RUGGEDIZERS

By Alcom

Rugged Mobile Computing for
Extreme conditions

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COMPLETE PRODUCT PORTFOLIO AND SERVICES

Ruggedizers product portfolio consists mainly of rugged tablets, vehicle mount computers, hardened PDA's and accessories. The Ruggedizers positioning is based around quality, durability and long-life expectation. We understand that selling hardware or devices is only a part of the solution and differentiation is brought by additional services through our manufacturer certified engineers offering technical assistance, a professional RMA service, in-depth product and application knowledge, device consultancy and customer configured solutions.

DIFFERENTIATION BY DEDICATED CUSTOMER SERVICE & FULL LIFECYCLE MANAGEMENT

Within the Ruggedizers network of committed partners we are able to provide or introduce to our customers even more added values. At Ruggedizers, we consider the importance of bringing the latest technologies and innovative products with regional effective customer service and maintenance as the real differentiating factor in nowadays fast evolving mobile computing market. Simply we eliminate your hidden cost of non-usage of your devices during failure or down-time.

RUGGEDIZERS

Ruggedizers is powered by Alcom Electronics and strengthens Alcom's reputation as the leading specialist distributor for embedded computing solutions showing an additional specialism for industrial mobile computing solutions. Ruggedizers is an important symbol of Alcom electronics in bringing rugged tablet computers, hardened PDA's and rugged mobile solutions to markets requiring flawless operation in the harshest environments.

APPLICATIONS & MARKETS

Ruggedizers by Alcom has a complete range of industrial mobile computing solutions that handle the most demanding field applications within markets. Meeting the most severe standards in harsh environments, our customers are guaranteed to take the safe choice for their "above standard consumer", professional and industrial mobile computing requirements. We help to improve productivity and efficiency in the field without sacrificing performance of the chosen rugged mobile computing solution.

FIELD SERVICE	FORESTRY	GIS
INDUSTRIAL	LOGISTICS	MANUFACTURING
MEDICAL	MINING	PUBLIC SAFETY
PUBLIC TRANSPORT	TRANSPORTATION	WAREHOUSING

PRODUCT OVERVIEW

Ruggedizers offers a full range of products to use in different markets and segments. For every purpose there is a family of devices.

RUGGED TABLETS

RUGGED PDA'S

VEHICLE MOUNT COMPUTERS

IMT-BT

IMT-BT medical tablets are designed to allow healthcare professionals to easily access electronic health records (EHRs) in order to check patient history, diagnosis, treatment and medications. This medical tablet is equipped with the Intel Celeron Processor N2807 and features a rugged design with IP65 ingress rating to withstand repeated sanitization.

RITAB 10-T1

The RiTab-10T1 is a semi-rugged, extended lifecycle and battery operated tablet computer which delivers high quality, sleek design, ultra-mobility. The RiTab-10T1 is equipped with an Intel® Atom™ Z3735F processor. It supports both Microsoft Windows and Android operating systems, allowing to easily integrate the tablet into your own existing solutions.

ALGIZ RT7 (ETICKET)

Whether you're collecting data, viewing graphics,.. the powerful quad-core processor provides reliable, uninterrupted work performance. Algiz RT7 doesn't just run Android flawlessly, its capacitive touchscreen enhances the Android experience with 5-point multi-touch capability, 600-nit high-brightness sunlight readability and chemically strengthened glass.

ALGIZ 8X

The ultra-mobile Algiz® 8X rugged tablet combines powerful computing with ultimate reliability in the toughest environments. It offers fast processing power along with user-friendly features and design, maximizing your efficiency on long days in the field. The Algiz 8X is powered by a speedy Intel® Pentium processor with plenty of RAM and storage.

ALGIZ 10X

The powerful Algiz® 10X rugged tablet offers sophisticated technology and can withstand weather elements and harsh handling — a perfect match for today's mobile workforce. It operates on a powerful Intel® quad-core processor, with a 128 GB SSD, expandable via microSD™, and 4 GB of DDR3 RAM, offering top-of-the-line computing capability and massive storage capacity. The Algiz 10X comes standard with Windows 10 Enterprise CBB (64-bit)

TABLES

F7

iRUGGY

Built tough: accidents happen. Be prepared, with a rugged tablet purpose-built to handle heavy use everyday indoors and out, with IP54 rated protection from liquid and dust ingress and 1.2M drop impact resistance.

F10

iRUGGY

Ideal for retail and hospitality: configure with an integrated 1D/2D imaging scanner to quickly capture barcodes off labels or smartphones. Complete the transaction at the point of service with payment via encrypted MSR, EMV-certified smartcard reader or third-party mPOS device connected through Bluetooth.

G8S

iRUGGY

Perfect size for mobility: smaller form factor paired with a high-resolution 8 inch screen are optimized for comfort and ease-of-use in extended mobile operation. The perfect companion, ready to go anywhere.

G10 (S)

iRUGGY

Fit for purpose: introducing ADD-f(x) modular design to optimize tablet functionality for your specific application requirements. A unique approach to configurability, new G10 ADD-f(x) architecture features 3 universal module bays to support a growing selection of mix-and-match function expansion modules.

PM-311

ruGGON

With RS-232, LAN (support PXE) and USB ports, user can maximize the effectiveness and productivity without any restraints of time or place. Equipped with barcode reader and MSR 2-in-1 module, PM-311 enhances workers productivity and streamlines business process.

TABLETS

PM-311B

PM-311B, the world's first tablet that can read up to 3 lines of machine-readable zone (MRZ) data - enabling it to capture, identify, and process passport, visa and ID card information. With a 508-dpi capacitive and high-performance fingerprint reader, PM-311B can collect more detailed/accurate fingerprint characteristics and match them to database.

PX-501

Rextorm can ignore unintended touches including hand palm, water mist and rain drops, while ensuring correct data and command input. Paired with precise pen, the PX-501 ensures accurate touchscreen interaction and fantastic writing feeling. Incorporated gorilla glass and glove touch function into tablet to resist external damage and fulfill field needs.

PX501

The new PX501 is equipped with the latest communication technology, mobile workers can experience precise positioning, faster processing, broader coverage and more stable data transfer even around buildings or trees. The seamless connection will be enhanced through a switchable dual pass-through connector.

PM-521

The Rextorm PM-521 comes with numerous I/O ports that provide exceptional connectivity options, including Ethernet (RJ-45), RS-232. And the extendible design of data collection and programmable function buttons can enhance functionality and product capability.

PM-522

As a best device for mobile workers, durability is key factor to fulfill each critical task. PM-522 meets rigorous MIL-STD-810G military standard for temperature, humidity, vibration, shock and 6 feet drop, and with IP65 rating for water and dust resistance.

	IMT-BT (ADLINK)	RITAB 10-T1 (avalue)	ALGIZ RT7 (handheld)	ALGIZ 8X	ALGIZ 10X	F7 (iRUGGY)	F10	G8S	G10 (S)	PM-311 (RUGGON)	PM-311B	PX-501	PX501	PM-521	PM-522
BATTERY	6300 mAh	2400 mAh	6000 mAh	5200 mAh	5300 mAh	8000 mAh	8000 mAh	8000 mAh	8000 mAh	2900 mAh	2900 mAh	4500 mAh	4500 mAh	4500 mAh - 9000 mAh	3800 mAh - 4200 mAh
DROP	5 feet	4 feet	4 feet	4 feet	4 feet	4 feet	4 feet	4 feet	4 feet	5 feet	5 feet	5 feet	5 feet	5 feet	6 feet
SIZE	10.1 inch	10.1 inch	7 inch	8 inch	10.1 inch	7 inch	10.1 inch	8 inch	10.1 inch	7 inch	7 inch	10.1 inch	10.1 inch	10.1 inch	10.4 inch
IP-RATING	IP65	IP54	IP65	IP65	IP65	IP54	IP54	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65
STORAGE	64 GB	64 GB	16 GB	128 GB	128 GB	32 GB	32 GB	64 GB	64 GB	32 GB	128 GB	128 GB	128 GB	128 GB	64 GB
NITS	600 nits	350 nits	600 nits	600 nits	600 nits	300 nits	300 nits	300 nits	380 nits	350 nits	850 nits	1000 nits	1000 nits	1000 nits	700 nits
OS	WIN 10 WIN 8.1 Android 4.4.2	WIN 10 Android 4.4.4	Android 6.0	WIN 10	WIN 10 WIN 7	WIN 10	WIN 10	WIN 10 Android 7.0	WIN 10 Android 7.0	WIN 7	WIN 10 WIN 8	WIN 10 WIN 8 WIN 7	WIN 10	WIN 10 WIN 8 WIN 7 ANDROID 4.4	WIN 10
RAM	4 GB	2 GB	2 GB	4 GB	4 GB	2 GB	2 GB	4 GB	2 GB / 4 GB	2 GB	4 GB	4 GB	8 GB	4 GB	4 GB
WEIGHT	1,200 kg	1,000 kg	0,650 kg	0,990 kg	1,300 kg	0.664 kg	0.945 kg	0.850 kg	0.997 kg	0,950 kg	0,950 kg	1,360 kg	1,360 kg	1,330 kg	1,300 kg

RUGGEDIZERS

NAUTIZ X2

handheld

The Nautiz X2 is the ideal handheld for today's mobile workforce. With enterprise-level capabilities, it can handle all your tasks – and your rough-and-tumble environments. Plus it offers the portability, feel and sophistication of an Android smartphone. All this, and it's the best value in the market.

NAUTIZ X4

handheld

The NAUTIZ X4 is a rugged barcode scanner and rugged handheld combination that can help you get the efficiency gains you need. With its integrated scanner and IP65 design the Nautiz X4 thrives in your tough conditions. It's packed with features, it's compact and truly portable, and it offers a reliable computing solution for challenging worksite environments.

NAUTIZ X8

handheld

The Nautiz X8 rugged handheld delivers the largest, most brilliant capacitive touchscreen in its class. This rugged PDA offers an unprecedented combination of processing power, connectivity and a tough IP67 ruggedness rating. The best ultra-rugged data collector available!

NAUTIZ X9

handheld

The Nautiz X9 rugged computer is a tough-as-nails Android PDA that can handle any environment a field worker might encounter. Loaded with all the enterprise-level capabilities available, it delivers best-in-class field performance with a battery that works through even your longest shifts. The Nautiz X9 is designed for use in the most challenging environments.

NAUTIZ ETICKET PRO II

handheld

A smart choice for electronic fare collection and ticket validation in public transportation, the Nautiz eTicket Pro II rugged handheld merges ultimate mobility with true field functionality. This rugged PDA with RFID is reliable and efficient for mobile ticketing, transactions and validations. It offers a IP65 ruggedness rating for tough worksite environments.

handheld

RUGGEDIZERS
By Alxom

	NAUTIZ X2	NAUTIZ X4	NAUTIZ X8	NAUTIZ X9
BATTERY	3300 mAh	4000 mAh	5200 mAh	4800 mAh
DROP	4 feet	4 feet	4 feet	5 feet
SIZE	4.7 inch	3.5 inch	4.7 inch	5 inch
IP-RATING	IP65	IP65	IP67	IP67
STORAGE	16 GB	1 GB	4 GB	16 GB
DISPLAY	1280 x 720	480 x 640	854 x 480	1280 x 720
OS	Android 6.0	WIN Embedded 6.5 pro Android 4.2.2	WIN Embedded 6.5.3 Android 4.2.2	Android 7.0
RAM	2 GB	512 MB	1 GB	2 GB
WEIGHT	0,230 kg	0,330 kg	0,490 kg	0,385 kg

VEHICLE MOUNT COMPUTERS

VM-521

Featuring 1000 nits truly sunlight readable display, VM-521 offers superb viewability even in direct sunlight. With brightness adjustable button, providing a widest brightness adjustable display to meet dim-to-black requirement. A best-in-class visibility makes VM-521 ideal for day and night operations.

VX-601

The VX-601, 12.1inch vehicle mount computer, is built from the ground up for durability and reliability, with IP66 (IEC 60529), MIL-STD-810G and IEC 60721-3-5 Class 5M3 compliance. This impressive durability with the optional defroster function makes handling easier and more adaptable to work in challenging conditions. On demand, the screen is also operable with gloves.

MT7000

MT7000 offers the best in-class connectivity with Wi-Fi 802.11 a/b/g/n/ac, GPRS/HSPA+/LTE, and Bluetooth V4.0 class2. The concurrent multi-GNSS reception of GPS/QZSS, GLONASS and BeiDou offers precise positioning. The supported dead-reckoning function also ensures continuous tracking even in tunnels, canyons, and overpasses.

MT7010

Built with impenetrable durability in mind, MT7010 mobile data terminal can withstand the various environmental impacts when mounted on vehicles. This include the terminal's MIL-STD-810G to withstand various shock and impact. The terminal also builds in with water and dust resistance on various surfaces, allowing versatile applications.

RUGGON

RUGGEDIZERS
By AcOn

	VM-521	VX-601	MT7000	MT7010
SIZE	10.4 inch	12.1 inch	7 inch	7 inch
IP-RATING	IP65	IP65	IP65	IP65
STORAGE	64 GB	64 GB 128 GB 256 GB	32 GB 64 GB 128 GB 256 GB	8 GB 16 GB
NITS	1000 nits	1250 nits	500 nits	500 nits
OS	WIN 10 WIN 8 WIN 7	WIN 10 WIN 7	WIN 10 Android 5.1	Android 5.1
RAM	4 GB	4 GB	2 GB	1 GB 2 GB
WEIGHT	3,800 kg	4,830 kg	1,250 kg	1,200 kg

ACCESSORIES

For every rugged device, there's a lot of accessories to choose from. To ensure that your device keeps up with all your demands, accessories can streamline your daily tasks. Depending on what kind of rugged computer you've chosen, the range of accessories varies.

CARRY CASE

DESKTOP CRADLE

HAND STRAP

PISTOL GRIP

POLE MOUNT

QUAD CHARGER

SHOULDER CARRIER

SUCTION MOUNT

VEHICLE CRADLE

KEY TECHNOLOGY PARTNERS

Ruggedizers offers a range of rugged tablets, vehicle mount computers, hardened PDA's, accessories and services. Below you can find a brief overview of our featured suppliers.

ADLINK

Adlink is a technology leading platform provider in the Embedded Computing industry, offering Embedded Computing solutions in a variety of products, systems and services. Adlink offers certified solutions for highly regulated markets. Like Health Care and Medical applications. The product range includes full medical certified tablets.

AVALUE

Avalue is focused on the future with innovative Embedded Computer products. At Avalue they're designing and manufacturing a broad range of computing solutions that contribute to a more convenient living environment. The product range includes semi-rugged tablets.

HANDHELD

Handheld is a fast growing manufacturer of rugged handhelds and tablets.
The PDA's, tablets and notebooks are offered for the toughest conditions and provide technology solutions for almost any application imaginable.

IRUGGY

iRuggy designs and manufactures ruggedized tablets and handheld terminals purpose-built for specialized business applications and heavy-use environments. Led by industry veterans with over 20 years in retail and rugged product design, iRuggy has the experience and knowhow to deliver innovative and reliable solutions.

RUGGON

RuggOn has decades of ruggedized mobile solution expertise and strives to improve productivity in harsh environments. The dedicated engineering team is missioned to deliver rugged tablets and vehicle mount computers with exceptional value & quality to improve user experience.

RUGGED KEY FUNDAMENTALS

WHAT IS RUGGED?

What is rugged? When it comes to mobile computing, what does rugged mean? From a user perspective, rugged is the device's ability to keep operating under all exposed working conditions. And not just once, but for the life of the unit, which can easily be 3-5 years.

However, depending upon the kind of work being performed, what is rugged for one user may not be rugged for another. For example, a mobile device in a warehouse is likely to be dropped often and may be exposed to a lot of dust, but is unlikely to face extreme temperatures or rain. On the other hand, a forester will need a unit with protection against water and a wide temperature spec, but is probably not too concerned about dust.

THE RIGHT TOOL FOR THE JOB

A mobile device is really just a tool used to help you do your work. So the cardinal rule for a user is: find the right tool for the job. A wise purchaser of a mobile device will carefully evaluate what kind of working conditions the unit will be exposed to and then dive into product specifications to find a unit that is rugged enough in the right categories to hold up under these conditions. It is also probably a good idea to select a unit which is a little more rugged than you actually need. It is far better to be too rugged than not rugged enough, and you may at some point encounter conditions more severe than you originally predicted.

HOW IS RUGGED DEFINED?

The level of rugged is best defined by its environmental specifications, and the 3 most common and useful specifications are:

• Temperature range
• MIL-STD-810G (formerly MIL-STD-810-F)
• IP

These specifications are almost always listed on the products data sheets.

The temperature spec defines the operational temperature range of the unit. Working with a unit above or below this spec may cause the unit to fail.

MIL-STD-810G is a standard issued by the United States Army's Developmental Test Command. The standard consists of a series of various environmental tests to prove that equipment qualified to the standard will survive in the field. They were designed specifically to test military equipment but are now used to test a wide range of both military and civilian products, including mobile devices.

IP stands for Ingress Protection, and an IP rating is used to specify the level of environmental protection of electrical equipment against solids and liquids. In other words, it tells us what amount of size of solids or liquids can get inside the enclosure and possibly damage the device. It is defined by international standard IEC 60529.
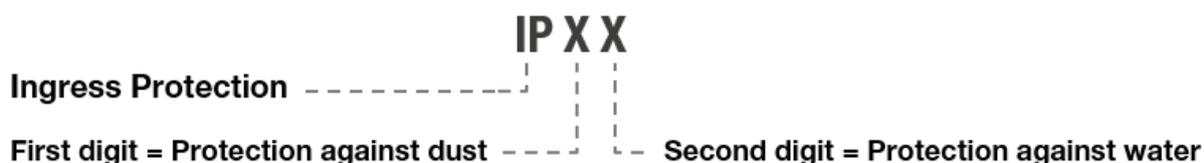
RUGGED KEY FUNDAMENTALS

THE MIL-STD TESTING METHODS
MIL-STD-810G is comprised of about 24 laboratory test methods that cover a wide range of environments, from the ability to perform at high altitude (method 500.5) to the ability to survive mechanically induced shocks (method516.6). No mobile device has been tested to all 24 methods; many of them do not apply to mobile computing. But generally speaking, the more methods tested (and passed), the more rugged the unit. Also, when evaluating a data sheet, pay attention to the methods that apply to your situation. If you will be working at over 10,000 feet of elevation, make sure the unit has been tested to the MIL-STD method that covers altitude. If you are going to be working in rapidly changing temperatures, make sure the unit has been tested for temperature shock.

THE IP DEFINITIONS – WHAT LEVEL DO YOU NEED?
IP ratings are displayed as a 2 digit number. The first digit reflects the level of protection against dust. The second digit reflects the level of protection against liquids (water).

IP X X

Ingress Protection — — — — — — — —

First digit = Protection against dust — — — —   — Second digit = Protection against water

FIRST DIGIT
Protection against dust
0: No protection
1: Protection against solids up to 50 mm
2: Protection against solids up to 12 mm
3: Protection against solids up to 2.5 mm
4: Protection against solids up to 1 mm
5: Protection against dust; limited ingress
6: Totally protected against dust

SECOND DIGIT
Protection against water
0: No protection
1: Protected against dripping water
2: Protected against dripping water (tilted)
3: Protected against water spray
4: Protected against splashing water
5: Protected against water jets
6: Protected against a nozzle under pressure
7: Protected against immersion (1 meter for 30 min)
8: Protected against submersion (at depth, under pressure)

In another example, an IP67-rated unit is totally dust proof and is capable of immersion in water for at least 30 minutes to a depth of 1 meter. This unit would be an excellent choice in either a very dusty or dirty environment or one where it may be possible to drop the unit into a body of water like a lake or a stream. On the other hand, an IP rating of IP54 is only protected in a limited way to dust and water and should never be fully immersed.

Increasingly, rugged device manufacturers are using the term IP68. What is important about the IP68 rating is that you need an additional detail in order to evaluate the true meaning. If IP67 is immersible in water, how can IP68 be more rugged? The secret is in the additional detail. For a true IP68 rating, the manufacturer must specify the depth and the length of time for the immersion. If the 1-meter for 30 minutes mark of IP67 isn't enough for you, you should be sure to compare the specifics if a device promises IP68.

MONTHLY NEWSLETTER

The Ruggedizers monthly e-mail newsletter contains new products and far-reaching solutions providing the engineers and their teams new ideas for the next generation of mobile computing.

Do not hesitate to subscribe by going to www.ruggedizers.com and fill out the subscription form.

THE HUMAN INTERFACE

Contact Ruggedizers for the latest product update and/or for a live-meeting/demo to discuss your required device and/or full solution.

Ruggedizers by Alcom
Alcom Electronics nv/sa
Singel 3
2550 Kontich
BELGIUM
Tel: +32 (0)3 458 30 33
Email: info@ruggedizers.be
www.ruggedizers.be

Ruggedizers by Alcom
Alcom Electronics bv
Rivium 1e straat 52
2909 LE Capelle a/d IJssel
THE NETHERLANDS
Tel: +31 (0)10 288 25 00
Email: info@ruggedizers.nl
www.ruggedizers.nl

CATALOG & LINECARDS

Ruggedizers is dedicated to providing its customers with advanced and top of the bill devices. Our product range is composed of carefully selected devices from world's leading technology manufacturers.

A key-supplier-oriented line card and product overview can be found on our website: www.ruggedizers.com.

Please contact us for vendor-specific (printed) catalog(s) or visit our user friendly website: www.ruggedizers.com.

WHO IS RUGGEDIZERS BY ALCOM

The Ruggedizers brand brings mobile computing solutions such as tablets, PDA's and vehicle mount computers to specialized business applications and heavy-use environments. Ruggedizers is a registered brand name and operates legally under the flagship of Alcom Electronics.
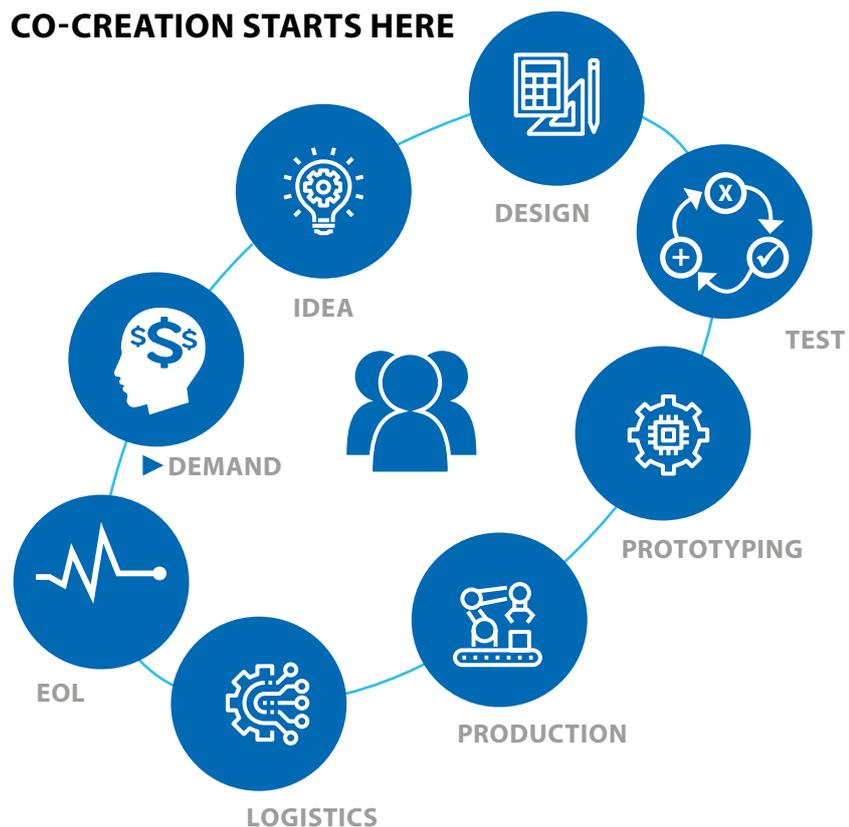
Alcom Electronics is the leading Benelux based stocking representative specialized in electronic components, embedded modules, computing and communication. Since its inception in 1980 we sell high-quality system components and integrated solutions with all-round services.

CORE VALUES

- Qualified & authorized electronics distributor and representative
- Sales, design-in and application support
- Offering the most advanced technologies
- Experienced professionals listening to our customer's needs
- Expertise in synergistic electronics products
- Financially reliable company

CO-CREATION STARTS HERE

IDEA

DESIGN

TEST

PROTOTYPING

PRODUCTION

LOGISTICS

EOL

▶ DEMAND

Rugged Mobile Computing
for
Extreme Conditions

RUGGEDIZERS
By Alcom

Ruggedizers by Alcom
Alcom Electronics nv/sa
Singel 3
2550 Kontich
BELGIUM
Tel: +32 (0)3 458 30 33
Fax: +32 (0)3 458 31 26
Email: info@ruggedizers.be
www.ruggedizers.be

Ruggedizers by Alcom
Alcom Electronics B.V.
Rivium 1e straat 52
2909 LE Capelle a/d IJssel
THE NETHERLANDS
Tel: +31 (0)10 288 25 00
Fax: +31 (0)10 288 25 25
Email: info@ruggedizers.nl
www.ruggedizers.nl