Our QA/QC/GMP

Quality Assurance | Quality Control
Good Manufacturing Practice

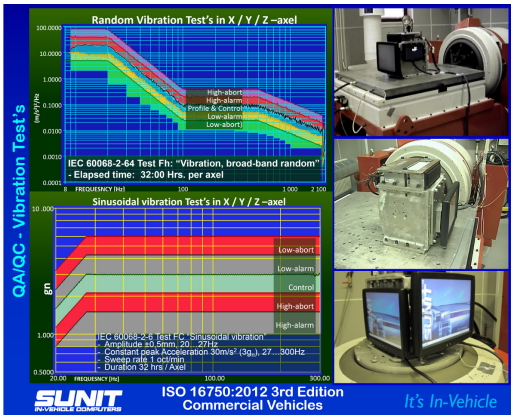
COMPUTING TECHNOLOGY FOR DEMANDING DUTIES

Since 1990, when we started manufacturing computer technology for the industry, our highest ambition has been based on our customers valuing the reliability and credibility of his tools and instruments.
The liable duty in tough environments requires durable equipment and the disruptions may cause serious disadvantage and in the worst case cause interruptions to the assignments.

SUNIT-QUALITY = TOPMOST IN-SERVICE LIFE-TIME

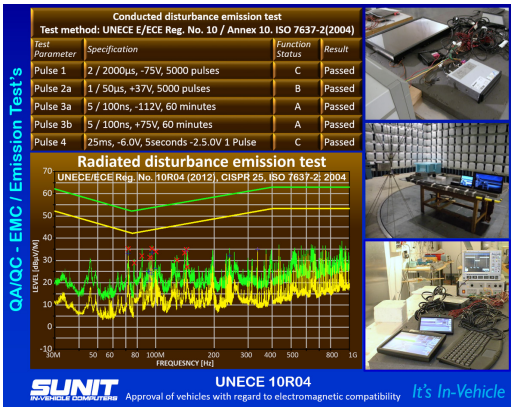
Within QA/QC and Good Manufacturing Practice we encourage a culture of innovation, responsibility and rectitude to ensure continuous improvement of responsibility in front of our Clients.
We strive to be Client's first choice today and tomorrow and the Quality is a natural part in all collaboration forms.
In technology and process we follow Industry Standard ISO-16750 and we effort heavily our resources to deliver products and service with Standard-associated quality.
Our Products are globally UNECE E-Certified.

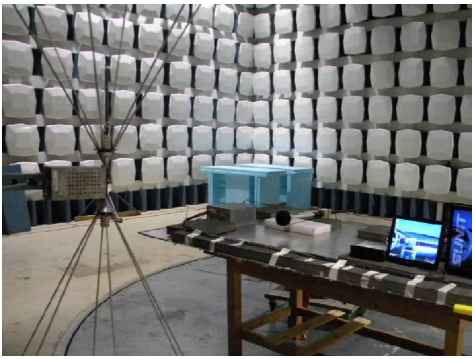
Quality is integral part of us. Our Clients are successful in his Entrepreneur and there is no doubt of expectations for the highest quality in all circumstances.
The average life-time of ICT-system is mainly 10 years Logistics and Supply Chain business.
We demand on our products perfectly durable service to our clients ICT-investment.



QA/QC and INDUSTRY STANDARDS

With our QA/QC Management and Good Manufacturing Practice we encourage a culture of innovation, responsibility and rectitude to ensure the continuous improvement of accountability in front of our Clients.
We strive to be every Client's first choice supplier today and tomorrow and the Quality of service is a natural part in all cooperation forms.
In Product technology and Manufacturing process we follow all of Vehicle industry Quality Standards and we effort heavily to keep us in front of reliable product quality provider.





LOCAL IMPROVEMENT LABOARATORY

Utilizing our local test equipment, we constantly execute destructive tests to find out the limits of product durability and reach even higher limit values.
The Complete Environmental Laboratory located next to us, is frequently exploited by us. It consists of all test-units and are appropriated for the ISO, IEC, UNECE, GENELEC and other Industry standards.
In addition we examine tests in accordance of Client-applied Standards.
This service gives us rapid reaction capability for any kind of Requirements and Tailoring reviews.
The Qualification tests for Certifications are applied by internationally certified laboratories.

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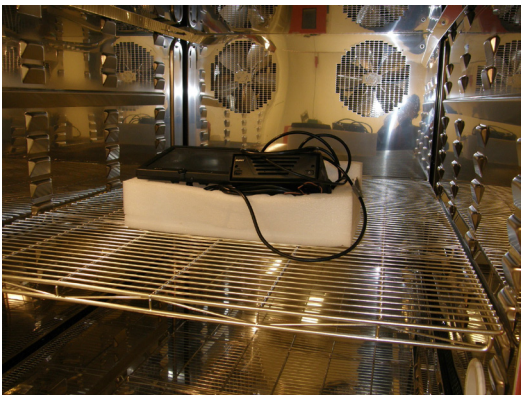
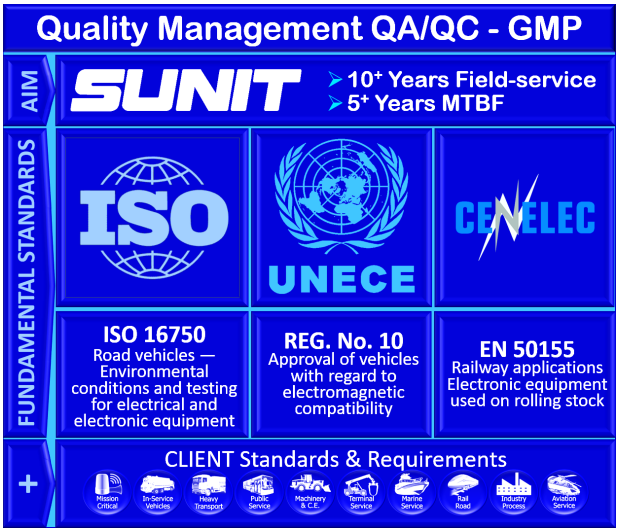


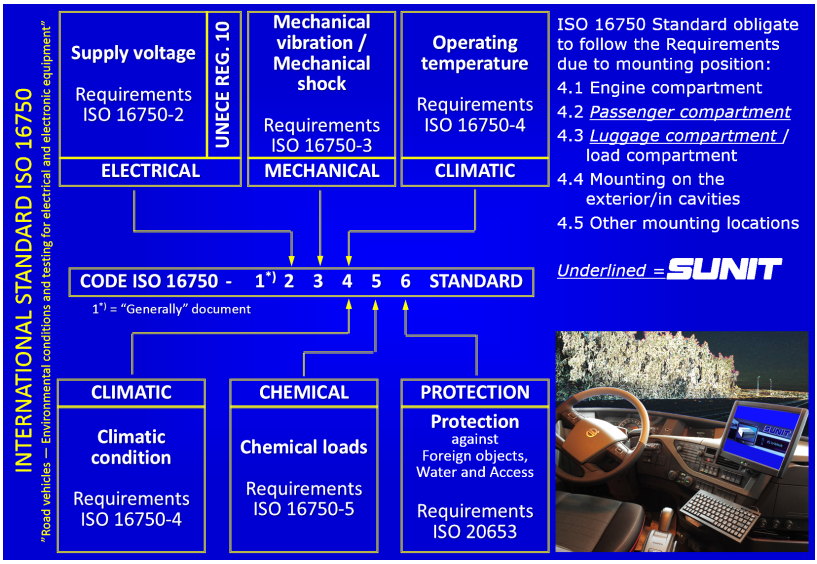


By applying Fundamental Industrial electronic standards we strive our development process for the safe Products and conform the industrial Life-time.
The Standards and Regulations in our Client-Industry Is currently subject for strong development process in regards of Electronics. Efficient energy utilization, safe day-around exploiting and ergonomics are factors that increasingly determine the product's efficient use.
Client specific standards in special cases are part of our tailor-making process and commonly base on the product specific safety requirements.

CERTIFIED PRODUCTS

Sunit Computer technology classifies as Fixed-Mount device. Therefore the device shall be certified according to thereof legal Regulations.
The Qualification tests for Certifications are applied by internationally approval certified laboratories.
Certificates disposes us Finnish Transport Safety Agency TRAFI.

The Scope on ISO 16750 Electronics Standard



The Vehicle Electronics Standard ISO 16750 determines the Requirements of particular Products and how the Environmentally impacts shall be verified.
The Standard determines Electrical, Mechanical, Climatic, Chemicals and Protections against Foreign Object.
Sunit utilizes the most harsh IEC-parameters for product-specimens which are obtained by Heavy-duty Industry.

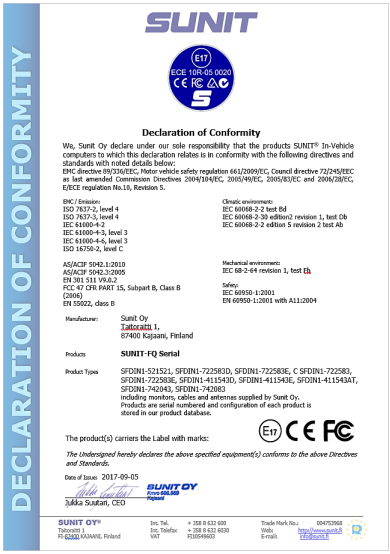
DECLARATION OF CONFORMITY

ISO 16750 determines WHAT to be verified and it use the IEC-standards for HOW to determine.
In addition the UNECE Regulations base on Agreement between every UN-Nation of the Traffic safety point of views. There is moreover 120 Regulations and Regulation No 10 determines the Vehicle Electronics.

UNECE Regulations uses mostly common IEC-standards than ISO for the product determinations, however taking in accordance the Manufacturing process as well.

UNECE regulations determines the product liability against the user and is adopted by UN-countries by justice and the producer shall Certify the product for purposed market.

Sunit uses all these standards and for each delivery


DECLARATION OF CONFORMITY

SUNIT

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Declaration of Conformity

We, Sunit Oy declare under our sole responsibility that the products SUNIT® In-Vehicle computers to which this declaration relates is in conformity with the following directives and standards with noted details below:
EMC directive 89/336/EEC, Motor-vehicle safety regulation 661/2009/EC, Council directive 72/245/EEC as last amended Commission Directives 2004/104/EC, 2005/49/EC, 2005/83/EC and 2006/28/EC, E/ECE regulation No.10, Revision 5.

EMC / Emission:
ISO 7637-2, level 4
ISO 7637-3, level 4
IEC 61000-4-2
IEC 61000-4-3, level 3
IEC 61000-4-6, level 3
ISO 16750-2, level C

Climatic environment:
IEC 60068-2-2 test Bd
IEC 60068-2-30 edition2 revision 1, test Db
IEC 60068-2-2 edition 5 revision 2 test Ab

AS/ACIF S042.1:2010
AS/ACIF S042.3:2005
EN 301 511 V9.0.2
FCC 47 CFR PART 15, Subpart B, Class B (2006)
EN 55022, class B

Mechanical environment:
IEC 68-2-64 revision 1, test Fh

Safety:
IEC 60950-1:2001
EN 60950-1:2001 with A11:2004

Manufacturer: Sunit Oy, Talorantti 1, 87400 Kajaani, Finland

Products: **SUNIT-FQ Serial**

Product Types: SFDIN1-521521, SFDIN1-722583D, SFDIN1-722583E, C SFDIN1-722583, SFDIN1-722583E, SFDIN1-411543D, SFDIN1-411543E, SFDIN1-411543AT, SFDIN1-742043, SFDIN1-742083
including monitors, cables and antennas supplied by Sunit Oy.
Products are serial numbered and configuration of each product is stored in our product database.

The product(s) carriers the Label with marks:

The Undersigned hereby declares the above specified equipment(s) conforms to the above Directives and Standards.

Date of Issue: 2017-09-05

SUNIT OY Kemi FINLAND Finland

Jukka Suutari, CEO

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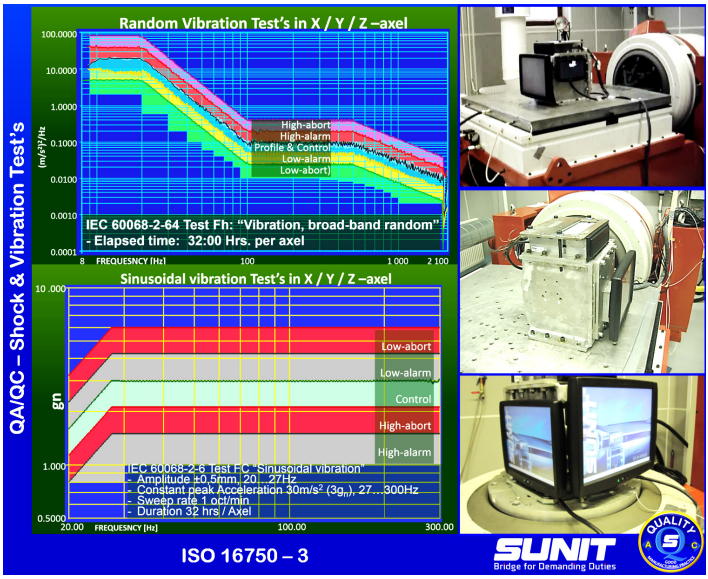


IMPACTS, DROPS AND VIBRATIONS – HEAVY-DUTY TESTS

In addition to the endurance of the product, the purpose of the Vibrations and Impact tests is to ensure safe operative use and user-friendly design in the event of an accident.

ISO 16750 – 3 "Shock & Vibrations" determines the Environmental Impact evaluating's.

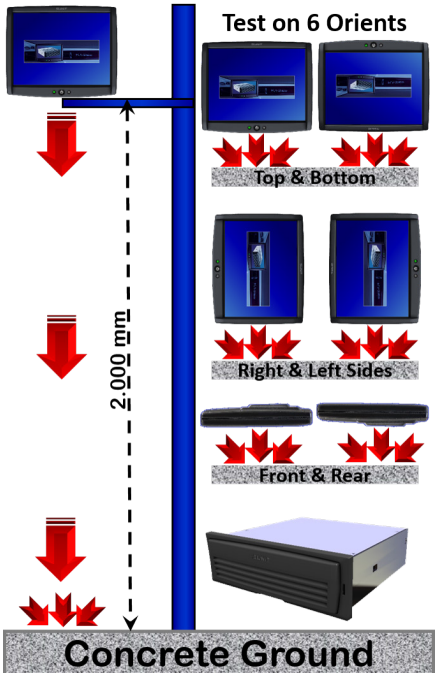
During evaluation we determine always that the Object for test may never harm on test and shall function normally after specimens.

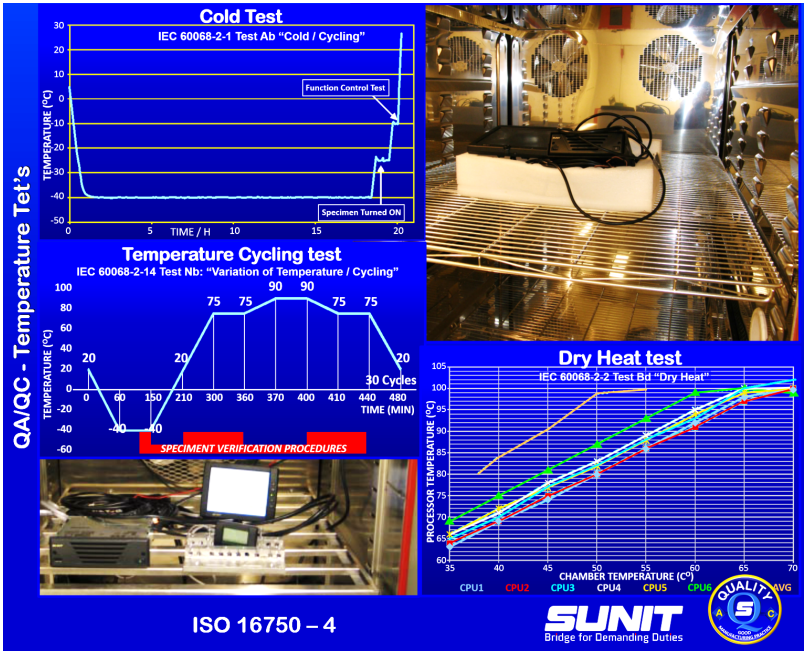
However, our Destructive tests aim to reach the sustainability limits.

Usually specimen time is 200 hrs.

The drop test applies double higher distance than ISO/IEC-standard determines.

The test equipment's are covered by ILAC-inspections and are object for periodical Calibrations.



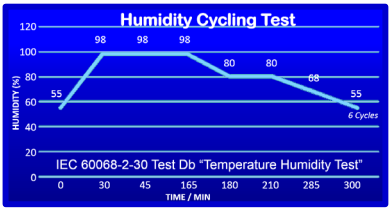


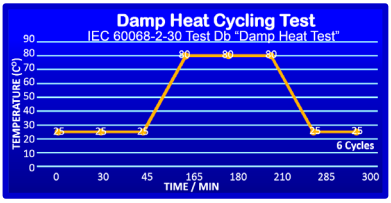
ICING, HEAT, HUMIDITY - TEMPERATURE-STRESS

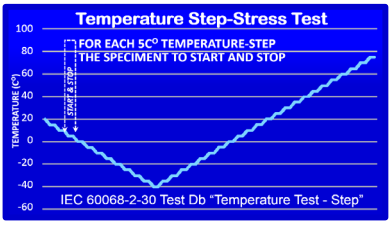
The impacts of Temperature and variations of temperatures in combination of humidity are most significant influences of Electronics life-length. Our test facility contains several chambers for this purpose, and are continuous in use for stress out the limits.

Temperature specimens carries out test 6 types of tests. Each Test-type stresses into effect of the Limit, whereat qualifications for absolute conditions in arctic and desert environments are met.

Each modification or each new candidate of implemented component or part are covered by this validation process prior the acceptance and the Implementation process takes in place.







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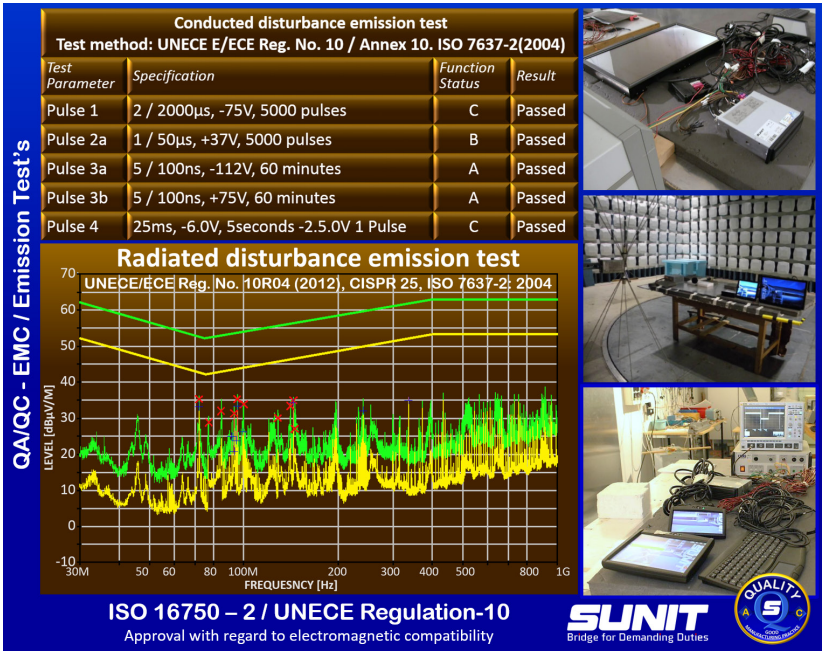
EMC / Emission for Certified products



MAY NOT CAUSE INTERFERENCE - AND MUST NOT BE DISTURBED

Sunit Applies the UNECE Regulations for EMC / Emission certifications. Since 2010 the FIX-mounted Electronic devices shall be certified for use in Traffic environment.

Today EMC / Emission is the most critical influent of Traffic safety in regard of vehicle electronics. Electromagnetic issues are the Keys for safe transports and therefore it is regulated as well for the Afterward installed equipment's.

EMC / Emission demands - in addition by UNECE - have Client specific requirements.
Our local Laboratory is a modern specially designed for extremely silent test's as well and therefore we rapidly can adopt each requirements from the market.

The evaluation process is always for us the purposeful intention toward most interference-free devices on the market.

One of our norm on this purpose is interference-free internal signal communication. By this reason we never design products having internal cable harness as they create internal antennas. We use only Board-to-Board connections. As well electronic boards are covered by Conformal Coating.

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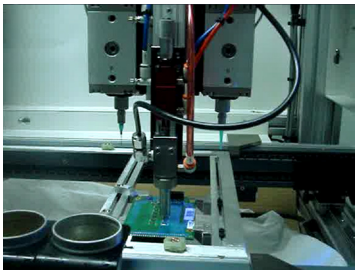


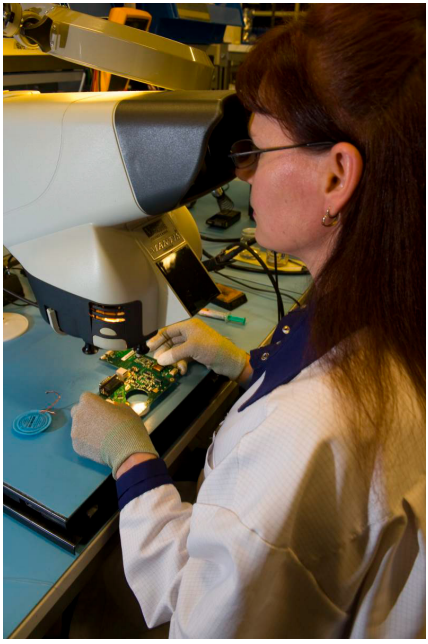
100% QA for Each and Every delivery

A Precise and Strict Process is the precondition for Good Manufacturing Practise.
During the process each part and product are prior assembly covered by at least 4 times of Quality Controls.

The Assembly process as a Can-Ban, have 100% inspections on each assembly station.
Finally, the products are stressed by Burn-In process with Full loaded Processor capacity.
During Burn-In the Check-Application monitors the product and reports each possible interrupt or failure.

The process contains application for all kind of Client applications, like Video, Communication, I/O-traffic etc.

Our Warranty Field-failure rate is currently almost Zero.



An Open and Transparent support for Client Enterprise

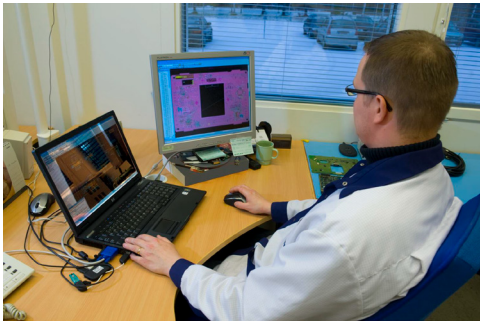
The Enterprises in Industry develops rapidly. New ICT-solutions and applications takes in place frequently.

Especially the Broad communication, Graphic User Interface, Vehicle-economy and Location-based Service areas are objects for Progressive and sophistic developments.

Intelligence on Industry expands to new unprecedented areas, the Internet of Thigs brings new opportunities.

Our QA/QC includes therefore the R&D-Support of Clients development process to help optimized and long-term enterprises.

Our Partners, who serve the Clients with applications wants continuously keep in front of the technology.



Our long-term experience in M2M-technology, Cloud-Computing and IoT-technology brings us to the front of skills in relation with Computer technology.

Our RnD consist Partner & Client support who are simultaneously product development personnel. This concept forms the best partner collaboration that serves the Client with the best possible quality on both hardware and application point of views.

We run large-scale In-Field tests, and therein our partners' experience and opinion are important information for us and our supplier partners.

For almost 30 years, we have found that this concept of process and method for new technology conducts to the safest applicability, especially in tough environmental industry markets.

As well, we continuously utilize our Quality Laboratory for verifying and Stress-tests of the limits.

Sunit Oy

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Design From Finland ®

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ISO 9001 BUREAU VERITAS Certification
Nº FIHSK10299467A

REACH 2006/121/EC

RoHS 2011/65/EC

WEEE 2002/96/EC