



Electromagnetism
is our thing

Products
Product catalogue

Emissions
Radio Frequency
Immunity **EMC**

Test and Measurement
Products





A test management and control software package developed by NEXIO since 1995

One complete solution for all EMC test

Hardware independent

- You can choose the equipment you want
- NEXIO focuses only on software
- Free drivers of any manufacturers

25 years of experience

- BAT-EMC was created in 1995
- Nexio was funded in 2003 by the 3 first developers
- More than 400 EMC labs in 26 countries

Monitoring

- Wide possibility to control your EUT



Automatic report

- Flexible and fast report generation

Flexibility

- The software adapts to your way of working in both Emission and Immunity

Easy to use

- Based on Windows interface and tree view structure with right click actions

Support & maintenance

- Local support in France Germany USA and China
- Support by phone, email, website, remote
- Improvements/Evolutions according to standard, customer ideas

BAT-SCANNER BAT-SCAN
 BAT-EMC EASY-MONITORING
 MAINTENANCE
 BAT-ELEC BAT-RF
 BAT-MANAGER BAT-CLICK



NEXIO, founded in 2003, offers the market's widest range of electromagnetic automation test software through a global network of support staff and sales representatives. NEXIO develops the software range called BAT, which stands for "Benchtop Automated Testing". BAT is a package of high-performance automation test software for a variety of electromagnetic compliance and RF testing requirements for all industries.

NEXIO's customers are among the top companies in the world in every major market sector ranging from aerospace & defense, aviation, automotive, multimedia, information technology, medical, home appliances, and so on. We are also the software of choice for some of the world's top accredited labs. Today, the company employs around 70 sales, development, and support personnel worldwide.

NEXIO's software success is based on the combination of leading-edge technology in automation software, a user-friendly interface, and the high level of expertise in electromagnetic and RF testing by the dedicated staff.

// Our star products

Our star product, BAT-EMC, is a world leader in automated test software. The world's top accredited labs and top industries leaders are equipped with BAT-EMC. BAT-EMC is used in more than 20 countries worldwide (Germany, USA, China, Japan, Canada, Mexico...). Other star products are BAT-SCANNER (near field measurements), and BAT-ELEC (for burst, surge, transients, etc.).

// Credibility

As a part of its world software success started in 1995, since 2003, NEXIO has also become the largest engineering company specialized in the field of electromagnetism in France. NEXIO wins business confidence in the electronics industry through our expertise and our highly-valued products.

Based on our experience with a number of accredited test labs and a variety of major OEMs (Original Equipment Manufacturers), we offer our expertise through our complete range of automated test solutions.

// Our business philosophy

One thing we would like to emphasize is that doing business with NEXIO is an ongoing partnership. We offer partnership, not just product. Especially at the early stages, it is important for you to engage us as much as possible to maximize your training, and take full advantage of our offer for customization and optimization. No other software company offers such partnership. It is a partnership for success.

Furthermore, by listening to your requests and ideas for enhancements, it helps to improve our product. Our products and methods are continuously evolving. This is a win-win situation for all.

// Support maintenance

In a world of quickly evolving technologies, and where quality requirements become increasingly stringent, EMC/RF standards and test procedures are constantly evolving. Your test methods should follow these changes. Our NEXIO EMC/RF engineering team offers total support and provides new versions of our continuously evolving software.



BAT-EMC: Emission & Immunity

BAT-EMC is a software developed by NEXIO, since 1995, to cover the full requirements of electromagnetic compatibility (EMC).

Flexible, easy to use and completely independent of any measuring device or complete system, BAT-EMC provides an answer to the increase in productivity and quality requirements of the EMC tests. Our software is now widely used by both accredited full-compliance and pre-compliance laboratories in all major market sectors, such as automotive, aviation, aerospace & defense, and commercial electronics worldwide.

Advantages

- Unique interface for all tests
- Independent of any measurement equipment
- Free drivers and more than 500 supported devices
- Efficient and dedicated technical support
- Large number of supported standards (EN IEC, CISPR, AUTOMOTIVE, DO160, MIL-STD, ETSI, etc.)
- Interface Agilent VEE™, MS Windows™, LabView, LabWindows CVI™
- Operating system: Microsoft Windows™ 10 and 11...
- Report generation with all version of Microsoft Office™



Functions

Pre-scan and final-scan customization with antenna mast and turntable, totally configurable for stepped or continuous motion via user-definable algorithms.

GTEM:

In accordance with EN/IEC 64000-4 20 calculation method with 3-axes.

Reverberation:

- The three calibration types (empty, loaded, or with equipment) have two objectives: homogeneity checking and the acquisition of field strengths and values for equipment under test.
- The stirrer can be used with continuous rotation or step by step rotation. Each mode allows the user to define a parameter of operation: the number of samples for the tuning and the rotation time in seconds per turn for stirring.



// EMC Test Modules

Radiated Emission
 Conducted Emission
 Reverb Emission

Radiated Immunity
 Conducted Immunity
 Reverb Immunity

Pictures and technical sheet are non-contractual



Test Software

Standards

- Automotive: 2004/104/EC, ISO 11451/2 SAE, J1113 & J551, CISPR 12 & 25, Ford, BMW, Mercedes, General Motors, PSA, Renault- Nissan, Toyota, Chrysler-Fiat...
- Commercial: CISPR/EN 55011, 14, 15, 22, 24, EN 61000-4-3, EN 61000-4-6, FCC Part 15, IEC 61967 & IEC 62132...
- Aerospace & Defense: MIL-STD 461/462, DO 160 (RTCA)...

Driver Compatibility

- | | | |
|---------------------|-------------|---------------|
| • Advantest | • Holaday | • Philips |
| • Agilent/Keysight | • HP | • PMM |
| • Anritsu | • Lecroy | • Prana |
| • AR | • Marconi | • R&S |
| • Fluke | • Milmega | • Keysight |
| • Gauss Instruments | • Narda | • Tektronix |
| • Gigatronics | • Frankonia | • Schwarzbeck |
| • Ophir | • Etc. | |

Report

Band	Frequency band (MHz)	Orientation 2		QP detector		Average detector		Status
		Limit (dB/10m)	Value (PV)	Limit (dB/10m)	Value (PV)	Limit (dB/10m)	Value (PV)	
LW	0.15 - 30	86	-15.075 (PV)	43	-2.875 (Peak PV)	30	-3.375 (PV)	PASS
MW			-15.075 (PV)	43	-2.875 (Peak PV)	30	-3.375 (PV)	PASS
SW	5.9 - 62	62	-27.011 (PV)					PASS
FM	76 - 108	30	-5.210 (PV) -5.980 (PV)	25	6.780 (PV) 7.100 (PV)			FAIL
DAB II	171 - 245	42	-12.733 (PV) -10.620 (PV)			22	-4.533 (PV) -5.912 (PV)	PASS
DTV	470 - 770	67	-23.000 (PV) -23.070 (PV)			47	-17.000 (PV) -14.710 (PV)	PASS
DAB L band	1447 - 1484	44	-15.200 (PV) -20.800 (PV)			24	-5.000 (PV) -7.210 (PV)	PASS
SDARS	2300 - 2345	60	-17.400 (PV) -17.370 (PV)			30	-10.430 (PV) -13.430 (PV)	PASS

Note: The Peak detector (the Peak) was measured instead of the QP.



The user has the ability to define a Word document template (.dot format) in order to insert BAT-EMC tags.

These tags are locations where the BAT-EMC software will insert data into the final document (.doc format).

A new way to generate report, based on an external framework Aspose.

This new generation of report will give you 3 main advantages:

- Faster than the previous generation of report (10 times faster, around 100 pages per minute)
- Much more flexible and configurable to save your time, our goal avoid manual changes after automatic generation
- No need to have MS Word on the computer to generate Word document



// All EMC testing in one software

Pictures and technical sheet are non-contractual



EASY-MONITORING

Easy-Monitoring is a range of add-on modules for BAT EMC that makes your EUT monitoring much easier. When a fault is detected, EASY-Monitoring executes actions configured by the user. Linked to BAT-EMC software, it detects EUT malfunctions through real-time signal analysis during the test.



// Product line (complete & modular)

BAT-EMC	EASY-Scope
AT-DIAG	EASY-Control
BAT-Image	EASY-Canoe

Pictures and technical sheet are non-contractual

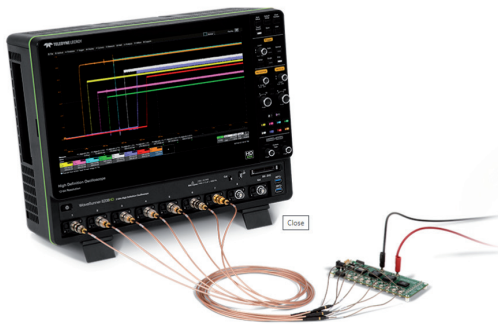


Monitoring Software

// EASY CONTROL

Simple monitoring equipment to measure 1 or 2 values (voltmeters, spectrum analyzers, multimeters, power meters, field probes...).

Easy control allows you to use the equipment already defined in BAT-EMC with the script measure and you have the possibility to create/modify/optimize the script.



// EASY SCOPE

Allows measurement with oscilloscope using available functions (Maximum, minimum, Peak, Peak, RMS, Average, frequency, duty cycle, mask). You can save settings and save print screen on fault.

// EASY SCRIPT

Allows you to send command/instruction to EUT with Ethernet, GPIB, Serial, Exe, dll.

Easy Script has 2 main uses:

- Activate one or more operating modes of the EUT (before or during the dwell time)
- Reset the EUT after a fault (if the EUT does not return to normal operation mode by itself)

// EASY TOOL

Our customers or NEXIO can develop a specific program based on customer specifications. These programs are developed in Labview, Vee, C++, C#.

These tools have functions executed at different timings of the test: beginning, start regulation, start dwell time, end dwell time. These tools have inputs and outputs such as test name, frequency, level, modulation, power, dwell time...

Examples: Dynamometer, audio analyzer, radio sensitivity, NI card, converter, pneumatic cylinder...



// Webinar Replay

Watch the webinar replay "Monitoring during immunity tests" on the website <https://emc-software.nexiogroup.com/en/>

Pictures and technical sheet are non-contractual



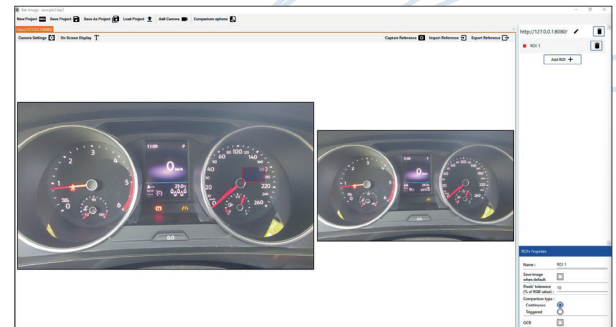
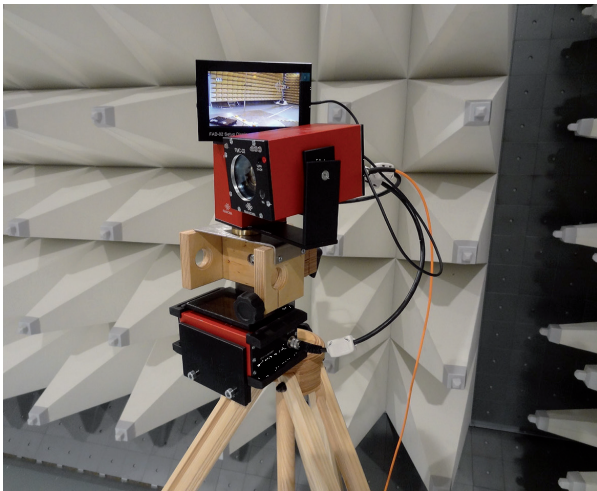
BAT-IMAGE

BAT-IMAGE is a video acquisition & surveillance control tool. In case of faults, it executes the actions set up by the user. Associated to NEXIO's EMC software, BAT-Image detects EUT malfunctions through real-time analysis.

Advantages

The goal of BAT-Image is to compare the reference image to the real-time image.

BAT-Image can be used as a control tool during immunity tests to detect EUT fault.



Functions

- Audio signal generation (prompt)
- Recording of the fault image
- Information transmission to EMC test system or others (frequency, level, modulation, etc.)
- Fault code (which can influence the test procedure)
- Attach message describing the fault

Bat-Image is a software developed by Nexio to compare a reference image and the current video. NEXIO provide a RCA or HDMI video acquisition, but not the camera.

Nexio developed dedicated tool to communicate with external software such as MK messTechnik, PONTIS, INTEGO... These companies provide a full system with camera, software, detection.



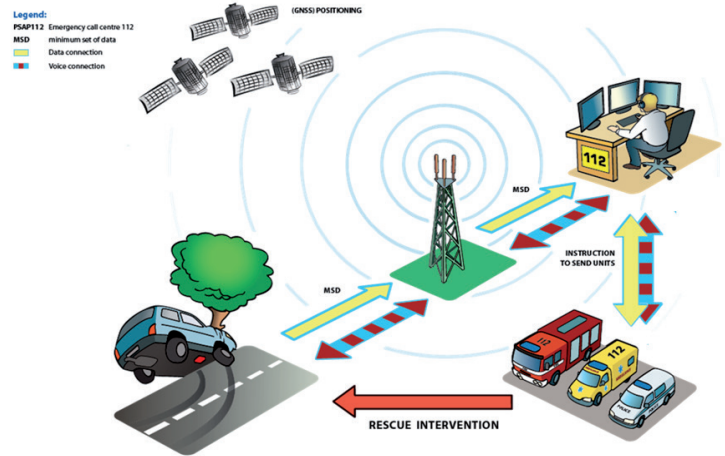
// Types of faults detected

Dash board lighting or warning lights (LEDs).
Analog display needle position (speedometer, gauge, etc.).



ECALL

Ecalle system is the emergency call in car. The base station simulator (e.g. Keysight UXM, R&S CMW500) must be set up to communicate with the car. The GNSS signal generator must simulate certain satellite constellations. This will allow the car to obtain its fictitious GNSS position and transmit it to the PSAP. The PSAP simulator should decode the Minimum Set of Data (MSD), and communicate it to BAT-EMC. This Control Tool will check the communication and MSD during immunity test. It is possible to complement the eCall tool with EasyScope to verify the establishment of a voice connection. Indeed, this eCall tool only checks the MSD.



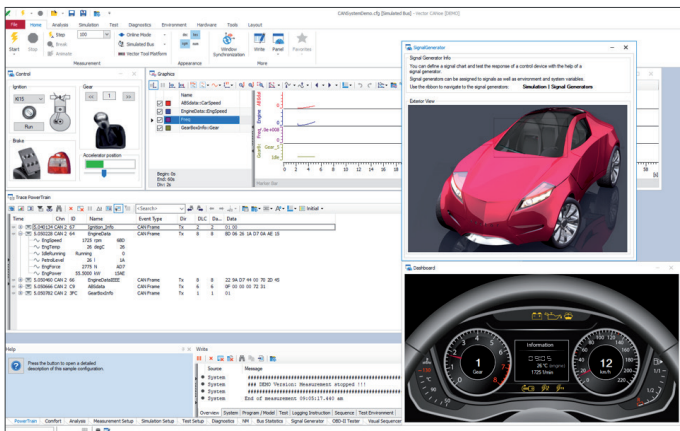
CAN BUS

CAN BUS could be read by 2 different ways: CANOE/CANALYZER from Vector or PCAN from Peak System.

The goal of CANOE/CANALYZER is to:

- Send and read variables or signals on the bus
- Modify the simulation parameters
- Trigger test series to modify the test environment
- Read calculator variables
- Read the test result made by CANOE

The goal of PCAN is to send and receive information on CAN bus.



// Compatible operating systems

Windows 10 and 11

Pictures and technical sheet are non-contractual



EMI AUTOMOTIVE

Automotive Emission license has been developed according to the automotive specification and in collaboration with automotive suppliers.

Advantages

- Limit definition same as OEM standards
- Automatic creation of test definition (wizard)
- Test optimization to save time:
 - Peak instead of QPeak for first prescan overview and automatic remeasurement
 - RBW 120kHz instead of 9K for first prescan overview and automatic remeasurement
 - Overlap sub range measure only once and results use in 2 tables
- Test report optimization:
 - Highly customizable to save your time after the test

Band Name	Frequency	Level	Peak	QPeak	Average
↓ Start	Stop	dBµV/m	RBW	Level	Level
				dBµV/m	RBW
Basic Limits					
84	9 kHz	150 kHz	66 - 62	200 kHz	
85	150 kHz	5.35 MHz	62	9 kHz	
86	5.35 MHz	20 MHz	62 - 39	9 kHz	
87	20 MHz	30 MHz	39	9 kHz	
88	30 MHz	75 MHz	62 - 52	120 kHz	52
89	75 MHz	400 MHz	62 - 63	120 kHz	42
810	400 MHz	1 GHz	63	120 kHz	53
811	1 GHz	3 GHz	60	1 MHz	60
812	3 GHz	6 GHz	104	1 MHz	84
Mobile and Others Services					
9 - 125 kHz	100 kHz	150 kHz	61	9 kHz	
10 - CB radio	26.5 MHz	29.7 MHz	60	9 kHz	40
11 - 4 m/BOS	84.015 MHz	87.255 MHz	37	9 kHz	14
12 - 2 m/Tail	146 MHz	164 MHz	37	9 kHz	14
13 - 2 m/BOS	167.56 MHz	169.38 MHz	37	9 kHz	14
14 - 2 m/BOS	172.16 MHz	173.98 MHz	37	9 kHz	14
15 - S/D	313 MHz	317 MHz	46	9 kHz	26
16 - Trunked Radio	380 MHz	385 MHz	51	120 kHz	31
17 - Trunked Radio	390 MHz	400 MHz	51	120 kHz	31

Limit definition

Limit Band	Peak / Average	QPeak	Mode	Max. 120K Instead of 9K	Max. Peak Instead of QPeak	Auto. Remeasure Overshoot Freq. Ranges	Settings	PreAmp
Name	Level	Average Level	RBW	Time	Level	RBW		
Radio/Bus								
LW	56	36	9 kHz	50 ms	43	9 kHz	Linear scan	Off
MW	56	36	9 kHz	50 ms	43	9 kHz	Linear scan	Off
SW	52	32	9 kHz	50 ms			Linear scan	Off
FM	38	18	120 kHz	5 ms	25	120 kHz	Linear scan	Off
DAB III	42	22	1 MHz	50 ms			Linear scan	Off
DTV	57	47	120 kHz	5 ms			Linear scan	Off
DAB band	44	24	1 MHz	50 ms			Linear scan	Off
SDARS	50	30	1 MHz	50 ms			Linear scan	Off
Mobile Services								
CB	52	32	9 kHz	50 ms			Linear scan	Off
VHF (1)	58	38	120 kHz	5 ms			Linear scan	Off
VHF (2)	41	21	120 kHz	5 ms			Linear scan	Off
VHF (3)	47	27	120 kHz	5 ms			Linear scan	Off
Japan RCE	44	Multi segment	120 kHz	5 ms			Linear scan	Off

Test definition



Test execution

Webinar Replay

Watch the webinar replay "Automotive by band and CISPR25 Hybrid" on the website <https://emc-software.nexiogroup.com/en/>

Pictures and technical sheet are non-contractual



METROLOGY

The metrology will help you save time by automating the metrology step of your equipment and performing these calibrations internally:

- Calibration automation
- Definition of limit and uncertainties
- Automatic conclusion on results
- Automatic reporting

Measurement with oscilloscope

The goal is to measure for example an ESD gun or a transient generator. This module will use the oscilloscope function and compare with the limit with uncertainties defined for each parameter.

Measurement with NetworkAnalyzer

The goal is to measure for examples cables, ESD target, CDN, LISN. The measurement is then compared to the limit line with uncertainties. It is also possible to measure with signal generator and spectrum analyzer. The result is directly integrated into the equipment transfer function of BAT-EMC.

Measurement for amplifier

The goal is to measure the gain, the XdB compression, harmonics, generated power. The result is directly integrated into the equipment transfer function of BAT-EMC.



// Replay Webinar

Watch the webinar replay "New Graphic interface in Emission and the Metrology" on the website <https://emc-software.nexiigroup.com/en/>

Pictures and technical sheet are non-contractual

Metrology consists of 3 modules, organized by type of measurement:

- Measurement with oscilloscope
- Measurement with network analyzer
- Measurement with amplifier

Scope settings can be saved

Automatic measurement with trigger

Limits and uncertainties

Screenshot for each measurement

Parameters Average of parameter

Direct Output - Open - 120 - Peak voltage						
Test Level (kV)	EUT Setting (kV)	Normalized EUT Peak Current (A)	Lower Limit (A)	Measured (A)	Upper Limit (A)	Pass/Fail
-1	-1	-1	-1.1	-1.0388	-0.9	Pass

Direct Output - Open - 120 - Rise time						
Test Level (kV)	EUT Setting (kV)	Normalized EUT Peak Current (A)	Lower Limit (A)	Measured (A)	Upper Limit (A)	Pass/Fail
-1	-1	-1	0.84	1.4504	1.58	Pass/Fail

Direct Output - Open - 120 - Pulse width						
Test Level (kV)	EUT Setting (kV)	Normalized EUT Peak Current (A)	Lower Limit (A)	Measured (A)	Upper Limit (A)	Pass/Fail
-1	-1	-1	40	54.804	60	Pass/Fail

Direct Output - Open - 120 - Undershoot						
Test Level (kV)	EUT Setting (kV)	Normalized EUT Peak Current (A)	Lower Limit (A)	Measured (A)	Upper Limit (A)	Pass/Fail
-1	-1	-1	-300	28.2	0	Pass

Example for Impedance and Phase measurements

5 RESULTS

5.1 Impedance and Phase Test

5.1.1 Impedance

Graph 5-1-1: Impedance Test

Table 5-1-1: Impedance Test Results						
Frequency (Hz)	Lower Limit: 100	EUT Measured: 151,707	EUT Measured: 151,099	Upper Limit: 170	Pass/Fail: Open	Pass/Fail: Short
100 kHz	100	151,707	151,099	170	PASS	PASS
100.492 kHz	100	151,076	151,072	170	PASS	PASS
100.984 kHz	100	150,326	150,312	170	PASS	PASS
101.476 kHz	100	150,029	150,025	170	PASS	PASS
101.968 kHz	100	149,626	149,622	170	PASS	PASS



BAT-ELEC

BAT-ELEC has been developed by NEXIO to support our customers for the new challenges with continuously evolving standards, NEXIO has developed BAT-ELEC, the only software which is compatible with all brands of test generators and for all standards (automotive, commercial electronics, etc.).

7 Reasons to choose BAT-ELEC

- 1 software for all your equipment
- 1 software for all standards
- 1 software for all your electrical EMC tests
- Advanced EUT monitoring & control functions
- Automated reports
- Dedicated team of specialists at your disposal
- Verification of signals with scopes, and automatic print screen directly sent to report.

Support

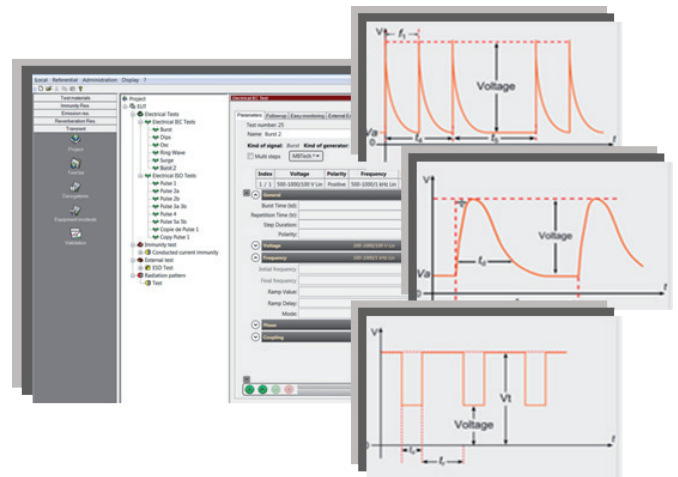
- Experienced and dedicated technical support
- Adaptation to changes in standards
- Driver development

Standards

- Automotive: ISO 16750-2 / ISO 7637-2
- Commercial electronics: IEC 61000-4-4 / IEC 61000-4-5 / IEC 61000-4-11 / IEC 61000-4-12

Driver Compatibility

- On demand
Examples: HAEFELY, EMTEST, TESEQ, EMC PARTNER, Hilo, Schlöder, etc.



// Integrated in BAT-EMC

- Project management
- Automated reports
- Integration of metrology
- Data sharing network



BAT-RF

BAT-RF is our Radio Frequency (RF) test software for antenna radiation patterns. It offers a wide range of test methods to set the basis for measuring antenna performance indicators, and for testing the radiated characteristics of various wireless devices.

Whether you are designing antennas for standalone applications, or testing an integrated antenna system and a radio module, BAT-RF offers the necessary flexibility and rigor to facilitate your testing.

Functions

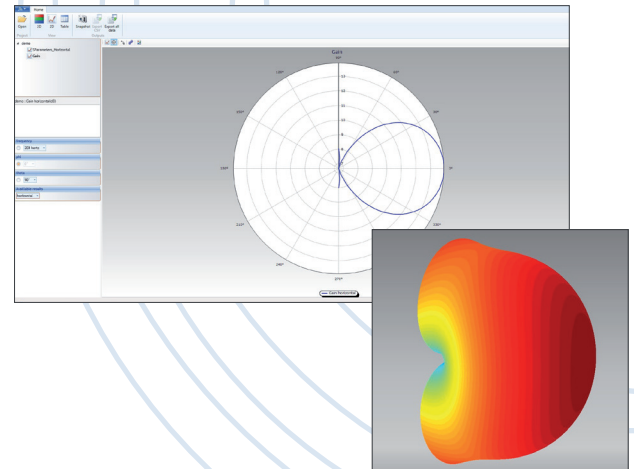
- Results overview in real time
- Export results
- Positioners control
- Theta - Phi variation
- Intuitive interface
- 2D and 3D visualization of the radiation pattern

Features

- Driver compatibility (on demand)
- All NA (Network Analyzer) compatibility
- Free pre-processing module for the test preparation
- RF radiation patterns registration
- Fully licensed version for tests
- Emission values determination
- Free post-processing module for results viewing
- Polar diagram display

Services

- Setup
- Guarantee
- Training



// Compatible operating systems

Windows 10 and 11



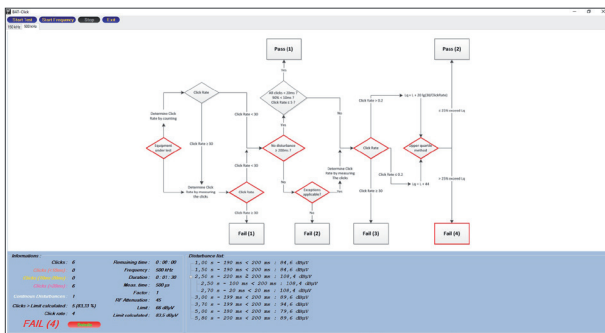
BAT-CLICK

BAT-CLICK performs click rate analysis in accordance with CISPR 16-1 and EN 55014, in conjunction with the R&S® ESCI and R&S® ESU EMI Test Receivers. It features real-time graphic display of the Max Peak and Quasi-Peak values.

After the measurement, a test report can be displayed and printed.

Features

- Compliant with CISPR 14-1 / EN 55014-1
- Communication with R&S® ESCI or R&S® ESU via LAN or IEC/IEEE bus interface
- Real-time graphic representation of measured values
- 500 μs time resolution for measuring Peak value and Quasi-Peak value levels
- Standard-compliant click rate analysis at 150 kHz, 500 kHz, 1.4 MHz and 30 MHz, as well as analysis at user-selected frequencies



- Navigating to individual click events on graph with cursor buttons
- Marking of click events while measurement is in progress
- Recording of number of clicks and calculation of click rate
- Allowing for exceptions specified by standards
- Generation of detailed test report and printing on Windows default printer
- Electronic archiving of measurements



// Validation algorithms can be customized



BAT-NSA / SVSWR

BAT-NSA / SVSWR is designed for anechoic chamber or open area test site (OATS) qualification and allows two different kinds of measurement:

- Normalized Site Attenuation (NSA) is measured in accordance with CISPR 16-1-4 and ANSI C63.4 in semi and fully anechoic environment. The volumetric test method is applied (test volume diameter needs to be specified) at 3 m, 10 m, or any other distance. The height scan of the receiving antenna is adjusted in the 1 m to 4 m range above the ground plane.
- The SVSWR measurement is done according to CISPR 16-1-4 in the frequency range from 1 GHz to 18 GHz using broadband omnidirectional antennas in horizontal and vertical polarization.

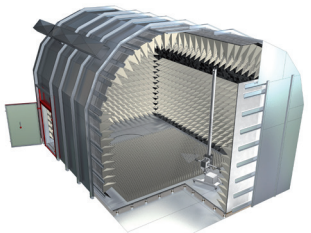
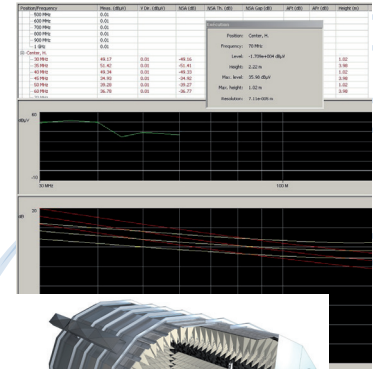


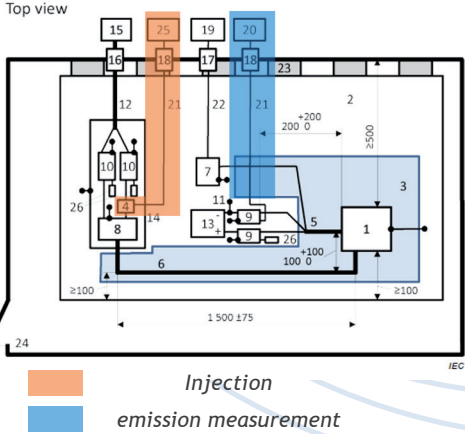
Photo used with permission of Frankonia

HYBRID

Hybrid module performs emission measurements according CISPR25 for High voltage in Electrical and Hybrid Vehicles.

The CISPR 25 includes a new type of test for Electrical and Hybrid Vehicles in Annex I:

- Conducted Emission on High Voltage power lines with Current method, with Voltage method
 - Radiated Emission
 - Coupling measurement between HV-LV systems
- NEXIO has implemented in Bat-EMC this new type of tests which is a mixture of Emission and Immunity measurement.



// Meet your metrology / calibration needs

All insertion losses can be automatically inserted in BAT-EMC

Pictures and technical sheet are non-contractual



BAT-MANAGER

BAT-MANAGER has been developed for centralized data management and the management of activities of a laboratory with strict quality requirements (ISO 17025, etc.), providing efficiency, flexibility, and continuous improvement.

BAT-MANAGER completes the range of software offered by NEXIO. The range BAT-EMC, BAT-ELEC, and the similar, is the preferred software in major EMC test laboratories in Europe, North America, and Asia, since 1995. BAT-EMC meets the complex needs of laboratories.

Advantages

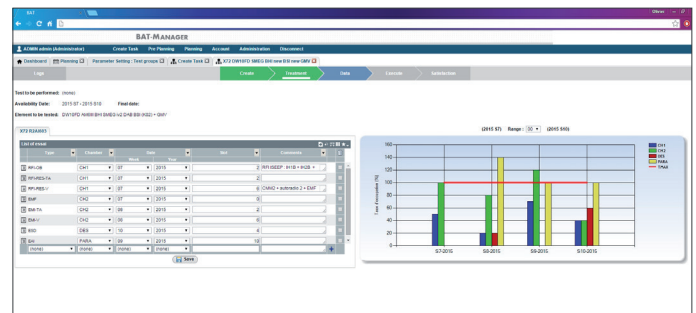
- Centralize information related to EMC testing
- Streamline processes (Workflow) respecting the QMS
- Share information
- Optimize the test preparation time
- Improve the traceability of information (monitoring, changes, etc.)
- Increase efficiency
- Measuring performance (indicators, statistics)

Features

- Management of requests for tests
- Planning
- Process management
- Management of resources
- Team Management (1*8, 2*8, 3*8)
- Progress of projects
- Reporting project (metrics / indicators)

3 reasons for choosing BAT-MANAGER

- 100% Web-compatible tablets, ergonomic, durable and scalable.
- A customizable offer to fit your needs with a competitive price.
- An experienced team in the business of EMC testing and software development.



// An experienced and specialized team

NEXIO is the only software company totally specialized to the management of EMC, RF, and electrical testing. NEXIO is a dedicated team that ensures delivery, training, support, and ongoing development worldwide. NEXIO is guaranteed to have the best for your laboratory proven by over 20 years of continuous improvement of our solutions.

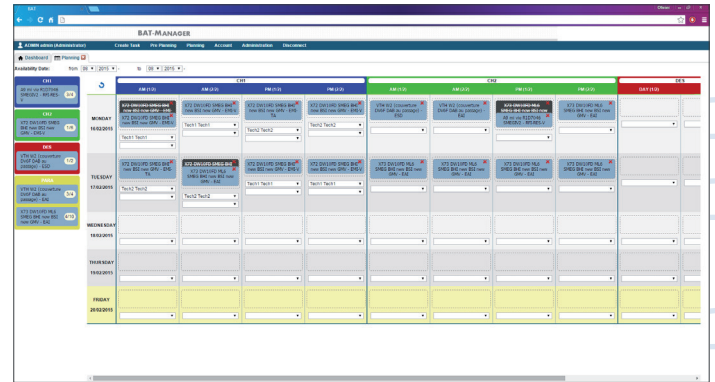
Pictures and technical sheet are non-contractual



Lab Management

BAT-MANAGER with BAT-EMC

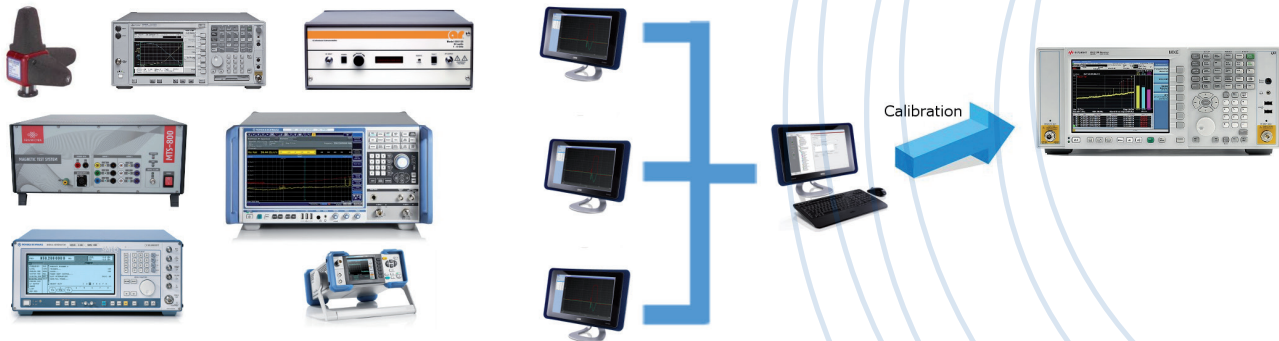
- Automatic creation of BAT-EMC projects from BAT-Manager
- Progress tracking of the projects in BAT-Manager at the end of each run in BAT-EMC
- Automatic generation of test summaries
- Centralization of test results, reports, etc.



Metrology with BAT-EMC

With BAT-EMC software you can meet the metrology (calibration) requirements of your laboratory:

- Coordinate your maintenance action of your equipment
- Generate your metrology / calibration reports



Referential with BAT-EMC

The referential (network drive) is used to share and store information between different workstations so you can manage all data from all workstation computers.

You can perform several tests at different workstations and combine them into the same project. You can perform a test at a lab workstation, and then afterwards, generate your reports from your office computer.



// Planning assistance for your laboratory

BAT-MANAGER allows you to plan your activities as you can manage your laboratory, the employees (1x8, 2x8, 3x8) but also the chambers and your test materials.

Pictures and technical sheet are non-contractual



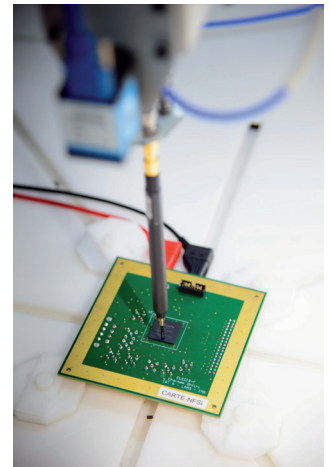
BAT-SCANNER

// **BAT-SCANNER** products are 3-D precision scanners to measure near field emissions. These scanners are used with BAT-SCAN software. Based on innovative measurement, analysis and post-processing methods, NEXIO has designed its 3-D scanners to assist in the design of electronic circuits by measuring their EMC characteristics.

📌 Specifications for the 2 available models



- Size: 100 x 70 x 70 cm
- Measuring Volume: 65 x 50 x 20 cm
- Maximum weight: 50 kg
- Effective measurement accuracy: 0.02 mm
- Camera integrated with high resolution 4K
- Integration of the Tektronix analyzer from 9 kHz to 6.2 GHz with a very high precision.



- Size: 96 x 44 x 39 cm
- Measuring Volume: 18,5 x 18,5 x 33 cm
- Maximum weight: 20 kg
- Effective measurement accuracy: 0.05 mm
- Camera integrated with high resolution 4K
- Integration of the Tektronix analyzer from 9 kHz to 6.2 GHz with a very high precision.



// Compliance Detection

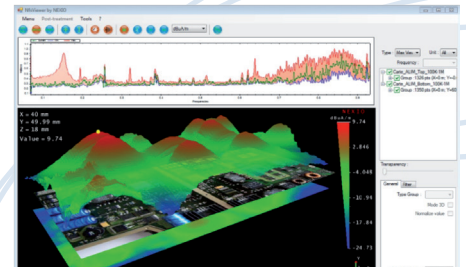
The scanner can detect if the probe touches the board.



BAT-SCAN

BAT-SCAN adapts to all robotic systems. BAT-Scan is the first software compatible with numerical simulation software.

- Investigate EMC failures observed during radiated emissions testing
- Assist with sustaining compliance due to design changes or component obsolescence
- Characterize the leakage of a shield (location, quantification, etc.)
- Evaluate the impedance mismatch of the tracks on a PCB
- Optimize the placement IC/PCB or PCB/box to reduce the phenomena of self-disturbance
- Calculate the field distribution at any distance using the techniques of transformation near-field / far-field



Free download **NFS Viewer** to view & analyse the results on your desktop

Automation with BAT-Scan

For the purpose of the project, NEXIO relied on its expertise in automation and its development structure to produce an industrial software suitable for measurements with near field scanners. BAT-Scan adapts to all scanner systems (10 drivers available since 2013) and offers a multitude of functions dedicated to best use. BAT-SCAN is the first software compatible with the standardized format IEC61967-1-1 that allows the use of results in your numerical simulation software. BAT-Scan enjoys the benefits of BAT-EMC, a leader in EMC automation software: technical support, web portal, maintenance and a library of instrument drivers (more than 500 to date, and averaging the addition of 10 drivers per year).

Modelling and simulation

The team at NEXIO has implemented the functionality needed to automate vectorial measurements, allowing direct connection with the EMC simulation tool market. These parameters, in addition to new features of post-processing, deliver the numerical model of the EUT after testing and performs additional analysis by simulation. These models are particularly appreciated by system designers who want to know the EMC characteristics of the subsystems, as accurately and realistically as possible.



// A real advantage

With this new range of tools, NEXIO brings complete solutions for reducing your design time, validation, and qualification of electronic equipment.

Pictures and technical sheet are non-contractual

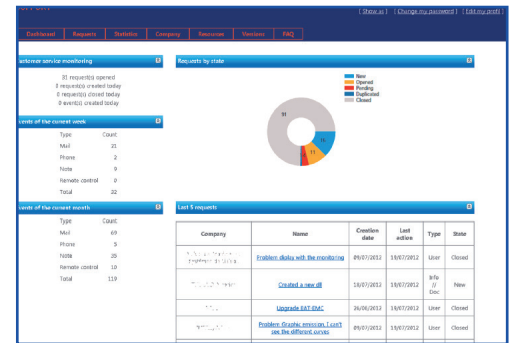


MAINTENANCE

Maintenance contract guarantees you regular software updates integrating new functions and improvements to help you keep in line with the most recent developments of standards. Thanks to our complete range of dedicated support services, you can be assured that each software user is only a click away from expert advice and support.

// Software Improvements and Evolutions

- **Standards:** The maintenance contract guarantees that the software takes standards modification into account.
- **Free drivers:** BAT-EMC offers a library of over 500 instrument drivers. This library is available for free to our maintenance clients and new drivers can be requested at no extra charge.
- **Annual improvements:** maintenance clients can submit requests to improve existing BAT-EMC functions.
- **New functions:** Your ideas and suggestions for new functions are taken into account and analyzed for integration into our yearly software update. Some may even be incorporated sooner.



// Services Support

- Benefiting from a strong EMC engineer team, NEXIO offers its clients expert advice, development and user support. NEXIO maintenance clients benefit from optimized response time in the case of software errors. (In case of loss of functionality, we will take the necessary measures to restore functionality ASAP)
- Technical support / web portal

Exclusive Access to Our Maintenance Customers

- **Technical support zone:** allows you to submit and review your requests for evolution and contact the support team for user support.
- **Download zone:** to access new drivers, limits, report models, videos explaining user functions, new software versions and their respective documentation, etc.

www.yournexio.com



// Some Figures

- More than 60 improvements / new functions per year
- More than 60 days of new version validation
- More than 500 support requests per year

Pictures and technical sheet are non-contractual

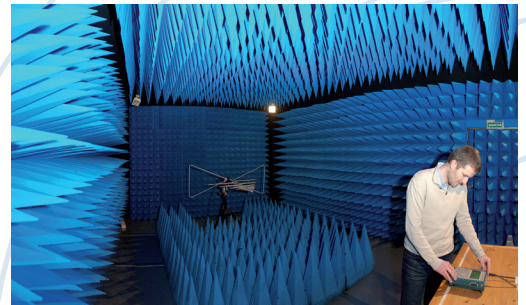


// Installation / Training

During the on-site installation, NEXIO performs a basic validation of the software system to ensure that all drivers and measurement functions perform correctly. We also provide basic start-up training to the software administrator and users. The scope of the basic validation and start-up training are given below. This is the minimum required to guarantee the correct setup of the software.

// On site validation

The validation of the new version using automatic validation, NEXIO's facility and beta testers are major steps of our validation process, but will in no way replace the on-site validation that we advise you to perform once you have received the new versions. To assist you in the validation of any major evolution versions, NEXIO offers annual on-site validation that can be added to your maintenance plan.



// Specific Control Tools

The control tools defined by the administrator constitute the interface between the BAT-EMC software and the instruments in charge of monitoring the EUT.

- These tools are built around the same template: a program based on libraries (Visual C++, C# VEE PRO, NI LabView or NI LabWindows) called by BAT-EMC.
- They include several functions which allow the initialization and disturbance or target step processing (and fault monitoring recording).
- Moreover, it can receive and process data such as frequencies, field levels, or power.



// Creating reports

Our engineers can set up your report templates for ease of automation and time-saving.

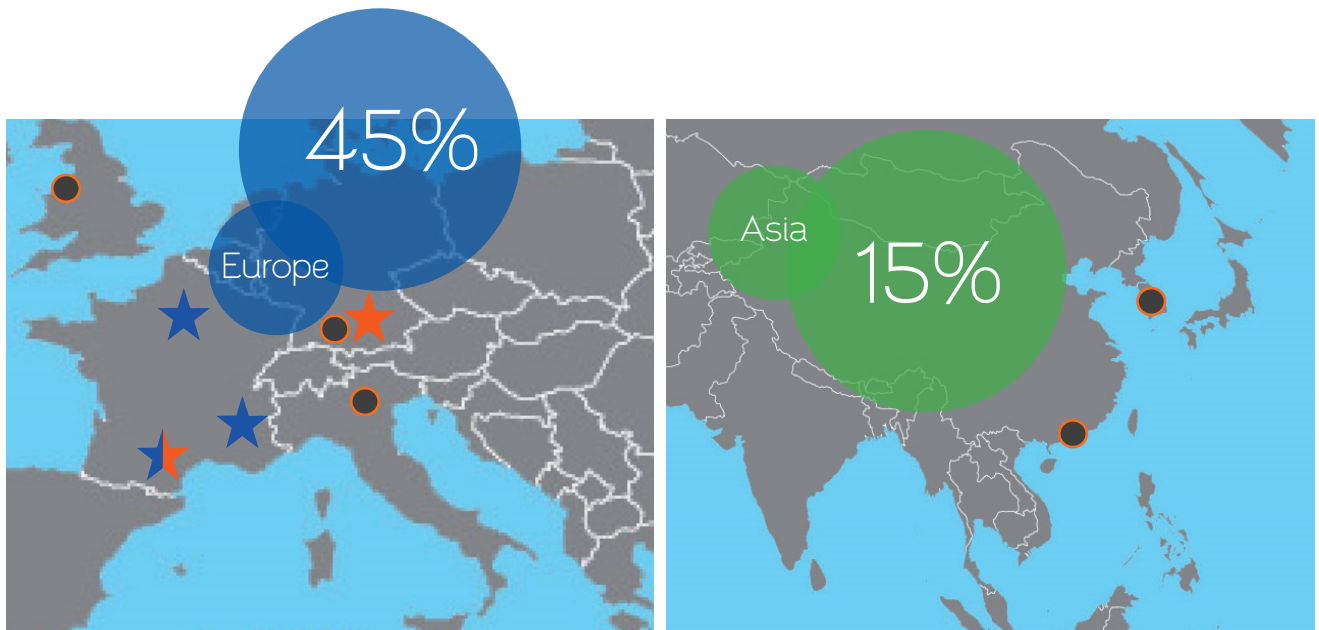


// Lab Expertise

Our experts can help set up your laboratory for greater efficiency and optimization.

Our International Presence

NEXIO provides timely local support through its highly qualified technical support engineers. Together with its committed distributors and representatives, NEXIO sells and supports its products in over 20 countries.



- Customers
- Distributors
- ★ NEXIO sales offices
- ★ NEXIO support

// Our local support

// France

NEXIO
48 Rue René Sentenac
31300 TOULOUSE, France
Phone: +33 (0)5 61 44 02 47
Email: sales@nexiogroup.com

// Germany

EMCO Elektronik
Bunsenstrasse 5
82152 Planegg, Germany
Email: dwaser@emco-elektronik.de
Phone: +49 (0)89 89556 50

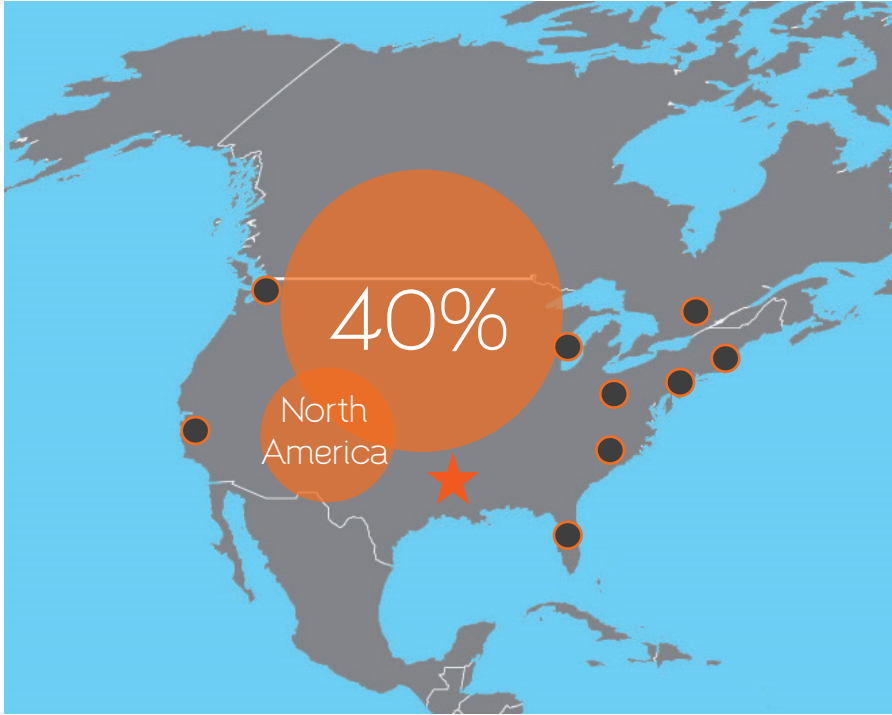
// China

ATS Technology Limited
No.611, Tianhe North Road,
Guangzhou 510600, China
Email: ricky.yang@atsolution.org
Tel +86 20 87556133

// USA

NEXIO INC
Email: greg.garza@nexiogroup.com

Emissions Radio Frequency Immunity EMC



// Your local contact



Electromagnetism
is our thing

Test and Measurement

Products

Emissions
Radio Frequency
Immunity **EMC**