



by **NT**sensors 

Online Monitoring



ES France - Département Bio-tests & Industries
127 rue de Buzenval BP 26 - 92380 Garches

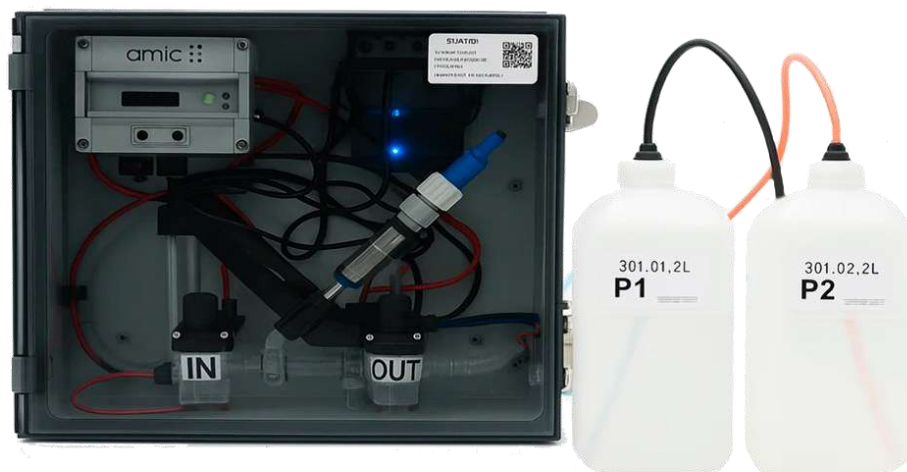


Tél. 01 47 95 99 90
Fax. 01 47 01 16 22



e-mail : bio@es-france.com
Site Web : www.es-france.com

Online Water Quality Monitoring



1 ONLINE METER

8 UP TO IONS

Automatic on-line analyzers. Smart, simple and effective.

NH₄⁺
AMMONIUM

Ca²⁺
CALCIUM

I⁻
IODIDE

Mg²⁺
MAGNESIUM

ClO₄⁻
PERCHLORATE

Na⁺
SODIUM

pH
HYDROGEN

Br⁻
BROMIDE

Cl⁻
CHLORIDE

Li⁺
LITHIUM

NO₃⁻
NITRATE

K⁺
POTASSIUM

NO₂⁻
NITRITE

AMIC - Automatic Multi Ion Control

100% Automated Operation – Set It and Get Data

This analyzer is designed for autonomous field operation, featuring:

- ☒ **Automatic Sample Intake:** Draws water or solution samples directly from tanks, pipes, or reservoirs.
- ☒ **Automatic Calibration:** Maintains precision without operator oversight.
- ☒ **Automatic Sensor Cleaning:** Prolongs sensor life and maintains data reliability.



Wide Range of Applications

The versatility of this analyzer makes it a perfect fit for:

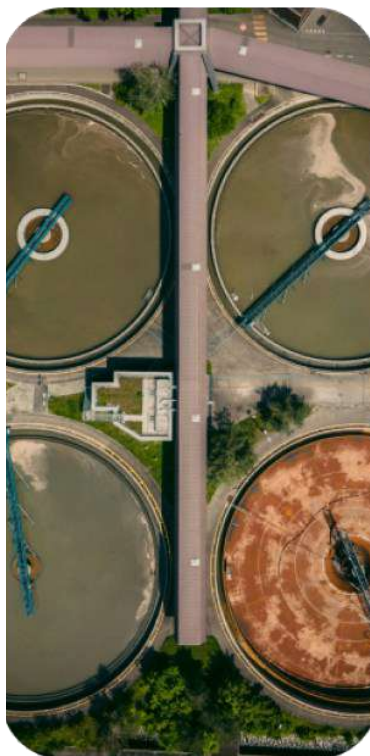
 **Industrial Process Monitoring** – Maintain chemical balance, reduce downtime

 **Food & Beverage Production** – Control water hardness and ingredient concentrations

 **Environmental Surveillance** – Ensure compliance with water quality standards

 **Water Treatment Facilities** – Manage hardness, nitrates, and more

 **Hydroponics & Aquaponics** – Deliver precise nutrients for better plant growth and yield



Smart Connectivity for Modern Industry

Communication protocols are built with industry integration in mind:



Modbus TCP/IP: Seamless integration with SCADA, PLCs, and industrial automation.



Embedded Webserver: Remote access via browser from any device, anywhere. This allows real-time visualization, configuration, and data logging. All accessible remotely and securely.

Input features

- Analyzes **multiple ions simultaneously**, not just one.
- Performs **all calibration, cleaning, and sampling automatically**
- Requires **no external chemical reagents**.
- Compact design, affordable and plug & play.

How it Works:

AMIC is a measuring system that uses a pumping mechanism to move the liquid sample to sensors. Once the sample reaches the electrode, the ISE sensor detects the ions present in the sample.

To ensure the accuracy of the measurements, liquid calibration standards with a known concentration of the parameter/ISE are employed. No reagents required for sample.

AMIC includes an automatic cleaning system, which helps maintain the equipment in optimal condition for accurate measurements. Finally, the data and/or signal output sends the results to other devices that can display them on a screen or use them to control a process.



Available Parameters for Configuration

Parameter	Ion Formula	Range (ppm)	pH Range	Multi Measurement Setup*
Ammonium	NH_4^+	0,1 – 9.000	4 – 8,5	✓ Yes
Bromide	Br^-	1 – 8.000	1 – 12	✗ No
Calcium	Ca^{2+}	0,4 – 4.000	3,4 – 8	✓ Yes
Chloride	Cl^-	1,3 – 35.000	2 – 12	✓ Yes
Iodide	I^-	1 – 10.000	2 – 12	✗ No
Lithium	Li^+	0,1 – 7.000	2 – 12	✗ No
Magnesium	Mg^{2+}	2,4 – 2.400	3 – 8,5	✓ Yes
Nitrate	NO_3^-	1 – 30.000	3 – 10	✓ Yes
Perchlorate	ClO_4^-	1 – 3.000	3 – 9,5	✗ No
Potassium	K^+	0,5 – 39.000	1 – 9	✓ Yes
Sodium	Na^+	2,3 – 23.000	1 – 9	✓ Yes
Nitrite	NO_2^-	1 – 1.000	4 – 8	✗ No
pH	H^+	— —	2 – 9,5	✓ Yes

*All available ion parameters tabulated as ✓ Yes, can be integrated into a single automatic unit, allowing for simultaneous, multi-ion measurement in real time.



Technical Specifications

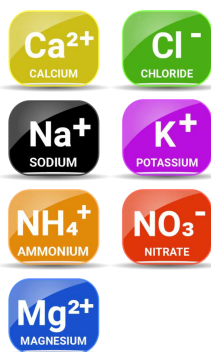
Parameter	Specification
Output / Communication	MODBUS TCP/IP or Webserver
Automatic Operations	Calibration, measurement, and cleaning
Maximum Pressure	1 bar
Sample Connections	1/4 inch
Sample Temperature	10 – 35 °C
Sample Points	1
Sampling Frequency (Min)	1 sample / 24h
Sampling Frequency (Max)	125 samples / 24h
Power Supply	85V AC to 240V AC
Power Consumption	12V 2A DC
Type of Measurement	Electrochemical measurement
Available Electrodes	See available electrodes.
Minimum Sample Volume	~100 mL
Output Units	mg/L – ppm
Measurement Range	1 to 50.000 mg/L
Technique	Ion-Selective Electrodes (ISE)
Dimensions	300 x 400 x 180 mm
Protection Grade	IP66

SKU	Product Name	Parameter	GTIN	Price	Page
A7-30X-204	Automatic Analyzer for MultiION Nutrients/Hidroponics/Agriculture	Calcium, Chloride, Sodium, Potassium, Ammonium, Nitrate, Magnesium	8436610062626	8.220 €	1
A7-30X-203	Automatic Analyzer for N, K	Nitrate, Ammonium, Potassium	8436610062619	7.460 €	1
A7-30X-202	Automatic Analyzer for Salinity (Sodium & Chloride)	Sodium, Chloride	8436610062602	7.270 €	2
A7-30X-201	Automatic Analyzer for Nitrogen (Ammonium & Nitrate)	Ammonium, Nitrate	8436610062596	7.270 €	2
A7-30X-200	Automatic Analyzer for Water Hardness	Calcium, Magnesium	8436610062589	7.270 €	3
A7-30X-018	Automatic Analyzer for Ammonium	Ammonium	8436610062466	7.080 €	3
A7-30X-080	Automatic Analyzer for Bromide	Bromide	8436610062558	7.135 €	4
A7-30X-040	Automatic Analyzer for Calcium	Calcium	8436610062527	7.080 €	4
A7-30X-035	Automatic Analyzer for Chloride	Chloride	8436610062503	7.080 €	5
A7-30X-127	Automatic Analyzer for Iodide	Iodide	8436610062572	7.135 €	5
A7-30X-007	Automatic Analyzer for Lithium	Lithium	8436610062459	7.270 €	6
A7-30X-024	Automatic Analyzer for Magnesium	Magnesium	8436610062497	7.080 €	6
A7-30X-062	Automatic Analyzer for Nitrate	Nitrate	8436610062541	7.080 €	7
A7-30X-046	Automatic Analyzer for Nitrite	Nitrite	8436610062534	7.135 €	7
A7-30X-099	Automatic Analyzer for Perchlorate	Perchlorate	8436610062565	7.135 €	8
A7-30X-039	Automatic Analyzer for Potassium	Potassium	8436610062510	7.080 €	8
A7-30X-023	Automatic Analyzer for Sodium	Sodium	8436610062480	7.080 €	9
A7-30X-205	Automatic Analyzer for MultiION Includes meter, standards and accessories. Sensors not included	<u>Customizable</u>	8436610062633	6.890 €	9



Automatic Analyzer for MultilON Nutrients / Hydroponics / Agriculture

SKU: A7-30X-204
GTIN: 8436610062626



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	1-10.000 ppm*
Min Sample Frequency	5 min
Work pH range	4 - 8
Repeatability	±10% ; ± 20% Ca ²⁺ and Mg ²⁺
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

* Check individual electrode ranges

APPLICATIONS

- Comprehensive monitoring of water quality
- Control in treatment plants
- Supervision in industrial processes
- Research and development

INCLUDES

- Probes for calcium, chloride, sodium, potassium, ammonium, nitrate & magnesium
- Ref sensor
- Tubing set
- 2x 2L Standards included

AVAILABLE COMMUNICATION

Modbus TCP/IP

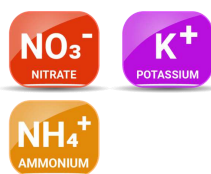


Webserver



Automatic Analyzer for N, K

SKU: A7-30X-203
GTIN: 8436610062619



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	1-10.000 ppm*
Min Sample Frequency	5 min
Work pH range	4 - 8,5
Repeatability	±10%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

* Check individual electrode ranges

APPLICATIONS

- Fertilizer optimization
- Wastewater quality control
- Research in greenhouses

INCLUDES

- Probes for nitrate, potassium & ammonium
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



Automatic Analyzer for Salinity (Sodium & Chloride)

SKU: A7-30X-202
GTIN: 8436610062602



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	1-10.000 ppm*
Min Sample Frequency	5 min
Work pH range	2 - 9
Repeatability	±10%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

* Check individual electrode ranges

APPLICATIONS

- Monitoring of salinity
- Corrosion prevention
- Optimization in desalination
- Control in osmolarity processes

INCLUDES

- Probes for chloride & sodium
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



Automatic Analyzer for Nitrogen (Ammonium & Nitrate)

SKU: A7-30X-201
GTIN: 8436610062596



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	1-10.000 ppm*
Min Sample Frequency	5 min
Work pH range	4 - 8,5
Repeatability	±10%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

* Check individual electrode ranges

APPLICATIONS

- Comprehensive control of nitrogen compounds
- Aquaculture
- Wastewater management
- Agricultural optimization

INCLUDES

- Probes for ammonium & nitrate
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



Automatic Analyzer for Water Hardness

SKU: A7-30X-200
GTIN: 8436610062589



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	1-10.000 ppm*
Min Sample Frequency	5 min
Work pH range	3,4 - 8
Repeatability	±20%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

* Check individual electrode ranges

APPLICATIONS

- Integrated evaluation of water hardness
- Management in distribution systems
- Control in industrial processes
- Optimization in treatment plants

INCLUDES

- Probes for calcium & magnesium
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



Automatic Analyzer for Ammonium

SKU: A7-30X-018
GTIN: 8436610062466



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	0,1 - 9.000 ppm
Min Sample Frequency	5 min
Work pH range	4 - 8,5
Repeatability	±10%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

APPLICATIONS

- Wastewater treatment
- Quality control in aquaculture
- Fertilizer optimization
- Management in industrial processes

INCLUDES

- Probe for Ammonium sensor
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



Automatic Analyzer for Bromide

SKU: A7-30X-080
GTIN: 8436610062558



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	1 - 8.000 ppm
Min Sample Frequency	5 min
Work pH range	1 - 12
Repeatability	±10%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

APPLICATIONS

- Drinking water treatment control
- Supervision in pharmaceutical processes
- Chemical industrial applications
- Environmental monitoring

INCLUDES

- Probe for Bromide sensor
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



Automatic Analyzer for Calcium

SKU: A7-30X-040
GTIN: 8436610062527



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	0,4 - 4.000 ppm
Min Sample Frequency	5 min
Work pH range	3,4 - 8
Repeatability	±20%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

APPLICATIONS

- Determination of water hardness
- Control in softening processes
- Food and pharmaceutical industry
- Production of supplements and fortification

INCLUDES

- Probe for Calcium sensor
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



Automatic Analyzer for Chloride

SKU: A7-30X-035
GTIN: 8436610062503



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	1,3 - 35.000 ppm
Min Sample Frequency	5 min
Work pH range	2 - 12
Repeatability	±10%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

APPLICATIONS

- Infrastructure corrosion prevention
- Water quality control
- Food industry
- Chemical and electrochemical processes

INCLUDES

- Probe for Chloride sensor
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



Automatic Analyzer for Iodide

SKU: A7-30X-127
GTIN: 8436610062572



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	1 - 10.000 ppm
Min Sample Frequency	5 min
Work pH range	2 - 12
Repeatability	±10%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

APPLICATIONS

- Control in the food industry
- Pharmaceutical applications
- Water treatment
- Clinical and nutritional research

INCLUDES

- Probe for Iodide sensor
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



Automatic Analyzer for Lithium

SKU: A7-30X-007
GTIN: 8436610062459



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	0,1 - 7.000 ppm
Min Sample Frequency	5 min
Work pH range	2 - 12
Repeatability	±10%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

APPLICATIONS

- Battery production control
- Electrochemical analysis
- Research in materials synthesis
- Verification in coating processes

INCLUDES

- Probe for Lithium sensor
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



Automatic Analyzer for Magnesium

SKU: A7-30X-024
GTIN: 8436610062497



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	2,4 - 2.400 ppm
Min Sample Frequency	5 min
Work pH range	3 - 8,5
Repeatability	±20%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

APPLICATIONS

- Determination of water hardness
- Control in chemical industries
- Production of nutritional supplements
- Optimization in biological processes

INCLUDES

- Probe for Magnesium sensor
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



Automatic Analyzer for Nitrate

SKU: A7-30X-062
GTIN: 8436610062541



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	1 - 30.000 ppm
Min Sample Frequency	5 min
Work pH range	3 - 10
Repeatability	±10%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

APPLICATIONS

- Evaluation of water pollution
- Control in water treatment
- Agricultural optimization
- Industrial processes

INCLUDES

- Probe for Nitrate sensor
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



Automatic Analyzer for Nitrite

SKU: A7-30X-046
GTIN: 8436610062534



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	1 - 1.000 ppm
Min Sample Frequency	5 min
Work pH range	4 - 8
Repeatability	±10%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

APPLICATIONS

- Wastewater control
- Prevention in aquaculture
- Environmental management
- Biological processes in laboratories

INCLUDES

- Probe for Nitrite sensor
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



Automatic Analyzer for Perchlorate

SKU: A7-30X-099
GTIN: 8436610062565



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	1 - 3.000 ppm
Min Sample Frequency	5 min
Work pH range	3 - 9,5
Repeatability	±10%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

APPLICATIONS

- Monitoring in industrial sites
- Environmental control
- Supervision in treatment plants
- Research and development

INCLUDES

- Probe for Perchlorate sensor
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



Automatic Analyzer for Potassium

SKU: A7-30X-039
GTIN: 8436610062510



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	0,5 - 39.000 ppm
Min Sample Frequency	5 min
Work pH range	1 - 9
Repeatability	±10%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

APPLICATIONS

- Fertilizer optimization in agriculture
- Monitoring in biological processes
- Pharmaceutical applications
- Aquaculture control

INCLUDES

- Probe for Potassium sensor
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



Automatic Analyzer for Sodium

SKU: A7-30X-023
GTIN: 8436610062480



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range	2,3 - 23.000 ppm
Min Sample Frequency	5 min
Work pH range	1 - 9
Repeatability	±10%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

APPLICATIONS

- Management of salinity in potable water
- Corrosion prevention
- Chemical industrial processes
- Pharmaceutical applications

INCLUDES

- Probe for Sodium sensor
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



Automatic Analyzer for MultION Includes meter, standards and accessories Sensors

SKU: A7-30X-205
GTIN: 8436610062633



Weight	4.7 kg
Dimensions	40 x 30 x 18 cm
Concentration Range (PPM)	1-10.000 ppm*
Min Sample Frequency	5 min
Work pH range	-
Repeatability	±10%
Technique	Ion Selective Electrode
Sample Measurement	No reagents required
Operation Mode	Direct Calibration
pH Measure	Available

* Check individual electrode ranges

APPLICATIONS

- General purpose applications
- Research & Development
- Customization upon clients requirements

INCLUDES

- Without ISE Probes
- Ref sensor
- Tubing set
- 2x 2L Standards included
- Ethernet Communication (RJ45)

AVAILABLE COMMUNICATION

Modbus TCP/IP



Webserver



General Sales Terms

Prices

- Prices do not include VAT.
- Prices are valid until **December 31, 2025**.

INCOTERMS: **EXW Tarragona**.

Shipments

- Shipments will be made via express courier.
- Shipments are at the **recipient's risk**. Insurance is not included.
- **NT Sensors assumes no responsibility** for damage or loss during shipment.
- Unless otherwise specified, the customer agrees to use NT Sensors' usual carrier.
- Packaging is included.

Any incidence during delivery must be reported in writing to the carrier and NT Sensors within **24 hours of receiving the material**.

Payment Terms

- Payments must be made **in advance via bank transfer or by credit card**.
- PayPal are subject to a **4% fee**.

Bank Details: BANCO BILBAO VIZCAYA ARGENTARIA S.A IBAN: ES20 0182 2609 5902 0009 5337

BIC (SWIFT): BBVAESMMXXX Bank Address: Spain

Delivery Time

- Delivery is estimated between **4 - 6 weeks** after order acknowledgment.

Immediate acknowledgment is available upon request, including information about material dispatch and shipping method for verification purposes.

Guarantee

- All NT Sensors materials are guaranteed against manufacturing defects in accordance with **European Norm 89/655 CEE**.
- The guarantee is void in cases of improper maintenance, alterations, or modifications to any component, which release the manufacturer from any liability.

Refer to the guarantee document provided with the material for detailed terms.

Returns

- Returns must be communicated and approved in advance, with a **maximum return window of 15 days** from receipt of the material.
- Returns must be shipped **prepaid**, and the original packaging must be in **perfect condition**.
- Returns are **not accepted** for standards, solutions, or custom-made materials.
- Returned items must include:
 - **Original packaging**.
 - A sufficiently protective exterior box for shipment.

All accessories and manuals included in the original delivery.