

# HOW IT WORKS





From high-bay warehouses to industrial cranes - your ABITRON safety radio remote control will not let you down.



Together with you, we develop economic and reliable solutions for all your construction machinery. Our construction crane standard set is approved by TÜV and can be used flexibly across all manufacturers.



### **HYDRAULIC**

The classic areas of mobile hydraulics such as loading cranes and concrete pumps, but also applications far beyond that, are among our strengths.



# SPECIAL VEHICLE

With a safety radio remote control from ABITRON, you control all of your vehicle's functions with precision and a high degree of efficiency.



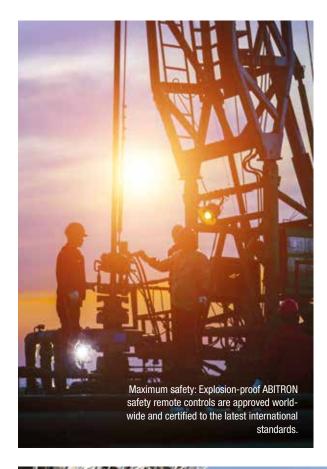
# **EXPLOSION-PROOF**

We offer a broad portfolio of explosion-proof safety remote controls for the mining, chemicals and manufacturing industries.



# SPECIAL SOLUTIONS

Our flexible and highly qualified team works with you to develop the customised solution for your application. Regardless of whether it is an individual piece or several hundred systems!







# Reliable under the toughest conditions

Your ABITRON safety radio remote control has been designed to give you precise and clear control of your machine in any application.
ABITRON safety radio remote controls have proven themselves for many years under the most extreme conditions on construction sites, in the manufacturing industry and in tunnelling, through to offshore applications and far beyond.



# LIGHTWEIGHT AND CLOSE AT HAND



# **PUSHBUTTON DEVICES**

# HANDY PUSHBUTTON DEVICES FOR DIGITAL APPLICATIONS

The TGD-8 and TGA are versatile pushbutton devices for the industrial sector and for mobile and customised applications.

The lightweight, ergonomically designed transmitters offer easy handling.

The function keys and rotary switches (TGA) can be flexibly assigned and configured to ensure the most efficient layout for the operator. Use our security features such as a user-defined security code to protect your device from unauthorised use.



TGD-8 NEW ERGONOMIC

### Compact pushbutton device with integrated battery

With its modern, ergonomic design, the TGD-8 pushbutton device is a leader in its class. The new operating concept offers optimum flexibility for applications with a smaller range of functions. The 8 two-stage pushbuttons and the toggle switch can be customised through individual labeling in your application. Optionally, up to 6 multi-coloured feedback LEDs are available for the status display of your machine.

PROTECTION CLASS: IP 65
TEMPERATURE RANGE: -20 to +60° C
WEIGHT: approx. 300g

 DIMENSIONS:
 80 x 45 x 175 mm (W/D/H)

 FREQUENCY RANGE:
 432-481/863-930MHz, 2.4GHz

BATTERY TECHNOLOGY: integrated, Li-lon
OPERATING TIME: up to 140 hours



### Pushbutton device with exchangeable battery system

The transmitter type TGA is equipped by default with 10 one or two-stage pushbuttons, as well as two 4-stage rotary switches. The illuminated display provides the user with simple status information, such as battery or transmitter information.

PROTECTION CLASS: IP 65
TEMPERATURE RANGE: -10 to +55° C
WEIGHT: approx. 350g

 DIMENSIONS:
 65 x 50 x 240 mm (W/D/H)

 FREQUENCY RANGE:
 419/429/434/458/869MHz

 BATTERY TECHNOLOGY:
 exchangeable battery, NiMH

OPERATING TIME: up to 10 hours

























# T-SERIES THE NEXT GENERATION



# **T-SERIES**

# OPTIMISED FOR THE BEST OVERVIEW

ABITRON's new T-Series has been created to combine cutting-edge design, the most reliable technology and decades of experience from practice in a completely redesigned series. The three transmitters in the innovative T-Series provide an enormous amount of space for switches, pushbuttons, joysticks and much more. The new transmitter designs enable highly intuitive handling and offer the best overview with the newly created colour graphic displays (GDC 3.5 and GDC 4.3) for all of your application's information. ABITRON equips your transmitter according to your individual needs.

# T3 NEW UNIQUE DESIGN

# Compact transmitter with a unique design

The T3 transmitter introduces the newly developed T-Series from ABITRON. The T3 already provides numerous options: Select key switches, stop switches, toggle switches, pushbuttons and joysticks with digital or analogue functions according to your needs. There is also a variety of information sources, such as LED displays and graphic displays, available.

PROTECTION CLASS: IP 65
TEMPERATURE RANGE: -20 to +60° C
WEIGHT: approx. 1400g

**DIMENSIONS:** 220 x 140 x 150 mm (W/D/H)

FREQUENCY RANGE: 419/429/432-481/863-930MHz, 2.4GHz

BATTERY TECHNOLOGY: exchangeable battery NiMH

OPERATING TIME: up to 20 hours



















# T5 NEW HIGH PERFORMANCE

# The handy transmitter with high performance

The larger housing allows the T5 transmitter to accommodate a variety of controls. With its clear design, combined with maximum ergonomics, the T5 transmitter provides the interface to your application. For the first time, the newly developed colour graphic display GDC 3.5 is available for this transmitter, which can be freely programmed by the customer.

PROTECTION CLASS: TEMPERATURE RANGE: -20 to +60° C WEIGHT: approx. 1800g

DIMENSIONS: 290 x 180 x 155 mm (W/D/H)

FREQUENCY RANGE: 419/429/432-481/863-930MHz, 2.4GHz BATTERY TECHNOLOGY: exchangeable battery, NiMH or Li-lon

OPERATING TIME: up to 20 hours

# T7 NEW **MAXIMUM POSSIBILITIES**

# Robust design with a maximum number of possibilities

The T7 transmitter is the largest transmitter of the newly designed T-Series. It provides you with the maximum space for your controls. At the customer's request, the T7 transmitter can accommodate an up to 4.3" colour graphic display with optional video feedback. This provides you not only with the best view of the status, but also of your machine's working area.

PROTECTION CLASS: IP 65 TEMPERATURE RANGE: -20 to +60° C WEIGHT: approx. 2000g

DIMENSIONS: 370 x 185 x 170 mm (W/D/H) FREQUENCY RANGE: 419/429/432-481/863-930MHz, 2.4GHz BATTERY TECHNOLOGY: exchangeable battery, NiMH or Li-lon

OPERATING TIME: up to 20 hours





















CUSTOMISED

CONSTRUCTION

HYDRAULIC

SPECIAL VEHICLE





# NOVA-SERIES PROVEN AND RELIABLE



# **NOVA-SERIES**

# **+** HIGHLY FLEXIBLE TRANSMITTER SERIES IN THREE SIZES

The NOVA-Series is the classic of the ABITRON product series. The design was created for digital and proportional applications.

The series consists of three different types of transmitters (M, L, XL). The NOVA transmitters not only prove convincing because of their unique layout, but also due to the user-friendly and robust design.

In the NOVA-Series, there are a variety of standard versions and customised fittings.



# **NOVA-M**COMPACT TRANSMITTER

# Compact transmitter with a variety of possibilities

The NOVA-M transmitter is the smallest joystick transmitter of the ABITRON group. It is characterised by its compact and ergonomic design.

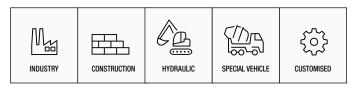
The NOVA-M transmitter offers a variety of options such as key switches, stop switches, toggle switches, pushbuttons and joysticks with digital or analogue functions.

PROTECTION CLASS: IP 65
TEMPERATURE RANGE: -20 to +60° C
WEIGHT: approx. 1000g

**DIMENSIONS:** 170 x 110 x 160 mm (W/D/H) **FREQUENCY RANGE:** 419/429/432-481/863-930MHz, 2.4GHz

BATTERY TECHNOLOGY: exchangeable battery NiMH

OPERATING TIME: up to 20 hours







# **NOVA-L** LARGE RANGE OF PERFORMANCE

### Comfortable design for more power

The larger NOVA-L transmitter impresses through its pleasant and ergonomic design. As with the smaller NOVA-M transmitter, the following applies: The NOVA-L transmitter offers a variety of options such as key switches, stop switches, toggle switches, pushbuttons and joysticks with digital or analogue functions. Its high degree of flexibility is supplemented by an optional graphic display.

PROTECTION CLASS: IP 65 TEMPERATURE RANGE: -20 to +60° C WEIGHT: approx. 1600g

DIMENSIONS: 235 x 110 x 165 mm (W/D/H)

FREQUENCY RANGE: 419/429/432-481/863-930MHz, 2.4GHz

BATTERY TECHNOLOGY: exchangeable battery NiMH

OPERATING TIME: up to 20 hours

# **NOVA-XL EXTREMELY POWERFUL**

# Powerful transmitter with maximum variability

The NOVA-XL transmitter is the largest transmitter of the NOVA-Series. It offers maximum performance with the highest level of user-friendliness. The large housing provides optimal space for all functions of your special application. The NOVA-XL transmitter can be equipped with many standard options such as a charging circuit including cable control, a graphic display and a variety of switch options.

PROTECTION CLASS: IP 65 TEMPERATURE RANGE: -20 to +60° C WEIGHT: approx. 1800g

DIMENSIONS: 315 x 170 x 165 mm (W/D/H) FREQUENCY RANGE:

419/429/432-481/863-930MHz, 2.4GHz BATTERY TECHNOLOGY: exchangeable battery NiMH

OPERATING TIME: up to 20 hours



















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INDUSTRY

CONSTRUCTION

HYDRAULIC

SPECIAL VEHICLE

14







# EX-SERIES SAFE UNDER EXTREME CONDITIONS



# **EXPLOSION-PROOF**

# THE NEW GENERATION EX

# APPROVED FOR EX APPLICATIONS

Explosion protection is a growing field in all areas of ABITRON applications.

These include not only the classic applications such as mining and the chemicals industry, but also many fields of application in the processing industry. To meet your requirements, we offer you a broad portfolio of explosion-proof safety radio remote controls.



# NOVA-L EX EXPLOSION-PROOF

# The compact explosion-proof classic

The NOVA-L transmitter is the classic in the field of explosion-proof transmitter designs from ABITRON. This transmitter can already be equipped extremely versatile: Select key switches, stop switches, toggle switches, pushbuttons and joysticks with digital or analogue functions according to your needs.

PPROVALS: ATEX, IECEx, NEC 500/505

APPROVALS: PROTECTION CLASS: TEMPERATURE RANGE:

IP 65 -20 to +60° C approx. 1600g

WEIGHT: DIMENSIONS: FREQUENCY RANGE:

235 x 110 x 165 mm (W/D/H) 419/429/434/447/456/458/869MHz

BATTERY TECHNOLOGY: exchangeable battery NiMH

OPERATING TIME: up to 10 hours











INDUSTRY

SPECIAL VEHICLE

CUSTOMISED



# **NOVA-XL EX EXPLOSION-PROOF**

### Ergonomic and robust with maximum variability

The NOVA-XL transmitter is setting standards in the explosion-proof field. The extremely robust housing can be comfortably gripped, even under the most adverse conditions. We can implement your customised solution with a variety of options. The NOVA-XL transmitter is the smallest design in which a graphic display can be integrated.

APPROVALS: ATEX, IECEx, NEC 500/505

PROTECTION CLASS: IP 65 TEMPERATURE RANGE:

-30 to +60° C approx. 1800g

DIMENSIONS (W/D/H): 315 x 170 x 165 mm

FREQUENCY RANGE: 419/429/434/447/456/

458/869MHz

BATTERY TECHNOLOGY: battery, NiMH

**OPERATING TIME:** up to 10 hours











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# **GL EX EXPLOSION-PROOF**

### Clear and functional

The plain and straightforward design characterises the GL form of the ABITRON EX products. This transmitter is always popular when there is a need for the highest level of clarity paired with maximum functionality.

APPROVALS: ATEX, IECEx, NEC 500/505

PROTECTION CLASS: IP 65

TEMPERATURE RANGE: -20 to +60° C approx. 1400g

DIMENSIONS (W/D/H): 300 x 180 x 185 mm

FREQUENCY RANGE: 419/429/434/447/456/

458/869MHz

BATTERY TECHNOLOGY: battery, NiMH OPERATING TIME: up to 10 hours







SPECIAL VEHICLE

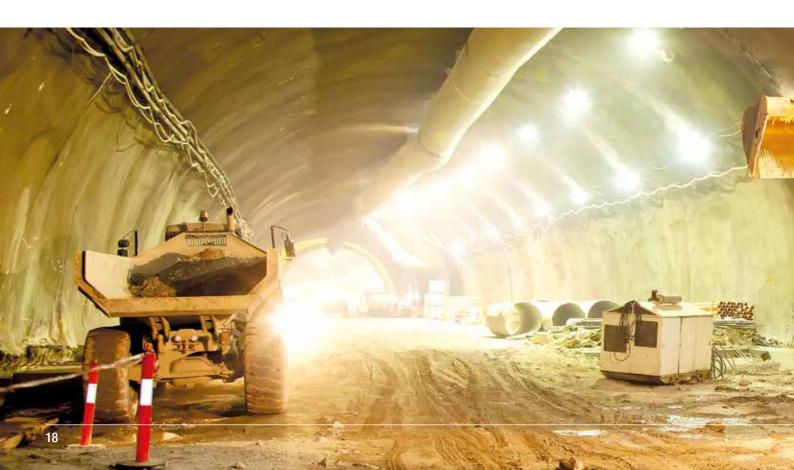


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CHEMICALS







# **GR EX EXPLOSION-PROOF**

# For maximum loads

The GR transmitter is designed for the most extreme loads. A classic in mining and on offshore platforms. Whether joystick or toggle switch, there is a variety of controls available.

CUSTOMISED

APPROVALS: ATEX, IECEx, NEC 500/505 PROTECTION CLASS: IP 65

SPECIAL VEHICLE

TEMPERATURE RANGE: -30 to +60° C approx. 2500g DIMENSIONS (W/D/H): 290 x 200 x 135 mm

INDUSTRY

FREQUENCY RANGE: 419/429/434/447/456

458/869MHz

BATTERY TECHNOLOGY: battery, NiMH OPERATING TIME: up to 10 hours





# **EURO EX EXPLOSION-PROOF**

### Comfortable despite a maximum number of controls

The EURO transmitter is the largest housing offered by ABITRON. Here you can integrate a maximum number of controls such as key switches, stop switches, toggle switches, pushbuttons and joysticks. Despite its size, the EURO transmitter can be comfortably worn with a chest plate or shoulder harness.

APPROVALS: ATEX, IECEx, NEC 500/505

PROTECTION CLASS: IP 65

TEMPERATURE RANGE: -30 to +60° C approx. 5500g DIMENSIONS (W/D/H): 425 x 235 x 120 mm FREQUENCY RANGE: 419/429/434/447/456

458/869MHz

BATTERY TECHNOLOGY: battery, NiMH OPERATING TIME: up to 10 hours

















# THE SAFE CONNECTION TO THE MACHINE



# RECEIVER

# EASY AND QUICK TO CONFIGURE

The majority of ABITRON's receivers have a modular structure, which brings some great benefits to your application: The receivers can be equipped quickly, cost-optimised and adapted to your application. In the event that your device is in need of repair, the modules can be replaced by our service staff in an instant, reducing downtime to an absolute minimum.



# HS-1 HOUSING VERSION SMALL

### Compact and for digital or serial interfaces

The smallest receiver housing in the ABITRON family has been specially designed for mobile applications with limited space. Due to its compact design, it can also be mounted in hard to reach places. Both digital and serial interfaces can be implemented in this housing variant.

INTERFACES: STOP-Output (up to Kat.3 Ple / SIL3)

RS 232/485, CANopen, CANopen Safety, DeviceNet, J1939, Profibus,

Industrial Ethernet, Relay outputs, Transistor outputs

 PROTECTION CLASS:
 IP 65

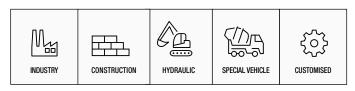
 TEMPERATURE RANGE:
 -25 to +70° C

 WEIGHT:
 approx. 800g

 DIMENSIONS:
 165 x 115 x 65 mm

FREQUENCY RANGE: 419/429/432-481/863–930MHz, 2.4GHz

OPERATING VOLTAGE: 8 - 30 VDC





# HS-2 HOUSING VERSION LARGE

### The universal receiver

The receiver housing HS-2 is the universal housing of ABITRON. This type offers various standard digital receivers, ranging from the RCV 14+ to the RCV 26+. Analogue outputs for controlling loading cranes or special machines can be easily implemented here. There are standard receivers for these applications, such as the BMS-1 and BMS-2. The HS-2 housing is also used for customised solutions and equipped according to your requirements.

INTERFACES: STOP-Output (up to Kat.3 Ple / SIL3)

RS 232/485, CANopen, DeviceNet, J1939, Profibus, Industrial Ethernet

relay outputs, transistor outputs, voltage outputs, current outputs

 PROTECTION CLASS:
 IP 65

 TEMPERATURE RANGE:
 -25 to +70° C

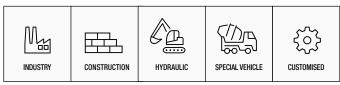
 WEIGHT:
 approx. 1800g

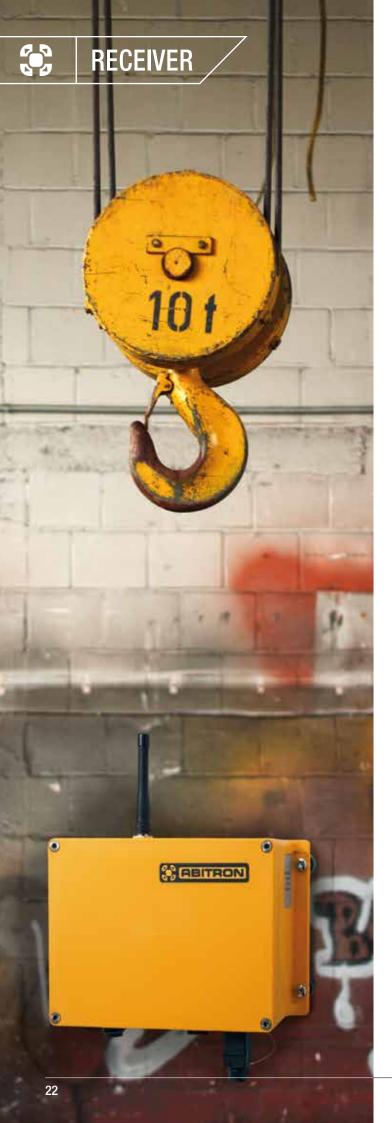
 DIMENSIONS:
 245 x 165 x 90 mm

FREQUENCY RANGE: 419/429/432-481/863-930MHz, 2.4GHz

**OPERATING VOLTAGE:** 10 – 30 VDC

48/115/230 VAC, depending on equipment







# RECEIVER RCV CBB-1 NEW

# **NEW RECEIVER GENERATION**

# Analogue and digital inputs with easy pairing

The RCV CBB-1 is the latest generation of compact interface receivers. This newly developed technology offers a variety of possibilities, such as two separate CAN interfaces, analogue and digital inputs, datalogging and easy pairing.

INTERFACES: 2 STOP-Relais (up to Kat.3 Ple / SIL3)

CANopen, CANopen Safety, J1939, Industrial Ethernet

PROTECTION CLASS: IP 65 TEMPERATURE RANGE: -25 to +70° C WEIGHT: approx. 800g DIMENSIONS: 165 x 115 x 65 mm

FREQUENCY RANGE: 419/429/432-481/863-930MHz, 2.4GHz

**OPERATING VOLTAGE:** 8 – 30 VDC















CONSTRUCTION

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# INDUSTRIAL ETHERNET NEW

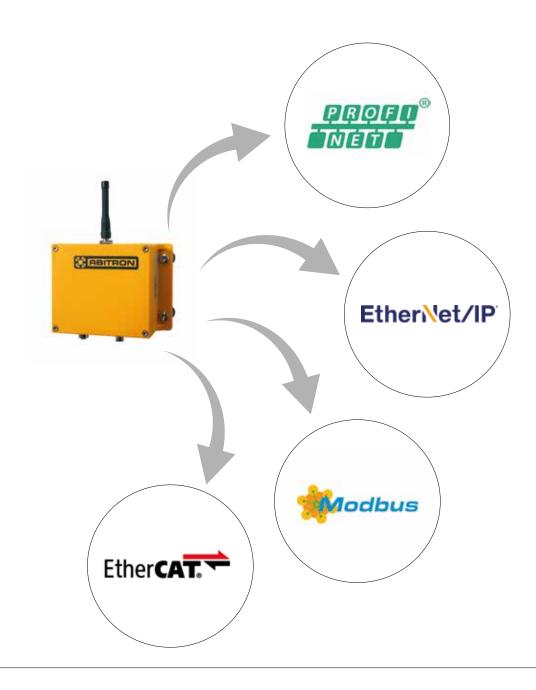
# MAXIMUM CONNECTIVITY – MAXIMUM FLEXIBILITY

As part of Industrial Ethernet, new networking technologies have been created that adapt the Ethernet standard to industrial environmental conditions. Industrial Ethernet makes it increasingly possible to create a transparent network infrastructure that is consistent across all levels. Thus, Industrial Ethernet offers completely new and much higher flexibility than most of the networks used so far.

# **+** YOUR INDUSTRIAL ETHERNET SOLUTION AT ABITRON

ABITRON has a multitude of possibilities in the field of Industrial Ethernet. With the RCV 14+ Industrial Ethernet, ABI-TRON offers a universal receiver that can be adapted to your requirements with a wide variety of software. Available interfaces include PROFINET, EtherNet IP, ModBus-TCP and EtherCAT.

ABITRON provides two RJ45 connectors as standard. Thus, you do not need an extra switch. You have the option of receiving your desired plug-in connection from us.





# **CERTIFICATIONS**

# ABITRON

has been committed to maximum quality for many years and we lay the foundation stone for this already during the development phase. New products are already discussed with accredited institutes during concept development, and are developed according to TÜV (German Technical Inspection Association).

This is the prerequisite for a successful product that is tested and certified according to the latest standards.

# ISO 9001:2015

ABITRON is regularly audited by independent testing institutes for compliance with operational procedures. We are very proud that these audits are passed with flying colours and we have a consistently high level of quality according to ISO 9001:2015.

# TÜV TYPE EXAMINATION CERTIFICATE

ABITRON has a large number of TÜV type examinationcertified radio remote controls pursuant to EN ISO 13849-1 and EN 62061. These examination certificates are being constantly extended.

# DNV-GL EXAMINATION CERTIFICATE

For your offshore applications, ABITRON offers a variety of products, which have a DNV-GL examination certificate.

# LARGE PORTFOLIO OF RADIO APPROVALS

ABITRON safety radio remote controls are certified with country-specific postal approvals. A unique selling proposition here is that we use the same frequency band in Europe, Australia, China, USA, Russia, UAE and India.

# EX-PRODUCTS

ABITRON has extensive EX approvals such as ATEX, IECEx and NEC 500/505 for the chemicals industry, mining and for many applications in the manufacturing industry.

# CERTIFICATES ON REQUEST

If you need additional certificates in order to use an ABITRON safety radio remote control for your application, please contact our ABITRON team.





# **CHARGER BCM-1**

### 100-240VAC / for battery E-Pack S

EU, UK, US & AUS ADAPTER KH68108570



**CHARGER BCP-M** 

### 100-240VAC / for battery E-Pack M

EU, UK, US & AUS ADAPTER KH68104570



**BATTERY E-PACK S** 

NiMH 3,6V/1,9Ah KH68300990



# **BELLY BELT WITH PADDING**

T-Series, NOVA-L and NOVA-XL KH11406052



# **ANTENNA MINIFLEX**

TNC / 419-460MHz KH56504011



also available with:

9-36VDC VEHICLE ADAPTER KH68108690 9-36VDC FLAT RECEPTACLES KH68108670



also available with:

9-36VDC VEHICLE ADAPTER KH68104690 9-36VDC FLAT RECEPTACLES KH68104670



**BATTERY E-PACK M** 

Li-lon 3,6V/8,6Ah KH68304000



# **NECK BELT WITH PADDING**

T-Series, NOVA-Series and GL KH11406202



# **ANTENNA MINIFLEX**

TNC / 850-900MHz KH56504100

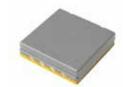
# ABITRON SPARE PARTS AND ACCESSORIES

Since many radio remote controls are exposed to heavy loads, they occasionally need spare parts. At ABITRON you can conveniently place your order by phone, fax or email. We take care of the immediate delivery of all relevant items. Our staff are happy to advise you.



**CHARGER BCT-1** 

100-240VAC / for battery TGA EU, UK, US & AUS ADAPTER KH68108101



**BATTERY TGA** 

NiMH 6,0V/1,0Ah KH68302500



# SHOULDER CROSS BELT

with padding, breast pocket, reflective strips

T-Series, NOVA-Series, GL, GR, EURO



# ANTENNA DUAL BAND FLEXIBLE

TNC / 434MHz / 869MHz KH56506500



also available with:

9-36VDC VEHICLE ADAPTER KH68108131 9-36VDC FLAT RECEPTACLES KH68108151



# **BELLY BELT WITHOUT PADDING**

**NOVA-M** KH11406600



### SHOULDER BELT

TGA/TGB/TGD-8 KH11404105



# **ANTENNA EXTENSION**

RG58 TNC->3,0m->TNC with holder

TNC PLUG STRAIGHT -> TNC SOCKET STRAIGHT 56501300-L03.00M

# WORLDWIDE, WHEREVER YOU NEED US

At ABITRON, we understand how important the availability of our products is to your application. ABITRON attaches great importance to accessibility and personal service.



# Partners worldwide

ABITRON has a large network of partners, which is constantly expanding. ABITRON has partners on every continent and in almost every country in Europe.

The partners are regularly trained so that they are up-to-date and able to respond quickly to customer requests.



# **ADDRESSES**

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# CONTROL. EVERYTHING. EVERYWHERE.



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