# NO-CODE IOT

Connect Objects to Mobiles & Cloud Securely, Rapidly with No Risks

## Discover...

- Our ready-to-use IoT devices
- Our expert IoT design services
- Our solution for do-it-yourself IoT projects





960 chemin de la Croix Verte 38330 Montbonnot, France

contact@duetware.com



## What We Do

#### **OUR READY-TO-USE IOT DEVICES**

With increasing concerns about energy scarcity, adopting effective consumption management practices is crucial for any organization.

Our ready-to-use, customizable, white-label products for metering help users control consumption and act sustainably. These innovative, secure, high-performance solutions for data acquisition and transmission adapt easily to your specific needs and your brand.

Ask us about our Duetware-based devices for water, gas and electricity conservation.



#### **OUR IOT DESIGN SERVICES**

#### Do you need help designing your IoT device?

We design your IoT devices rapidly to your specifications thanks to Duetware. Duetware features for **cyber security**, **data handling**, **and wireless communication** and **cloud data transfer** allow us to respond rapidly to any request and accompany you from proof-of-concept (PoC) to industrialization. Let us know what you need, we'll make it happen.

#### **OUR SOLUTION FOR DO-IT-YOURSELF IOT**

#### Do you want to design your IoT device in house?

Duetware allows us to deliver a complete **no-code**, **low-code solution** that overcomes technical hurdles for you. You focus on your use case and create connected devices faster with fewer risks. We provide you the **embedded software**, **qualified wireless hardware** and **design tools** that are guaranteed to deliver results.

Use any part of our solution, together or independently, we'll accelerate your IoT project.

# **Metering & Monitoring Products**

#### **AUTOMATE METER READING WITH AQUAMETER**

Aquameter uses Duetware features and capabilities to provide state-of-the-art, adaptable image recognition and data transfer that automates meter reading and leak detection for water utilities. It reinforces resource conservation efforts that helps organizations demonstrate their commitment to today's environmental concerns.

#### Why Image Recognition?

- · Compatibility with all water meters
- Battery life up to 20 years
- Installation without service disruption
- Apps for easy installation, no expertise required
- Secure, anonymous data transmission
- Works with any cloud or billing platform





## **Use Cases**

#### **NFC ACCESS CONTROL**

Organize bicycle parking, prevent theft, offer value-added services like reservations and rentals – this application makes it possible with an easy-to-use, secure bicycle parking stations.

These stations use a **Near Field Communication app** to lock/unlock bicycles without requiring a network connection. Users simply tap their mobile to the station to launch the app which manages authorizations, verifies reservations, and even handles payments.



#### INDUSTRIAL MONITORING & CONTROL

Sediment and chemical filtering membranes to produce clean water a nothing new. But, the systems for using these materials are rarely available where they're needed most. So, Aclaira® created them with the cost, durability and ease-of-use required for these markets.

To reign in system costs, Aclaira® chose TapBus modules with Duetware to manage filtration processes. These low-code modules eliminated expensive programmable logic controllers and replaced industrial displays with mobile apps.

Now, their systems are now configured and maintained with an app that guides technicians in complex tasks. Plus, their products can now be monitored remotely connected to network gateways via ethernet or Wi-Fi.









Wi-Fi

#### **INDUSTRIAL MONITORING & CONTROL**

Accessing data in machines is key to making decisions about operations and maintenance.

To do this, this application relied on Duetware's adatability for a **custom TapBus module** that is scaled to provide just the right sensor inputs for these machine tools. Customers benefit from **power management**, **wireless communication** and **edge data processing**capabilities of Duetware's Java Virtual Machine.

Duetware features, adaptability and scalability make TapBus the ideal, scalable solution for data acquisition and control.

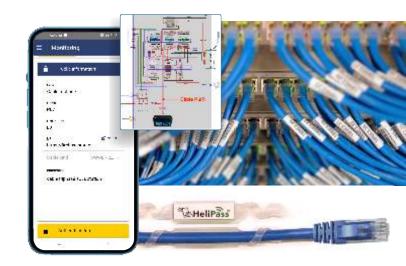


#### **NFC DIGITAL PRODUCT PASSPORT**

In data centers, ensuring correct cable connections is time-consuming but crucial. These Digital Product Passport (DPP) tags combine **NFC** and **RFID communication** to track cable information.

With our App Creator tool, designing a custom app requires no expertise. Designers drag and drop components from graphic and function libraries to build their UI and data logic. As a service, we can also add custom object libraries like those for the UHF interface in these DPP tags.

Now, technicians use an app to read and update cable data, and to access complex information like routing schematics.



#### **EQUIPMENT MONITORING & CONTROL**

Helping operators understand job site hazards and equipment performance are crucial to construction safety and efficiency.

This design team for heavy equipment monitoring systems began using Duetware-based TapNLink modules when they wanted to trial a new user interface as a mobile app.

Thanks to Duetware they added **NFC and Bluetooth to their electronics** with little effort and coding, then created their first app in just days.



They are now field-testing their app which allows users to control machine position, monitor performance, and retrieve and update job and maintenance data directly on a smartphone.

#### **APPLIANCE CONFIGURATION & PROGRAMMING**

When European directives mandated **programmable controls for electric heaters**, appliance manufacturers discovered that fewer than 10% of owners used the features they provided because of difficulties using the push-button controls and LCD on the appliance.

With Duetware-based TapNLink modules, they added an intuitive Near Field Communication interface and programming app to their products at low cost and on a very short design cycle.

User interface apps are now emerging as a game-changer, in appliances by providing consumers a user-friendly, seamlessly integrated, and cost-effective solution for programming product features.



Ø

## **DIY Solution to Create Your IoT Devices**

Are you working on a new design or updating an existing system? You can add connectivity and create IoT apps rapidly and easily thanks to **Duetware's pre-implemented features**, our **qualified wireless hardware** and **tools**. **Choose just what you need from our solution** to complement your in-house design capabilities and create your IoT device in record time.

#### **OUR WIRELESS MODULES & DEVICES**

Choose from our qualified wireless devices, including:

- · Embedded modules for OEM
- Data acquisition & control modules for industry

They connect to microcontrollers in embedded designs, or to fieldbus on industrial systems, then configure in just minutes to communicate with mobiles or the cloud.



**TapNLink** 



TapBus

#### **DUETWARE EMBEDDED SOFTWARE**

It pre-implements everything for **communications**, **cyber security** and **data handling** – accelerating your projects by eliminating the need for coding. For customization, its **Java Virtual Machine** allows you to add logic and adapt features with a few lines of java!

#### **OUR NO-CODE/LOW-CODE DESIGN TOOLS**

Create professional user interfaces as apps with minimum effort and no expertise. Our no-code / low-code tools speed the design of dashboards that you build into iOS, Android apps with the click of a button. Our ecosystem includes app creator and builder, free hardware configuration environment, java coding and debugging tools.



# **Create Mobile UI Apps for Anything**

Our design tools make it easy to create rich, intuitive mobile user interfaces (UI) so that you can replace costly, built-in displays with powerful smartphone apps.

With our tools, designers can quickly build customized dashboards that run in any browser, or on any mobile as standalone apps for iOS and Android. Our tool ecosystem supports your rapid UI app design with:

- · Drag-and-drop, WYSIWYG UI design environment
- Libraries of graphical display & control components
- UTF-8 support & multilingual interface manager
- Advanced data flow logic control
- Built-in app project generator & builder

Need to go further? Add your own components as plug-ins, or libraries to tailor your apps to your product, market or industry.

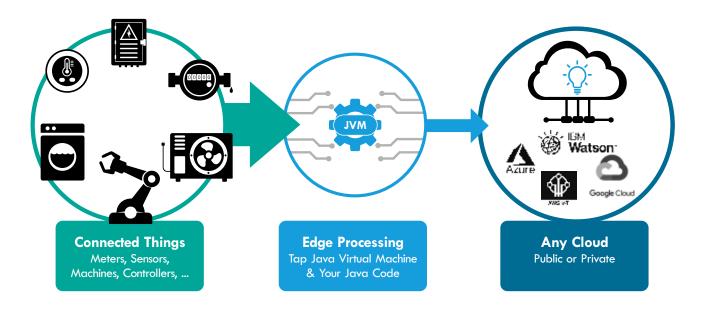
With our app creator, your mobile interface practically builds itself!



# **Edge Computing with Duetware**

#### The Power of AI & Machine Learning with Embedded Java

Enhance any IoT device with powerful edge intelligence. Duetware's embedded Java Virtual Machine works seamlessly with its embedded IwM2M features (cyber security, communications, data handling) to enable advanced data logic, real-time control of other devices and communication with any cloud.



With minimal coding and effort, add the intelligence for:

- Data filtering & aggregation
- · Real-time decision making & device control
- Data caching, formatting & delivery optimization
- Load balancing & bandwidth management
- Firmware updates
- And more...

With our solution, a little code goes a long way to make your IoT device smarter, respond faster and adapt more easily so that you can unlock the full potential of the IoT.



#### **DUET**WARE

960 chemin de la Croix Verte 38330 Montbonnot, France contact@duetware.com

