WORLDCAST SYSTEMS

POWERFUL
PERFORMANCE
CONTROL
SAVINGS
SERVICES

Audemat FM Probe
QoS Monitoring. Measurements. Analysis.

The Audemat FM Probe is a complete FM monitoring solution to perform advanced signal analysis, onsite or in the coverage area.

The powerful and innovative platform can monitor up to 50 channels sequentially and **up to 8 channels continuously**, to ensure that your FM network complies with both legislation and expectations.

It also includes a complete set of tools to perform FM band scanning and monitoring, real time analysis, audio streaming and recording, full RDS decoding, RF, MPX and audio spectrum analysis...

The Audemat FM Probe is feature-packed with a userfriendly web interface, alarm notification by email or SNMP traps, and is equiped with telemetry board and ScriptEasy to remotely control your facilities and perform automated actions.

MONITORING	ANALYSIS	STREAMING	RECORDING	TELEMETRY

Audemat FM Probe benefits:

Monitoring Expertise
Audemat FM Probe is the result of the company's 40 years of expertise developing analog and digital signal monitoring solutions for radio & TV. The Audemat range is recognized worldwide for its level of quality, accuracy, and reliability.

Time & Operational Cost Saving
Users benefit from standard tools to remotely control the quality of their FM broadcast as well as the good operating conditions of their facility.

Comprehensive & Scalable Platform
Designed to meet market needs after extensive customer feedback, Audemat FM Probe is a feature-rich hardware platform that is ready for optimal performance of monitoring, measurement, and analysis. Highly scalable, it can monitor up to 8 channels continuously and 50 channels sequencially.

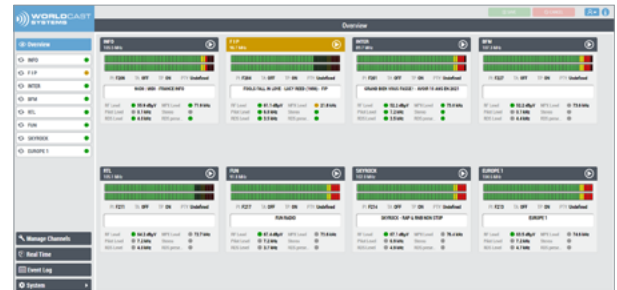www.worldcastsystems.com

Scan and Monitor THE FM BAND

The fast FM band scanning allows visualizing the entire FM spectrum and identifies the channels you may like to monitor. 24/7 scan monitoring is also available and can inform you in case of missing or unauthorized FM stations.

Scan

Overview OF THE MONITORING CHANNELS

The AUDEMAT FM Probe gives the ability to get a global overview of all the monitored stations to efficiently get all information needed at a first glance. it includes main alarms, audio vumeters, RDS and more...

Global overview

Qualify THE FM RECEPTION QUALITY

The advanced measurements and relevant parameter values are represented graphically. Trends can be consulted over 3 rolling months.

Measurements

Analyse IN DEPTH RDS DATA

In addition to FM and audio related information, the AUDEMAT FM PROBE has the ability to display realtime RDS information starting from basic RDS application to more advanced like TMC

RDS breakdown

Alarm notification & USER MANAGEMENT

Several user accounts can be created with personal access levels and rights. Depending on the user access level and rights configuration, an alarm notification can be sent to 1 or several users, by E-mail or SNMP, to the network management system(s).

Consult the TRENDS

The unit stores the RF measurements over 3 sliding months in the µSD card provided in standard. The graphical representation allows the identification of trends. The 10000 last events including the alarms can also be consulted and filters are possible to find out relevant information.

This data can be exported in CSV file format.

Stream the service / ON-AIR VERIFICATION

Following an alarm, on-air verification is possible. Users can remotely stream the audio, in compressed or in native format, and visual the associated DSL and slideshow.

On-site FACILITY MANAGEMENT

Using the physical inputs/outputs or SNMP commands, it is possible to monitor and control almost all the devices or sensors to combine the information and verify the status of the entire transmitter site.

Key Applications:

Service Operator

- Ensure the quality and the continuity of the RF signals
- Immediately notify a problem on the broadcasting network
- Remotely control the facility and do the first troubleshooting

Regulation authorities

- Ensure the conformity with the broadcasting rules
- Analyze the causes of possible disturbances
- Give a history of the situation over several weeks.

Content Providers

- Monitor the quality of the broadcast services
- Confirm the programs are ON-AIR 100% of the time
- Check the audio presence and level
- Verify the RDS information deeply

KYBIO Media

KYBIO Media is a centralized, vendor-agnostic M&C software for media and broadcast, serving markets such as IPTV, radio, TV, cable, and satellite. KYBIO simplifies the monitoring of even the most complex IP infrastructures and helps you ensure operational continuity across your end-to-end value chain from media acquisition, production, and distribution.

Thanks to its unique combination of monitoring, OSS, and control modules you benefit from improved uptime and performance of your equipment, efficient workflows, and powerful analytics. With its advanced auto-pilot configuration engine, KYBIO is fast and simple to deploy and can be run on-premises, in the cloud or in a hybrid environment.
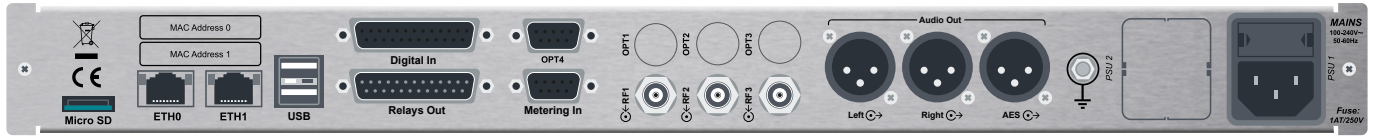
- Unified web interface & mobile-ready
- Vendor-agnostic monitoring
- Auto-discovery & network scanning
- Dynamic maps & displays
- Real-time monitoring & history tracking
- Alarm & notification management
- Ticket management for incident & tracking
- Analytics & reporting engine

KYBIO

ON-SITE MONITORING

OFF-SITE MONITORING

IP NETWORK

SNMP & GPIO

SCRIPTEASY

ENERGY

3ʳᵈ PARTY DEVICES

CONTROL ACCESS

SCRIPTEASY

On-Site Facility Management & Advanced Telemetry

ScriptEasy is a revolutionary facility control software for connected devices, enabling the automatic correction of any critical errors that may occur. Across its intuitive web interface, ScriptEasy includes management of the GPIO, serial communications, SNMP, logic operators, live user inputs, timers, and more. This enables the "scripting" of site operations for evaluating multiple parameters and automatically engaging back up systems, while simultaneously alerting relevant technical personnel. **Integrated in the Audemat FM Probe, ScriptEasy is the core technology used for the product's telemetry input-outputs.**

Rear panel

Interfaces	
RF inputs	3 - BNC type (for 8 simultaneous FM programs monitoring)
Audio outputs	
analog	2 - XLR type / Left + Right
digital	1 - XLR type / AES
headphone	6.35 mm
Telemetry	Compatible with the ScriptEasy software
Relays	8 - SPDT 1 A - 30 V
Digital inputs	16 - Internal or external power supply
Metering inputs	4 - 0-50 V (4 ranges - ADC: 10 bits)
µSD card slot	1 - For measurement history storage
Screen	1 - OLED type For network configuration, device information, readings and alarms
LED indicators	4 – for alarm status and CPU operation
LAN ports	2 - RJ45 ports Base-T 10/100/1000M
Alimentation	1 - IEC type
FM characteristics	
Frequency range	87.50 to 108.00 MHz
Frequency step	10 kHz
RF input impedance	50 Ω / 75 Ω
Stereo sensitivity (19 kHz pilot)	< 40 dBµV for S/N 60 dB
Input sensitivity	10 to 100 dBµV
Selectivity	
Selectivity at ± 120 kHz	> -50 dB
Selectivity at ± 200 kHz	> -55 dB
Selectivity at ± 300 kHz	> -75 dB
Selectivity at ± 400 kHz	> -90 dB
Stereo decoder	
L/R separation	40 dB Typical
19 kHz suppression	> 30 dB
Distortion	
Deviation: 75 kHz Left or Right	< 0.4 % 1 kHz

S/N 1 kHz mono (at 75 kHz deviation and 60 dBµV RF)	
RMS 20 Hz-20 kHz	55 dB stereo
QP CCIR	50 dB stereo
Acquisitions	
Continuous monitoring	Up to 8 channels
Sequential monitoring	Up to 50 channels
Max. number of monitored stations	50
RF level acquisition range	20 dBµV to 95 dBµV
RF acquisition relative precision	+/- 2 dB guaranteed
AUDIO signal acquisition range	- 40 dB to + 3 dB
AF acquisition precision	+/- 1 dB
MPX signal acquisition range	4 kHz to 110 kHz
MPX acquisition precision	+/- 2 kHz up to 90 kHz +/- 5 kHz from 90 to 110 kHz
MPX power acquisition range	-12 dB to + 12dB
MPX power acquisition precision	0.2 dB
PILOT 19 kHz sub-carrier acquisition range	1 kHz to 15 kHz
PILOT 19 kHz acquisition precision	+/- 1.5 kHz
RDS 57 kHz sub-carrier acquisition range	1 kHz to 10 kHz
RDS 57 kHz acquisition precision	+/- 1 kHz
Main characteristics	
Dimensions (l x h x d)	483(19'') x 42 (1U) x 180mm
Weight	2.35 kg
Main power supply	100-240VAC / 50-60 Hz
Power consumption	25 VA
Operating temperature Storage temperature	0°C - +50°C -30°C - +80°C
Humidity	10-95% Non-condensing RH

Technical specifications are subject to change without prior notice - On project, WorldCast Systems may offer distinct specifications. Spécifications on the offer prevail those in this document.

Order information

REF	DESCRIPTION
TF01090	AUDEMAT FM PROBE with 1 FM receiver. Standard version including ScriptEasy
CD01031	Additional receiver for Audemat FM probe
SP02795	DC PSU for AUDEMAT FM PROBE
FORM-AUDEMAT	1-day training or technical assistance on product installation Audemat
SU-WCS-CPT	Yearly Premium support agreement for WCS compact products

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ISO 9001
Qualité
AFNOR CERTIFICATION