	Steel plate (aluminum-zinc coated)
Operating temp. range	0...+45°C
Storage temp. range	-40...+70°C
Power supply	Internal, 90...260 V, 47...63 Hz