MuxScope

DAB+ · FM ANALYZER AND MONITOR

Your multiplex, always under control.

DISCOVER MUXSCOPE

Measures and monitors DAB+ multiplexes and FM stations around the clock, and tells you what is wrong, where and since when.



Unattended, 24/7

Continuous cycle over all DAB+ multiplexes and FM stations, with thresholds.

TII on a map

Every received transmitter, with distance and delay from the database.

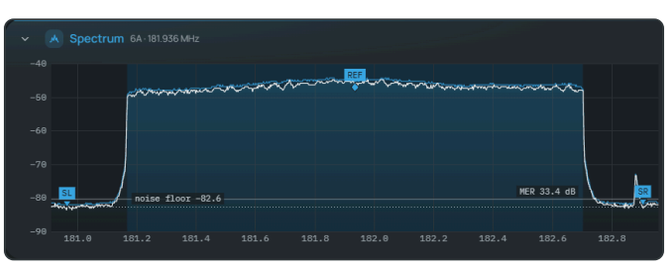
Drive test

In-car logging of multiplex and FM levels along the GPS track.

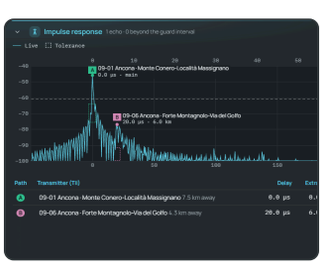
Alerts anywhere

Telegram, e-mail, MQTT and SNMP; availability reports in PDF and CSV.

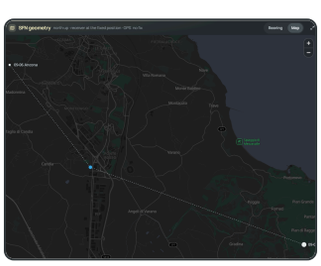
THE INTERFACE



Spectrum
DAB block, noise floor, shoulders and MER



Impulse response
TII of every transmitter



SFN map
Sites, distances, delays

IDEAL FOR Broadcasters | Network operators | Installers | Regulators

Telantel S.r.l. · Ancona | Designed and made in Italy

www.telantel.com/muxscope

MuxScope

TECHNICAL SPECIFICATIONS

174–240 MHz	0.1 dB	24/7	365 days	1U 19″
Band III DAB/DAB+, plus FM 87.5–108 MHz	SNR and MER resolution	Unattended monitoring	Trends and history	Rack unit with 2.79″ front display

RECEPTION

BANDS	DAB/DAB+ Band III, 174–240 MHz (5A–13F); FM 87.5–108 MHz
CYCLE	Continuous cycle over all watched muxes, 60 s dwell each (adjustable)
SCAN	Background Band III scan, one unwatched channel per cycle
GPS	Receiver position and time drift vs GPS
DRIVE TEST	In-car level logging of DAB+ muxes and FM stations along the GPS track, on a map

DAB/DAB+ MEASUREMENTS

RF / OFDM	SNR, MER (0.1 dB), level, AGC, ADC clipping, offset (Hz, ppm), FIC CRC errors
CIR	Echoes in µs, km and dB; 246 µs guard interval
TII	TII of every received transmitter on the impulse response, with delay and level
MAP	Transmitter database: map position, distance and delay from the receiver
DISPLAYS	Spectrum, null-symbol spectrum, constellation, trends

DAB DECODING

ENSEMBLE	EId, ECC, LTO, time, reconfigurations; every FIG with raw value
SUBCHANNELS	Start address and size in CU, EEP/UEP, bitrate, FEC, multiplex capacity
SERVICES	SId, labels, PTy, MP2 and HE-AAC v1/v2, SBR, PS
DATA	DLS, DL+, MOT SlideShow, SPI/EPG
AUDIO ERRORS	RS corrected and uncorrectable, AAC CRC, error-free seconds (EFS)

FM

MEASUREMENTS	Level, C/N, multipath, offset, MPX power, deviation, pilot, loudness (LUFS)
RDS	PI, PS, RT, PTY, TP/TA, alternative frequencies (AF), RDS block errors

MONITORING AND ALARMS

RULES	Thresholds with hold-off, confirmed over several visits; audio silence, stuck DLS or slideshow
REFERENCE	Missing or added services, any deviation from the reference configuration
HANDLING	Critical, Warning, Info; acknowledge, shelve, maintenance windows
AVAILABILITY	Per service and multiplex over 24 h, 7 and 30 days; PDF and CSV reports

NOTIFICATIONS AND INTEGRATION

CHANNELS	E-mail, webhook, MQTT, browser push, SNMP trap, Telegram
API	REST API

USER INTERFACE AND DATA

ACCESS	Web browser on PC, tablet and smartphone; user profiles; full-screen mode
LANGUAGES	English and Italian; light and dark themes
HISTORY	Trends up to 365 days, event log with ms timestamps, CSV export

HARDWARE

FORM FACTOR	19″ 1U rack, 482.6 × 44 mm, anodized aluminum
DISPLAY	2.79″ front panel, 428 × 142 px; status, readings, QR code for easy connection
RF INPUT	SMA female, 50 Ω; max. 0 dBm continuous, +10 dBm for short periods
NETWORK	Ethernet
POWER SUPPLY	100–240 V AC, or 12 V DC barrel jack
WEIGHT	Approx. 3 kg



Telantel S.r.l. | Designed and made in Italy

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Specifications are subject to change without notice.