Boxed Wireless & Industrial Controls Networking

The right technology partner for your IIoT projects

World of IoT
& Alcom

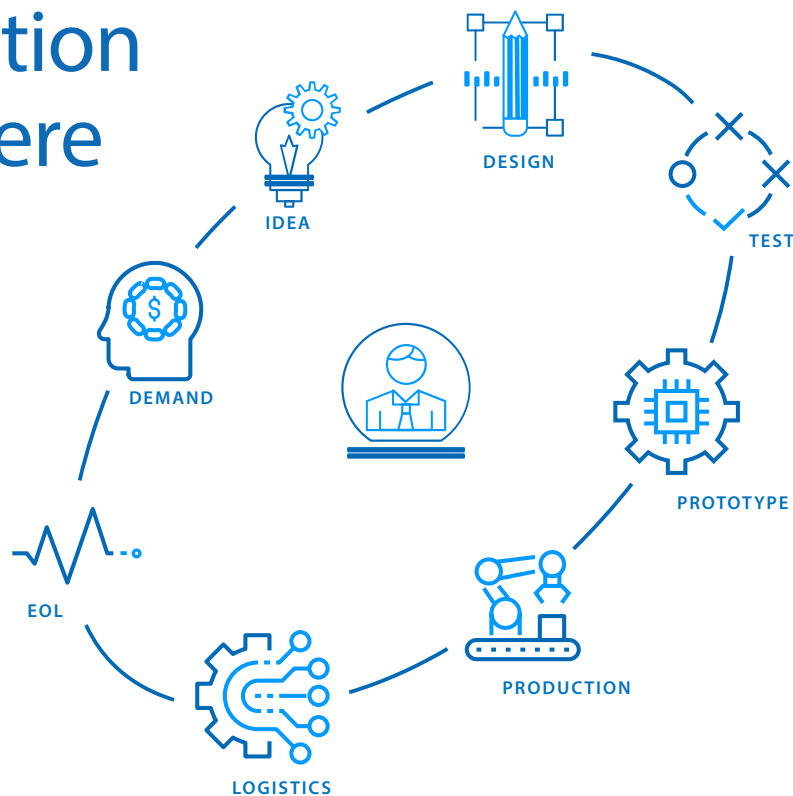**IoT anywhere" cannot be achieved with one connectivity type alone**

Alcom Electronics has been at the forefront of Industry 4.0 since the 1990s, evolving from M2M (Machine-to-Machine) technologies to modern IoT (Internet of Things) solutions.

Evolution of IoT Technologies

- **1990s: M2M Applications**
  Initial M2M applications utilized mobile networks for tasks like fault notifications via GSM modems.
- **2010s: Rise of IoT**
  Machine connectivity expanded to the internet, marking the rise of IoT.
- **2020s: Advanced IoT Modules**
  It's module solutions now support condition monitoring, predictive maintenance, remote service, and data analytics.
- **Today: Scalable IoT Solutions**

Alcom offers scalable IoT solutions backed by over 20 years of experience in complex applications. We help simplifying connecting your assets and solutions. Contact us and get expertise of manufacturer-certified Field Application Engineers for your projects.
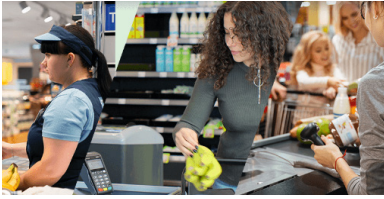
Co-creation starts here

IDEA — DESIGN — TEST — PROTOTYPE — PRODUCTION — LOGISTICS — EOL — DEMAND

" Alcom considers everybody an indispensable added value in the collaborative chain with all of its partners.

Applications & Markets

BUSINESS BRANCH NETWORKING

IOT CONNECTIVITY OF CLEAN ENERGY

DIGITAL FACTORY

HEALTHCARE

BUILDING SECURITY

TRAFFIC MANAGEMENT

ENVIRONMENTAL MONITORING

LOGISTICS

GREEN TECHNOLOGY

Providing the best solution for your unique antenna and RF challenges

Alcom's technical experts will help you with the antenna and cable selection for optimized performance ready for your carrier certification. Whether you need custom antennas, off-the-shelf options, or pre-certification optimization, we have the expertise to meet all your antenna and wireless connectivity needs.

Let's get you started in building your custom antenna

Tuning and tweaking to maximize antenna performance at specific frequencies. Customize antenna assemblies the way you like it with our **online antenna builder**.

Product overview

Antennas

- External antennas: omnidirectional, directional and high-gain for cellular, mmWave, GNSS, WiFI, Bluetooth, NFC, Combo, ISM,LoRa, UWB, NFC, Satcom, C-V2X
- Customized and customer-configured antenna options
- Manufacturer-approved antenna solutions for each router or module
- RF coaxial cable-assemblies, connectors, accessories & mounts
- Alcom Antenna- and cable builder available for customization and configuration

Industrial control networking

- Rackmount, Din-rail, In Vehicle-Ethernet switches
- Serial and USB-connectivity, USB isolators and serial adapters, protocol switches, fieldbus gateways
- Media converters incl. Ethernet, RS-232/RS422/RS485 to fiber media converters
- Industrial Ethernet Serial servers and adapters, PCI (e) Async/Sync Serial Adapters
- Wired RS-232,RS-422, RS-485, Ethernet and CAN solutions
- Industrial communication H/W and S/W for CAN and LIN bus applications
- Network Management Software
- Industrial Time Servers & Converters
- Smart control Solutions
- AUTBUS industrial communication multi-drop broadband fieldbus

Managed IoT connectivity and services

- Full hardware and cellular connectivity solution sets
- IoT connectivity management for remote smart Connected products
- Edge-to-Cloud solutions for connecting industrial assets
- IoT device monitoring and cloud services
- Device configuration and programming
- Secure connected industrial devices
- Test and certification support services

Cellular, Networking and LoRaWAN

- Cellular Modems, routers and bridges for enterprise, industrial, transportation
- Vehicle routers, gateways and telematics
- Gateways for specific markets such as renewable energy, metering, industrial vending, retail, consumer
- USB Connectivity, Serial Connectivity, Console Servers
- Infrastructure management software and Tools
- Wireless LAN access points
- LoRaWAN Gateways, modules, wireless sensors
- Sensor-based IoT solutions (temp, leak detection, movement, push button, proximity, ...)
- IoT platforms for easy management, monitoring and control
- Remote device & Energy management solutions
- Cloud-Managed networking solutions

Innovation & technology partners

Simplifying the IoT by delivering connected products, services & technologies

Alcom stands as a leader in the M2M/IoT and industrial data communication sectors, renowned as a true partner in solving complex engineering challenges. With nearly 30 years of innovation in the wireless space, we consistently introduce industry firsts, connecting thousands of businesses to critical data and millions of people to essential information. Our customers rely on us for competitively priced products and services from top global manufacturers, ensuring faster time-to-market.
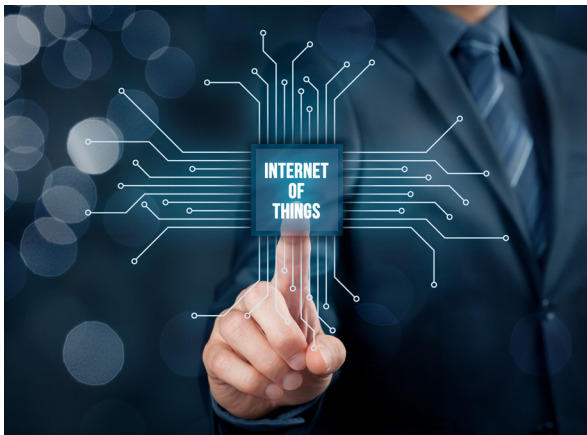
We specialize in delivering **industrial-grade connectivity solutions, cutting-edge AI-powered industrial networking** solutions, and efficient **smart control systems**.

Key Sectors & applications:
- Enterprise Networks
- Industrial and Building IoT
- Digital Energy & smart grid
- Smart Commerce & retail
- Surveillance and Security
- Mobility & intelligent transportation
- Smart manufacturing
- ...

The significance of IoT is accelerating, and achieving "**IoT anywhere**" requires diverse connectivity solutions. Get in touch with Alcom to learn more about:

- The most important IoT connectivity types suited to different applications
- The role and fit of 5G RedCap versus LTE Cat versions
- The benefits of combining long-range and short-range wireless technologies
- The roaming potential of LoRaWAN

Subscribe to our bi-monthly **T4D newsletter** designed with the development engineer in mind to stay informed about the latest advancements in **Industrial Edge, Cloud Computing, Remote Connectivity Solutions, Secure Connected Solutions, Industrial Ethernet Automation Networking and IIoT** amongst other latest news, product offerings.

Connect with Alcom electronics and build your future with the Internet of Things and stay tuned for the Internet with AI-Powered Solutions for Tomorrow's World.

Offering innovative wireless and datacommunication products, services and solutions are in our DNA.

KEY PARTNERS

New product releases

5G SOLUTIONS FOR MISSION CRITICAL APPLICATIONS

IR 624 5G Industrial router for Industrial IoT
FWA 02 5G Router for business Internet
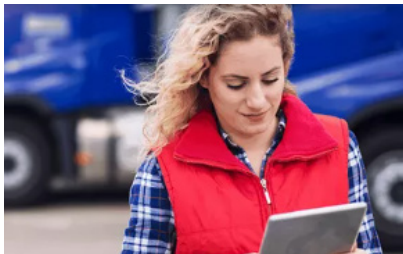ODU2002 5G Outdoor unit
VG710 5G Vehicle Gateway for Mobility

DIGI IX15 IOT GATEWAY AND CELLULAR ROUTER

The versatile Digi IX15 device functions as both gateway and router for customers seeking lower-cost, quicker-to-market alternatives to chip-down DIY designs for networking operations. Digi IX15 is an industrial-grade IoT gateway that connects Digi XBee® modules to cloud applications over cellular or Ethernet, providing the easiest path to Internet connectivity for the Digi XBee ecosystem of hardware, software, services and award-winning tools.

LORAWAN GATEWAYS & BASE STATIONS

Commercial: Designed for indoor environment
Conduit AP Access Point
Industrial: Designed for industrial environments
Conduit & Conduit 300 Series
Outdoor: Robust IP67 casing designed for challenging external environments
Conduit IP67 200 Series

5G/4G CELLULAR VEHICLE GATEWAY

The VG series is a 5G/4G cellular vehicle gateway specially for the Internet of Vehicles. It provides high-speed and secure connectivity for a wide range of scenarios in the mobility industry, such as public transport, heavy equipment, logistics, municipal and public safety. With extensive interfaces, cloud integration and developer features, it enables connectivity to various on-board devices and remote monitoring of vehicle status, improving operation and management efficiency.

PROVIDING THE BEST SOLUTION FOR UNIQUE ANTENNA AND RF CHALLENGES

Alcom's technical experts will help you select and optimize the antenna and cable selection for optimized performance ready for your carrier certification. Whether you need custom antennas, off-the-shelf options, or pre-certification optimization, we have the expertise to meet all your antenna and wireless connectivity needs.

SERIAL I/O & INTEGRATION FOR INDUSTRIAL CONTROL

Alcom electronics offers the widest selection of asynchronous and synchronous serial solutions made by Sealevel. Sealevel serial interfaces are trusted for factory and process automation, and other data-intensive applications.

Alcom product portfolio

ELECTRONIC COMPONENT SOLUTIONS	WIRELESS EMBEDDED CONNECTIVITY & SENSORS	WIRELESS & INDUSTRIAL CONTROLS NETWORKING	DISPLAY & TOUCH

LED & SOLID STATE LIGHTING	POWER & EMC	RUGGED MOBILE COMPUTING	EMBEDDED SYSTEMS, AI & EDGE COMPUTING

- Semiconductors
- Frequency & timing
- Power management
- Circuit protection & discretes
- Magnetics
- Passives & electromechanical
- Connectors & cable assemblies
- Photonics

- Wireless modules
- Antenna's
- Sensors

- Routers & gateways
- Wireless embedded computers
- Industrial ethernet and IP variations
- Wired & wireless machine networking
- Antenna's
- Device to cloud solutions
- Connectivity & remote management services
- Networking & connectivity

- Displays
- Touch screens
- Optical bonding
- Total display solutions

- LED light sources
- Optics
- Thermal management
- Power & intelligent controls
- LED modules

- AC/DC power supplies
- DC/DC converters
- Power management modules
- Wireless charging
- E-mobility solutions
- Transformers & power inductors
- UPS
- EMC filters

- Tablets
- PDA's
- Vehicle mount computers
- Accessories

- Computer-on-modules
- Embedded boards
- Industrial PC & automation
- System integration

Bridging the gap between technology, people and business with a human interface.

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

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

Get to know us

ALCOM PROVIDES THE WORLD'S MOST ADVANCED TECHNOLOGIES.

With a team of like-minded entrepreneurs, Alcom will continue to inspire its valued customers to use advanced innovative building blocks in vertical markets. The importance of providing high-level services and a human interface based on specialism, knowledge and design-in expertise will remain key differentiators.

Alcom is positioned for growth. We invite all our customers to discuss their current and future concepts and designs. Let's connect, work and grow together.

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