

BITRON

Details driving Innovation

www.bitron.com



Vision & Mission

Efficiency and sustainability are inseparable concepts

A hand is shown interacting with a futuristic, glowing blue interface. The interface consists of several circular buttons with icons: a hand, a person, and a checkmark. A large central circle contains the text "OUR VISION". The background is a dark blue with a hexagonal pattern.

**OUR
VISION**

Vision

We create products and systems to help improve the quality of life of people and the world around them. We believe in a future in which efficiency and sustainability are inseparable concepts.

Mission

We have been creating with tenacity & passion more and more competitive, reliable & smart technologies aimed at guiding innovation towards a sustainable future. We constantly build upon our success, forever based on strong links with our global stakeholders, verticalizing and glocalizing our processes.

Values




PASSION




INTEGRITY




CONCRETENESS




BELONGING




PEOPLE




AMBITION

Diversity, Equity & Inclusion

Our Commitment

We promote, in every decision we make, a company culture based on collaboration and respect, building day by day a working environment where everyone feels welcome. We value employees for their individual qualities, creating the conditions for them to express their full potential.



SINCE 1955



Company profile 2024

Key data

Last update: January 2024

1.398M€

PRE-CLOSING 2023

76,8M€

CAPEX
PRE-CLOSING 2023

9.200

HUMAN RESOURCES
(temporary workers included)

HOME APPLIANCE
AUTOMOTIVE
HVAC
ENERGY
eV CHARGING

INDUSTRIES



Bitron helps companies to **design & realize innovative** solutions by guiding them in research, development & production of mechatronic components and systems.

18

MANUFACTURING PLANTS
& DEVELOPMENT CENTRES

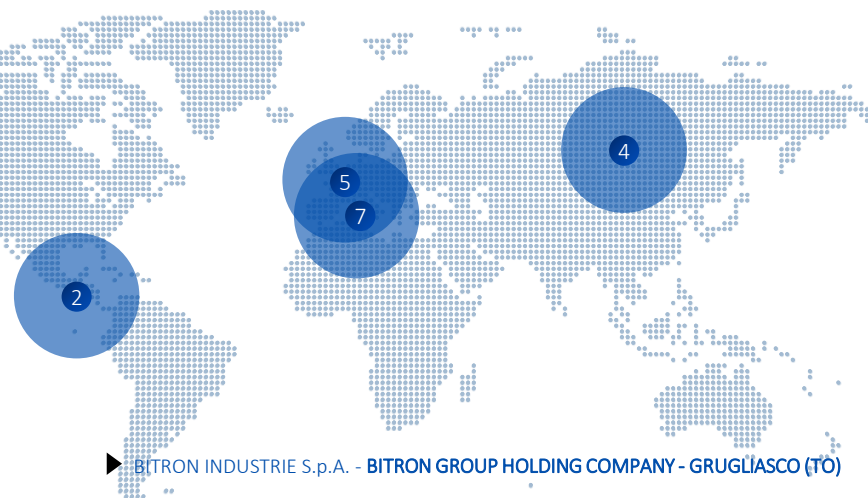
16

SALES AND
TECHNICAL CENTRES

1

BITRON SERVICE

(AFTER MARKET CENTRE) TURIN - ITALY



▶ BITRON INDUSTRIE S.p.A. - BITRON GROUP HOLDING COMPANY - GRUGLIASCO (TO)

In the world

Manufacturing plants and development centres

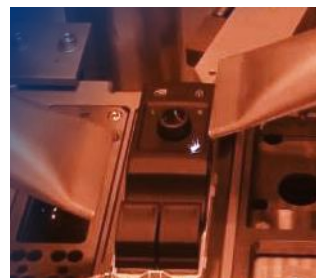
| REGION | UNIT | PRODUCTS |
|---------|--|---------------------------------|
| ITALY | BITRON ELECTRONICS S.p.A. Grugliasco Unit | |
| | ELBI INTERNATIONAL S.p.A. Collegno Unit | Appliance / HVAC / Tooling Unit |
| | ELBI INTERNATIONAL S.p.A. Alatri Unit | Appliance |
| | ELBI INTERNATIONAL S.p.A. Cormano Unit | Appliance / Vending |
| | ELBI INTERNATIONAL S.p.A. Dronero Unit | Appliance / HVAC |
| | BITRON S.P.A. AUTOMOTIVE SOLUTIONS Rossana Unit | |
| | BITRON S.P.A. AUTOMOTIVE SOLUTIONS Savona Unit | |
| EUROPE | BITRON ESPAÑA BARCELONA AUTOMOTIVE | |
| | BITRON POLAND ELECTROMECHANICAL UNIT SOSNOWIEC | APPLIANCE AUTOMOTIVE HVAC |
| | BITRON POLAND ELECTRONICS UNITS SOSNOWIEC | ELECTRONICS COMPONENTS |
| | BITRON POLAND 2 ELECTRONICS UNITS SOSNOWIEC | ELECTRONICS COMPONENTS |
| | BITRON TURKEY MANISA | APPLIANCE AUTOMOTIVE |
| ASIA | BITRON ELECTRONIC CHINA QINGDAO | ELECTRONICS COMPONENTS |
| | BITRON ELECTRONIC CHINA HUANGDAO | ELECTRONICS COMPONENTS |
| | BITRON CHINA QINGDAO | TOOLING UNIT |
| | BITRON IND. CHINA QINGDAO | APPLIANCE AUTOMOTIVE |
| AMERICA | BITRON DE MÉXICO ELECTROMECHANICAL UNITS QUERÉTARO | AUTOMOTIVE APPLIANCE |
| | BITRON DE MÉXICO ELECTRONICS UNITS QUERÉTARO | ELECTRONICS COMPONENTS |

Core technologies

DISCOVER MORE →

ELECTROMECHANICAL TECHNOLOGIES

ELECTRONIC TECHNOLOGIES



CAD - CAM - CAE and 3D prototyping

Rubber compounding and moulding

Plastic moulding, overmoulding, multimaterial injection

Painting, printing, laser etching, In mould Labeling (IML)

Metal process: blanking, turning, surface treatment

Coil winding

Automatic and manual assembly lines and testing

Core technologies

DISCOVER MORE →

1. SMT PHASE

ELECTROMECHANICAL TECHNOLOGIES

ELECTRONIC TECHNOLOGIES

2. ASSEMBLY AND TEST PHASE



- Full traceability and automatic MSL (Moisture Sensitivity Level) control

- 3D solder paste inspection

- Pin in paste assembly

- PTH automatic insertion and soldering module

- In-line ICT testing and AOI (Automatic optical Inspection) (2D/3D)

- X-Ray inspection



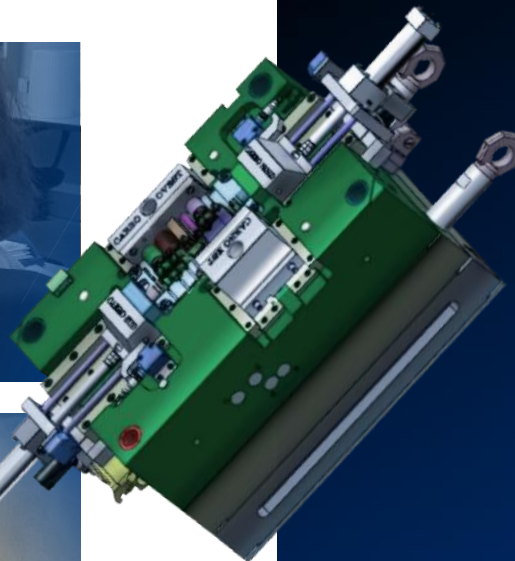
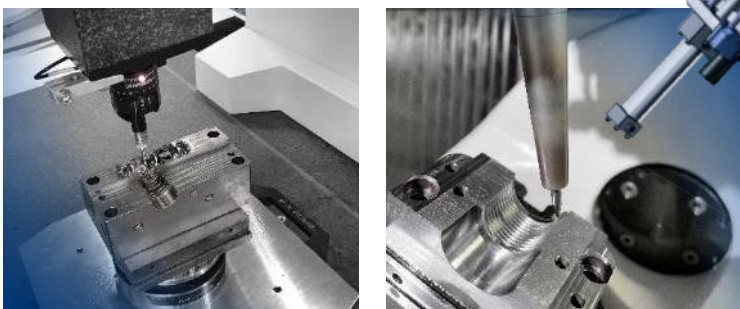
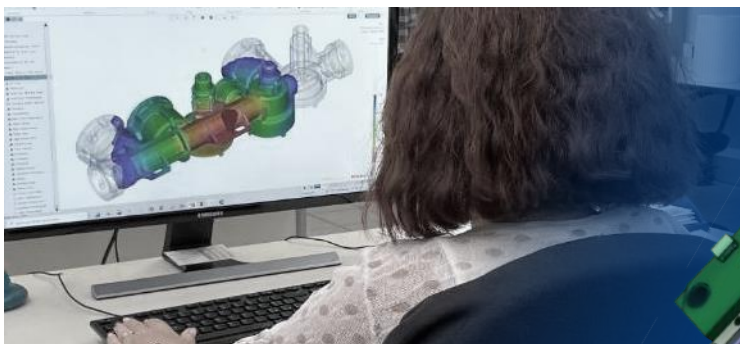
- Reconfigurable router (PCB separation)

- Reconfigurable mechanical assembly

- Multi Assembly Cells
(standard module for automatic lasering, testing, assembling & packaging)

- Real time monitoring of production data

- Internal development of testing solution



Our two mould development and manufacturing centres are located in Italy and China. However, thanks to our shared know-how, several Bitron plants have molding departments with dedicated tool shops able to assure the fine-tuning, maintenance and spare parts of their tools.



Tool design and manufacturing

Bitron Tool Departments

Research & Development

The systems approach: expertise and strategy

Multi-functional engineering teams

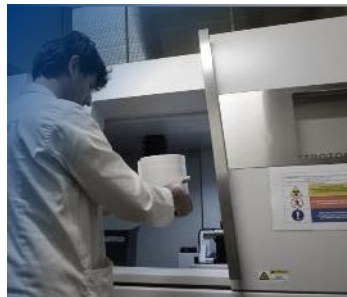
Best-in-class development tools

System knowledge

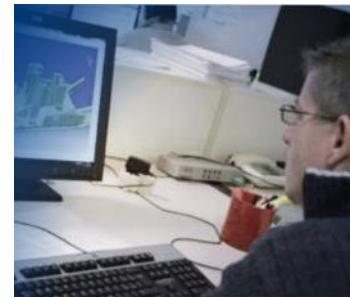
Dedicated competence centres

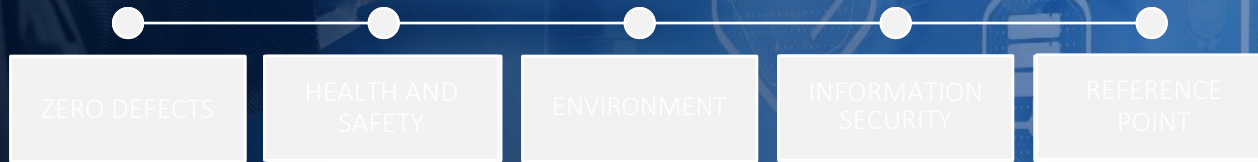
Multilocation R&D centres

Internal laboratories for validations



COMPUTERIZED AXIAL TOMOGRAPHY





Integrated Management System



At Bitron we develop, implement and maintain an Integrated Management System for Occupational Health and Safety, Environment, Information Security and Quality.

We operate strictly in accordance with the latest versions of the UNI EN ISO 45001, ISO 14001, ISO 27001, ISO 9001 and IATF 16949 standards, which relate to Safety in the workplace, respect for the Environment, Quality for Customer satisfaction and Information Security, to be essential.

ZERO DEFECTS

HEALTH AND
SAFETY

ENVIRONMENT

INFORMATION
SECURITYREFERENCE
POINT

Our standard is: zero defects

To provide products and services that meet the requirements including safe and eco-sustainable processes, ensuring the protection and preservation of information. No one is willing to buy or sell, consciously, defective services or products, so the commitment of each of us must be to cultivate our knowledge for:

- Understanding without errors or omissions the needs of those who ask us for a service or product
- Sourcing resources 100% compliant with requirements
- Satisfying, without compromise, the expectations of those who buy our work

ZERO DEFECTS

HEALTH AND
SAFETY

ENVIRONMENT

INFORMATION
SECURITYREFERENCE
POINT

Occupational Health and Safety

In order to spread the “safety culture” and to improve accident prevention, Bitron Group has launched a project entitled “Safety: our way of life”.

The project has been rolled-out primarily in all of the Italian plants, focusing on training, education and improvement actions addressed to all Group employees. It is a permanent project involving all of the human resources of the Company. We are all highly committed to providing the best solutions in order to make our jobs and processes safer.



Environment

Protecting the environment is one of Bitron’s core values.

We pursue the goals of reduction of environmental impact through the prompt identification, assessment and prevention of environmental risks, referred to internal and external contexts.

Strategies for sustainable development pursue continuous improvement in environmental and related aspects, in compliance with our Sustainability Policy and the United Nations Global Compact – SDG’s.

PILLARS OF OUR SUCCESS:

- ECODESIGN
- MAXIMIZATION OF ENERGY EFFICIENCY
- OPTIMIZATION & MINIATURIZATION (RAW) MATERIALS
- USE OF RECYCLED MATERIALS



ZERO DEFECTS

HEALTH AND
SAFETY

ENVIRONMENT

INFORMATION
SECURITY

REFERENCE
POINT

Information Security

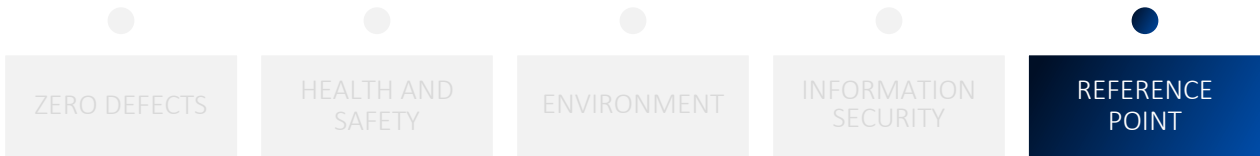
Bitron operates according to the highest Information Security Standards ISO27001/IEC62443/TISAX with the aim of protecting the Confidentiality, Integrity and Availability of information.

Human resources and technological means cooperate to provide the security of all types of data, including personal data.

A Corporate Integrated Information Security Management System has been deployed across all plants worldwide.

Bitron Group, through its people-centric philosophy, has implemented an awareness project in all plants to improve Security and the resilience against threats.

Information Security is an essential part of our culture.



The Customer's Reference Point

| Bitron Certifications | ISO 9001 | IATF 16949 | ISO 14001 | ISO 14006 | ISO 45001 | ISO 50001 | ISO 27001 | TISAX | IEC 62443-4-1 | RBA | MID |
|--|----------|------------|-----------|-----------|-----------|-----------|-----------|-------|---------------|-----|-----|
| BITRON INDUSTRIE S.p.A. (HEADQUARTERS) | • | | | | | | • | | | | |
| ELBI INTERNATIONAL S.p.A. | • | | • | | | | | | | | |
| BITRON ALATRI | • | • | • | | • | | | • | | | |
| BITRON CORMANO | • | | | | • | | | | | | |
| BITRON DRONERO | • | | • | | • | | | | | | |
| BITRON GRUGLIASCO | • | • | • | • | • | | • | • | • | | • |
| BITRON ROSSANA | • | • | • | | • | | | • | | | |
| BITRON SAVONA | • | • | • | | • | | | • | | | |
| BITRON ESPAÑA | • | • | • | | | | | • | | | |
| BITRON TURKEY | • | • | • | | | | | • | | | |
| BITRON POLAND ELECTRONICS | • | • | • | | • | | • | | | | • |
| BITRON POLAND ELECTROMECHANICS | • | | | | | | | | | | |
| BITRON INDUSTRY CHINA | • | • | • | | • | • | | | | | |
| BITRON ELECTRONIC CHINA | • | • | • | | • | | • | | | | |
| BITRON ELECTRONIC CHINA HUANGDAO | • | • | • | | • | | • | | | • | |
| BITRON DE MÉXICO ELECTROMECHANICS | • | • | • | | • | | | • | | | |
| BITRON DE MÉXICO ELECTRONICS | • | • | • | | | | • | | | | |

Quality is one of the **Bitron Group's** fundamental principles



Sustainability

Development Goals



Bitron Group has aligned its operations and strategy with the **UN Global Compact** initiative, which upholds ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption.

Bitron is committed to helping to realize the SDGs (Sustainable Development Goals), the set of global targets adopted by the United Nations in 2015, comprised of 17 goals to be achieved by 2030 for a more sustainable society.

Sustainability

Development Goals

Bitron is actively involved in:



GOOD HEALTH AND WELL-BEING



AFFORDABLE AND CLEAN ENERGY



INDUSTRY, INNOVATION AND INFRASTRUCTURE



RESPONSIBLE CONSUMPTION AND PRODUCTION



CLIMATE ACTION



Key data

Sustainability - Last update: December 2023

46,3%

WOMEN

696

NEWLY RECRUITED
EMPLOYEES UNDER 30

0,056

ENERGY INDEX
(GJ/HOURS WORKED)

0,006

INDEX
OF INTENSITY OF EMISSIONS
(TCO₂/HOURS WORKED)

94%

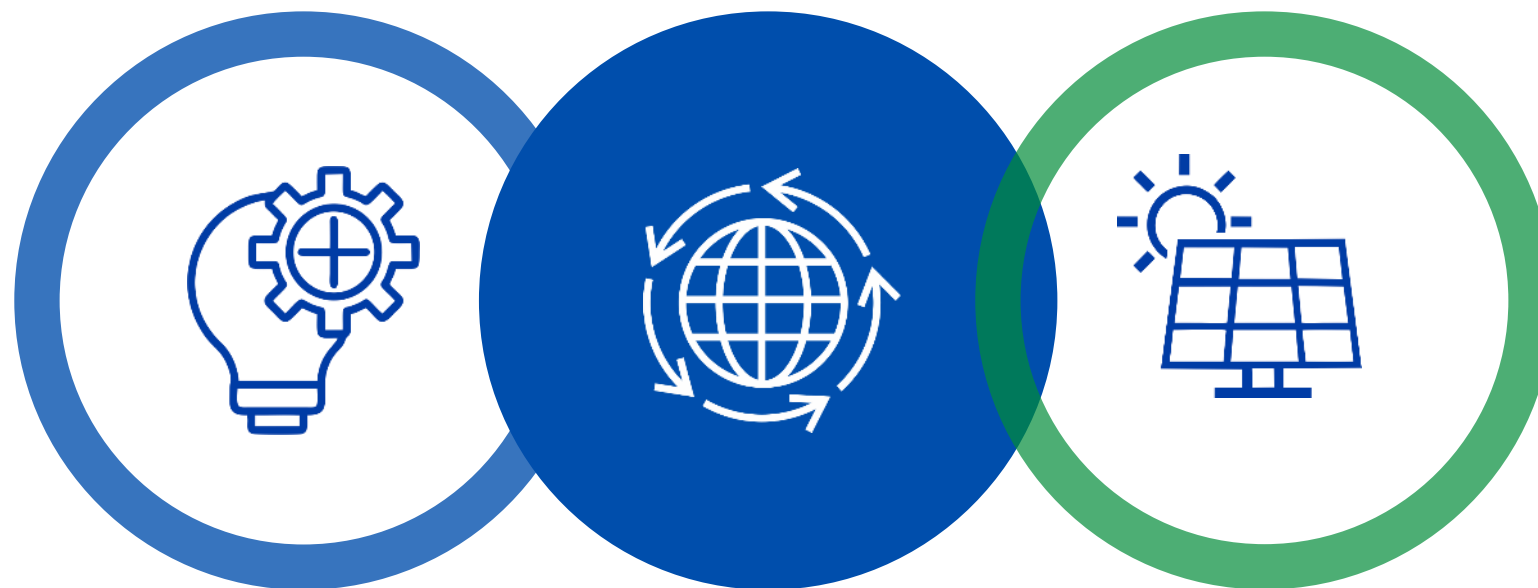
WASTE INTENDED
FOR RECOVERY

Climate protection is one of the core values of Bitron Group. Green energy is the solution Bitron Group adopts to safeguard our planet. 11.5% of the total energy consumption is green.

Investments

Sustainability

Decarbonization & social responsibility are the targets always guiding our business choices. For this reason, Bitron Group is investing heavily in:



ENERGY EFFICIENCY

- Tri-generation technology
- Heat pumps with vertical geothermal probes
- Led lighting
- Energy efficient electric plastic injection machines

CIRCULAR ECONOMY

- Resource minimization
- Reused plastic and metal scrap

RENEWABLE ENERGY

- Solar PV plants
- Carbon credits
- Renewable Energy Purchasing (REC/ GOs)



BITRON

Automotive Solutions

www.bitron.com

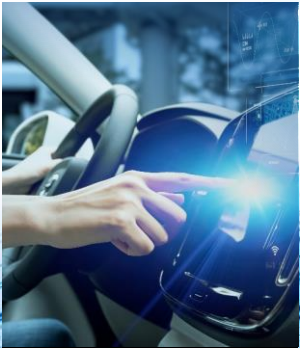


Main customers

Automotive

Automotive products

Applications



HMI



POWERTRAIN



TRANSMISSION



CHASSIS



E-MOBILITY



MOTORCYCLES



HYDROGEN

We put our skills and technology into each area of application, in order to develop complete solutions covering the entire production cycle.

[DISCOVER MORE](#) →



DOOR MODULES



SEAT MODULES



CENTRE STACKS



ROTARY CONTROLS



E-SHIFTERS



HMI SWITCHES



STEERING WHEEL MODULES



REAL CONSOLE



S&S DISPLAY SWITCH

HMI

A Human Machine Interface device allows humans to engage and interact with vehicles in a far more natural way. Bitron HMIs represent smart surfaces that by combining controls, info displays, lighting and haptic actuators, erasing the boundary between function and aesthetic, ensure a formidable customer experience.



POWERTRAIN

At Bitron, we consider the Powertrain the car's hearth. Our passion guides us in developing components that manage the vehicle fluids, mandatory for the correct beat of the car. In this way, we are sure to guarantee the user satisfaction giving our contribution for the environment sustainability.



AIR SOLENOID VALVES



WATER SOLENOID VALVES



OIL SOLENOID VALVES



REFRIGERANT SOLENOID VALVES



SMART VALVES



ACTUATORS



SWITCHES AND SENSORS



POWER CONTROLS



SWITCHES



ACTUATORS



SOLENOID ACTUATORS

TRANSMISSION

The transmission system uses the power created in the engine to keep the wheels spinning, physically allowing the movement of the vehicle. Clearly, not all the vehicles are the same. They can be all-wheel-drive, front-wheel drive or rear-wheel drive. Indeed, the transmission system has to be perfectly tuned to your vehicle.



ACCELERATOR
PEDALS



PEDAL
SWITCHES &
SENSORS



SMART ACTUATORS



POSITION
SENSORS



BRAKE LIGHT
SENSORS



VACUUM
SWITCHES &
SENSORS



ACUSTIC
WARNING
DEVICES



POWER
CONTROLS



SENSORS

CHASSIS

The chassis system manages the dynamic behavior of your vehicle. Its perfect control impacts directly on the driving experience in terms of safety, comfort and efficiency.



E-MOBILITY

E-mobility refers to the vehicles fully or partly driven electrically. Hybrid vehicles combine two engines, electric and internal combustion, to assist the second one in terms of lower emissions and consumption. On the other side, full electric vehicles (or BEV), only use the power of electricity to move, without any internal combustion. Environmental sustainability and reduction of carbon footprint is a sensitive issue, becoming higher than ever, specially inside the automotive world. At Bitron, we are working to be part of the new market landscape, changing constantly towards more sustainable choices.



DUAL BATTERY SWITCH MODULES



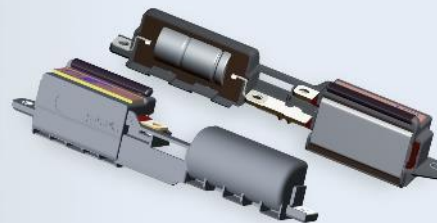
SMART VALVES



ACOUSTIC VEHICLE ALERTS



E - SHIFTERS



EMC FILTERS



ELECTRICAL ACTUATORS FOR PARKING BRAKE



MOTORCYCLES

In Bitron, we strongly believe that the motorcycle world demands for more innovative and customizable solutions. Therefore, we are aiming at improving our entire dedicated product portfolio with a clear scope: increasing efficiency.



FUEL
MODULES



FUEL LEVER
SENDERS



RIDE BY
WIRE
HANDGRIPS



LINEAR POSITION SENSOR

SWITCHES AND
SENSORS



CANISTER VALVES



ACTUATOR



HYDROGEN

Hydrogen is an interesting alternative energy that meets certain needs in transport, industry, heating and auxiliary electricity production. We have therefore developed a first range of low-pressure hydrogen solenoid valves for fuel cells based on our long experience in solenoids. For the cooling of the stack, we also offer a modular actuator with 2 to 4 ways with different flow rates.



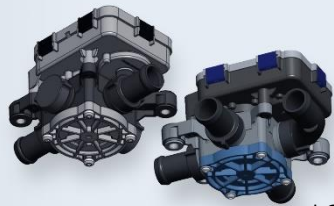
FLOW CONTROL VALVE



PURGE &
DRAIN VALVE



SHUT OFF
VALVE



LOW FLOW
RATE 2-4 WAYS



LOW
FLOW RATE 3 WAYS



MEDIUM
FLOW RATE 2-3 WAYS

← APPLICATIONS

Home Appliance

www.bitron.com



Main customers

Home appliance

Home appliance products

Applications



WASHERS &
DRYERS



DISHWASHERS



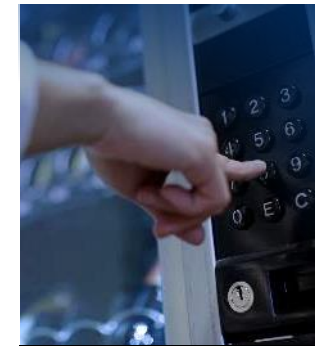
COOKING
APPLIANCES



REFRIGERATION
APPLIANCES



SMALL
APPLIANCES



HORECA
& VENDING

We put our skills and technology into each area of application, in order to develop complete solutions covering the entire production cycle.

DISCOVER MORE →



WASHERS & DRYERS

Applications include water control (solenoid valves and safety systems), detergent and liquid distributors, bulk dispensing devices, water softeners, door locks, various types of switches and sensors (including pressure sensors) as well as a comprehensive range of electronic main control-boards and user interfaces. We are available for the development of customized solutions.



INLET & SAFETY VALVES



DOOR LOCKS



DETERGENT DISPENSERS & PUMPS



WATER SOFTENERS



PRESSURE SENSORS



SWITCHES & OTHER SENSORS



USER INTERFACES



MAIN BOARDS



MOTOR CONTROLS



DISHWASHERS

Applications include water control (solenoid valves and safety systems, water softeners and air breaks & back flow prevention devices), detergent and rinse-aid dispensers, switches and sensors as well as a comprehensive range of electronic main control-boards, motor drives and user interfaces. We are available for the development of customized solutions.



INLET, DIVERTER & SAFETY VALVES



DETERGENT DISPENSERS



HEAT EXCHANGER



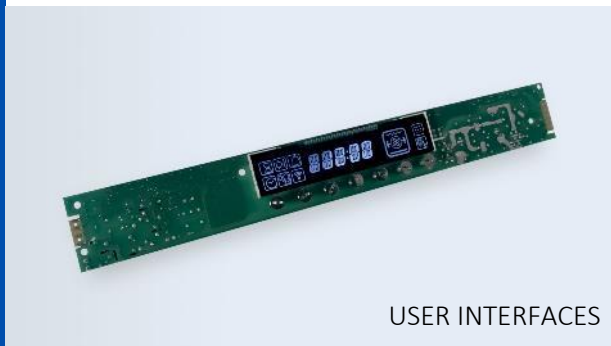
AIR BREAKS & BACK FLOW PREVENTION DEVICES



WATER SOFTENERS



SWITCHES & SENSORS



USER INTERFACES



MAIN BOARDS



MOTOR CONTROLS



COOKING APPLIANCES

Applications include water control (solenoid valves and safety systems), door locks, switches, induction coils as well as a comprehensive range of electronic main control-boards and user interfaces.



INLET & SAFETY VALVES



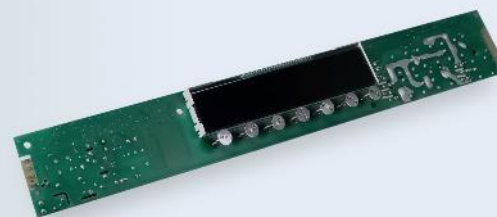
DOOR LOCKS



INDUCTION COILS



SWITCHES



USER INTERFACES



MAIN BOARDS



REFRIGERATION APPLIANCES

Applications include water inlet valves, bistable gas valves, fan motors, sensors as well as a comprehensive range of electronic main control-boards and user interfaces.

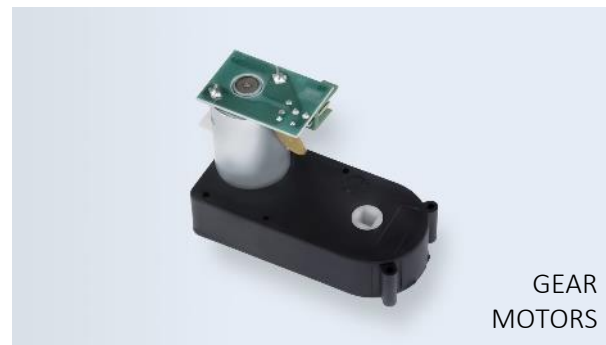
We are available for the development of customized solutions.





SMALL APPLIANCES

Applications include water inlet valves, motors and switches as well as a comprehensive range of electronic main control-boards and user interfaces.





HORECA & VENDING

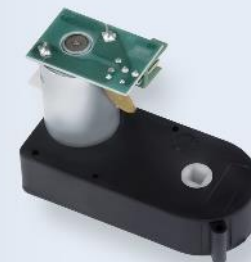
Applications include gear motors, water inlet valves, by-pass and post-mix valves switches and sensors as well as a comprehensive range of electronic main control-boards and user interfaces.



INLET & SAFETY VALVES



BYPASS VALVES



GEAR MOTORS



POST MIX VALVES



SWITCHES & SENSORS



BITRON

HVAC

www.bitron.com



Main customers

HVAC



HVAC products

Families



HYDRAULIC
GROUPS



HEAT PUMPS
COMPONENTS



COMPONENTS



ELECTRONICS

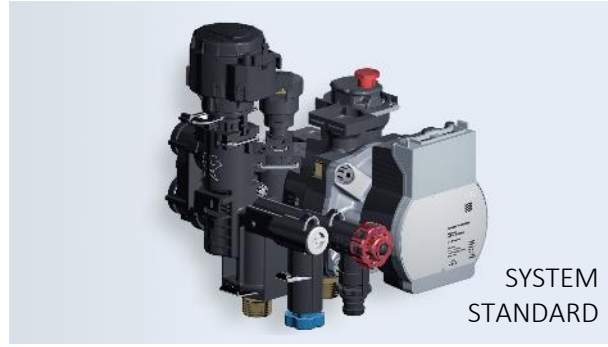
We put our skills and technology into each product family, in order to develop complete solutions covering the entire production cycle.

DISCOVER MORE →



HYDRAULIC GROUPS

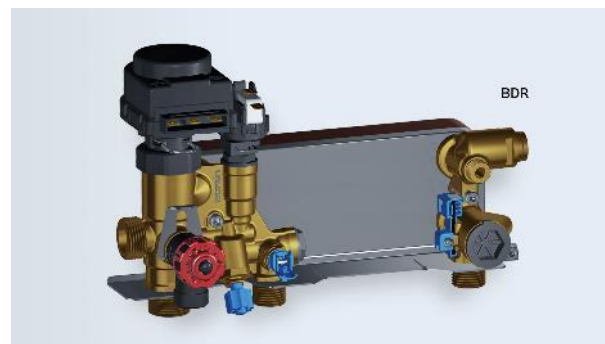
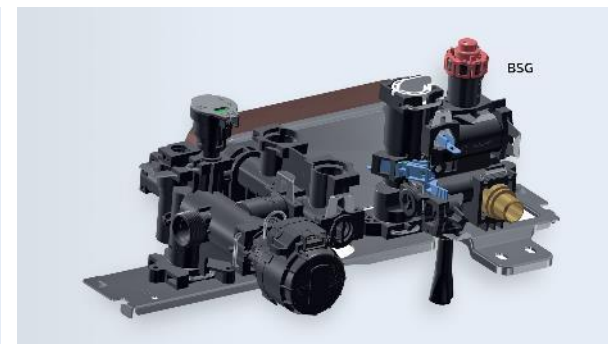
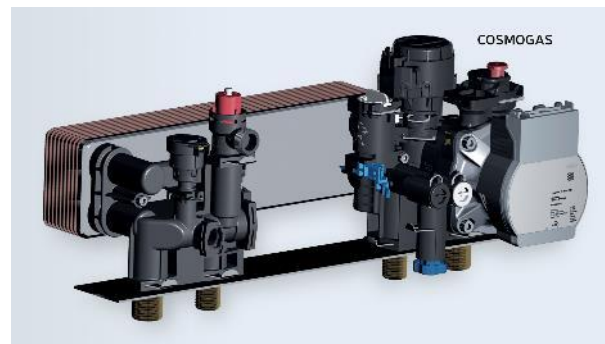
Bitron has been one of the first companies to develop and manufacture complete hydraulic units for Boilers in composite. The long-lasting experience enabled us to become one of the market leaders in this field with standard and customized systems that integrate most of the components needed to run your appliance on the water side.





HYDRAULIC GROUPS

The attention to our customer needs is one of the key success factors of Bitron's growth over time. Working in co-design with customers, Bitron is able to develop solutions that are perfectly suited to the needs of their applications.





HEAT PUMPS COMPONENTS

In Bitron we believe that the optimization of the layout and the attention to the assembly process of our customers are key success factors to keep them competitive in the fast-changing market of heat pumps. Bitron's experience in the system integration together with the know how on heating and cooling water circuits are the basis for the Heat Pumps of the future.



3WAY VALVES - COMPOSITE



3WAY VALVES - BRASS



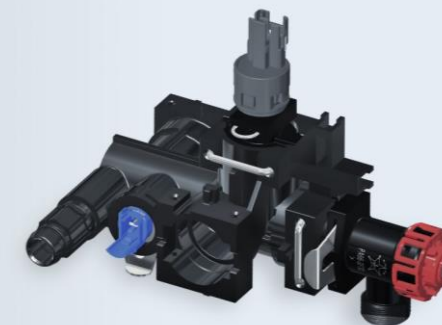
3WAY VALVES - BRASS



DIFFERENTIAL PRESSURE SENSOR



ULTRASONIC FLOW SENSOR



WATER KIT



COMPONENTS

The wide range of Bitron components, their first-class performance and their well-known reliability makes Bitron the best partner for all companies looking for a strong position in the market. We commit to exceed customer expectations providing the highest quality to the Heating, Ventilation and Air Conditioning market.



ACTUATORS



3 WAY VALVES



SENSORS



FLOW SENSORS



DISCONNECTORS



PRESSURE RELIEF VALVE



TEMPERATURE SENSORS



PRESSURE SWITCHES



POWER CONTROLS



MOTOR DRIVES



MOTOR DRIVES



USER INTERFACES & HMI MODULES



WIRELESS CONTROLS

ELECTRONICS

Electronics is one of the core businesses of the Bitron Group: the interaction between the electronic boards and mechanical parts, thanks to the know-how in both fields, is one of the strengths of Bitron Electronics, that makes us the perfect Partner both for EMS and Co-Development activities. For the HVAC industry Bitron offers reliable production processes, as well as innovative and energy-saving features based on Customer requirements.



Energy

www.bitron.com

ENERGY

Bitron is at the forefront of smart meter technology providing design support and best-in-class manufacturing processes, with the successful development of a complete range of smart energy meters and AMI-devices for major smart meters solution provider.



SMART ENERGY METER CUSTOM-SIZE



SMART ENERGY METER DIN-SIZE



DATA CONCENTRATORS



ACCESSORIES-DISTRIBUTION



SMART HOME DEVICES



μ UP: SMART STREET BOX DEVICES
REMOTE CONTROL & MONITORING

Main customers ▶



EV Charging

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EV CHARGING

Our added Values:

- Global EMS supplier
- IATF-certified Manufacturing site
- Cost engineering team providing complete support for electronic design and VaVe analysis
- ODM with dedicated design engineering team



AC RESIDENTIAL & PUBLIC CUSTOMIZABLE SOLUTIONS



DC 25 KW V2G STATION

DC FAST V2G MODULAR STATION

ULTRA FAST CHARGING DISPENSER

EV SUPPLY EQUIPMENT CONTROL

Main customers ▶





Grazie
Thanks

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