CryptoDATA Tech CO.

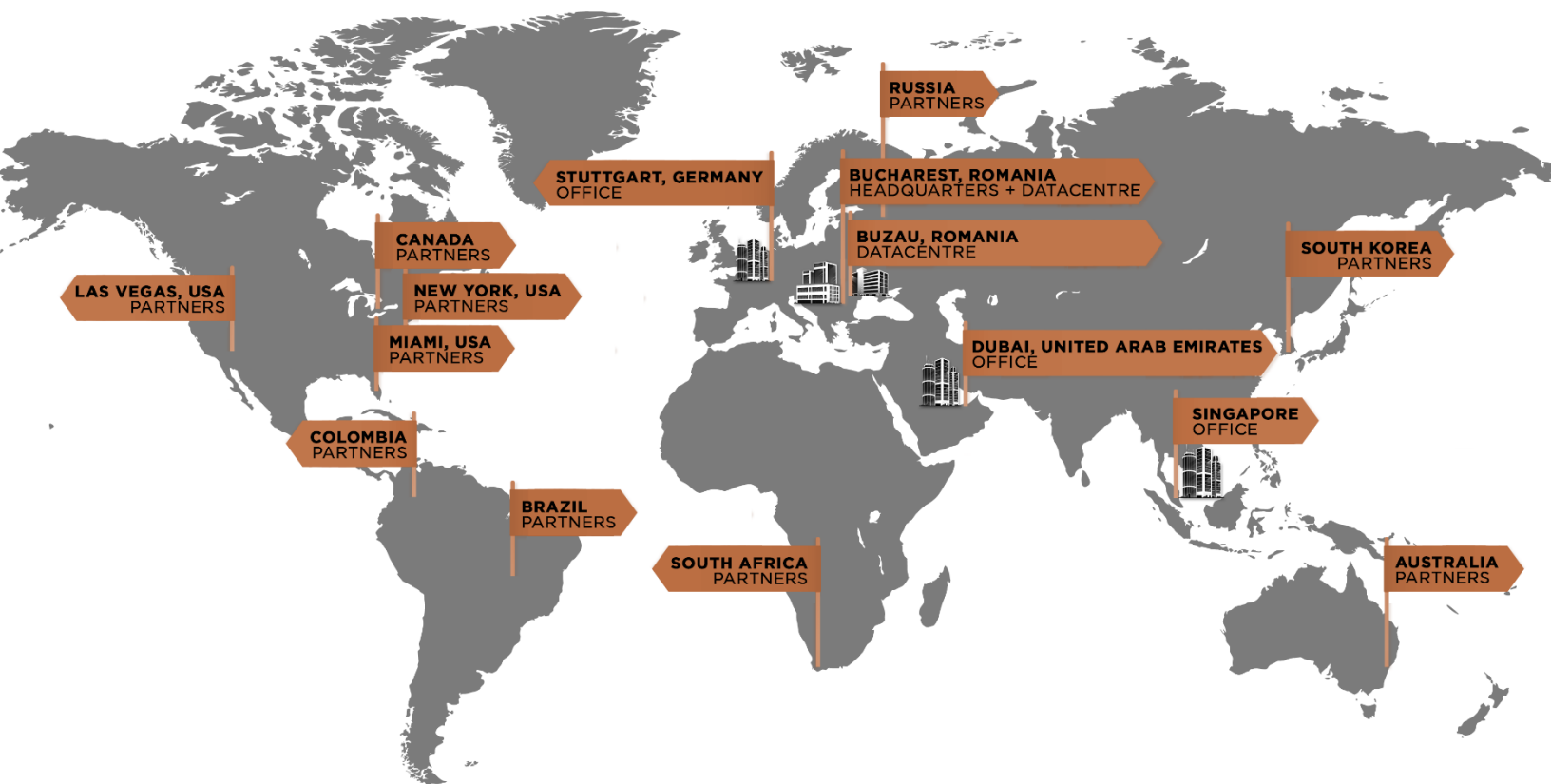Smart **Security** the energy of **Mobility**

Who is CryptoDATA ?

Founded in 2013, CryptoDATA represents a company providing IT solutions in cyber-security, developed using blockchain technology and A.I systems. Our promise is to offer users worldwide security based on decentralization. Our aim is that every person could communicate freely and securely.

Where is CryptoDATA located ?

CryptoDATA has started its activity in Romania by developing the biggest encrypted information processing data-center in Europe. In 2015, the company's Headquarter relocated to Bucharest, the capital of Romania, and opened a new data center for processing. In 2018, by announcing the launch of the first encrypted smartphone working on blockchain – IMPulse K1 and, also, by launching the innovative VOBP technology, the company has expanded its activity in Stuttgart, Germany.
At the moment, the company has offices and work points in Singapore and UK, and operates, also, through partners located in the USA, Canada, Russia, South Africa, Colombia, Brazil, Australia, South Korea. Our company's mission is to create a decentralized community and to provide access to our innovative technology to all people from every corner of the world.

RUSSIA PARTNERS

STUTTGART, GERMANY OFFICE

BUCHAREST, ROMANIA HEADQUARTERS + DATACENTRE

CANADA PARTNERS

BUZAU, ROMANIA DATACENTRE

SOUTH KOREA PARTNERS

LAS VEGAS, USA PARTNERS

NEW YORK, USA PARTNERS

MIAMI, USA PARTNERS

DUBAI, UNITED ARAB EMIRATES OFFICE

SINGAPORE OFFICE

COLOMBIA PARTNERS

BRAZIL PARTNERS

SOUTH AFRICA PARTNERS

AUSTRALIA PARTNERS

CryptoDATA

Who owns CryptoDATA?

CryptoDATA is a private equity company entirely owned by its employees. The shareholding system was implemented in 2019 through CryptoDATA Tech S.R.L. This system was created in accordance with the blockchain's functioning, the decision-making power in the company being granted as 50% + 1 within the heads of departments. No governmental agency or external organization owns shares in CryptoDATA.

Who controls and manages CryptoDATA?

CryptoDATA has a solid, efficient and innovative governance system. Each employee who is promoted in a leadership position within a certain department automatically becomes a shareholder with voting rights in the organization's decision-making process. The CEO position is held by one of the company's founders, whose decisions are analyzed and approved by the other shareholders before being implemented.
The shareholding committee exercises the decision-making authority for the corporate strategy and operational management. It represents the highest entity responsible for the corporate strategy, operations management and customer satisfaction.

Who does CryptoDATA work with?

Externally, we rely on our customers. They represent the core of the company, as we continuously improve our work through their feedback, and everything we develop is for providing innovative products designed to maintain the community secured and make its members' lives easier.
Internally, the most important component of the company is made up of its human resource. Dedication represents the most illustrative quality of CryptoDATA's work ethic. In this company, the head of every department is actively involved in the mentorship of its members in order for them to achieve professional evolution. Commitment and evolution are rewarded by being accepted on the company's shareholder board.
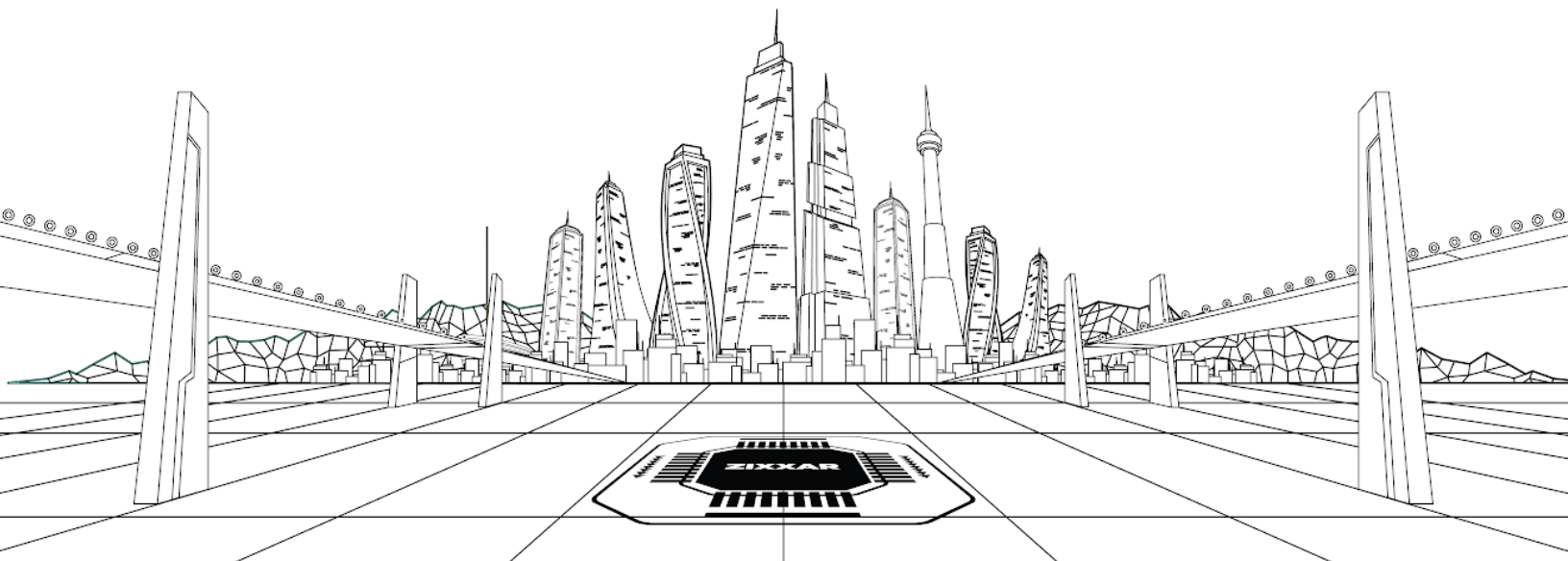
CryptoDATA

Core Values of CryptoDATA

Customers First
The activity of the CryptoDATA company is dedicated to the users' requirements because, in our conception, they represent the engine of the whole system. Our company aims to deliver long-term value through increased receptivity towards the users' community. The decentralized community should have access to technology through simple means for easing their activities.

Smart Innovation
Advanced technologies have opened the gates for a new industrial revolution through which everything alters and develops with huge speed. These technologies open the way to a new world, where all devices are intelligent, connected and communicating to ease our entire activity. One of the main goals of our company is to bring innovation through its developed products and services.

Privacy and Security
CryptoDATA has a very strict policy regarding privacy and security. Our developed technologies and products have a proven track record in terms of protection and our cyber-security practices have won our users' and partners' trust worldwide. Our solutions are and always be oriented towards our users' privacy and security, as our company's statement - "privacy is the new order" underlies their development.

Integrity and Transparency
These are our most important qualities within the company. CryptoDATA's policy states that these values should be applied both between the company's employees, as well as within the relationship with its customers. Transparency is one of our most important values because it helps us keep our promises towards our users and partners and build a community based on respect.

Speed and Experience
For conducting its activity, CryptoDATA has gathered experience in what concerns data transfer's protection and, also, efficient ways of approaching and developing different solutions related to both internal and external projects. Both intelligent devices and users' needs are expanding with increasingly high speed, which leads to the opening up of new horizons in terms of industrial development. At CryptoDATA, we constantly strive to innovate industrial models and key technologies in order to provide top products and services that are imperatively required to be elegant, user-friendly and safe, and, most importantly, developed and delivered in accordance with the flow of the users' needs.

What do we offer to the world?

We create value to our customers. Together with our partners, we develop products based on innovative technologies in order to make our clients' lives easier and to keep them secured at the same time.

We ensure solutions for our customers' projects. The company delivers a premium service, that of transforming every client's idea into a finished product by, also, providing solutions for production, industrialization, sale and distribution.

We provide secure data transfer technologies. The company's main priority is its users' cyber-security and the protection of their privacy. By implementing CryptoDATA's patented technology – the VOBP, we have securely connected over 1500000 users worldwide in the year 2019.

We promote technology development and global digitalization. CryptoDATA's strategy is the investment in the human resource to help create innovative technology solutions. An educated community revolutionizes the world and favors work simplification.

We facilitate the creation of a decentralized ecosystem. The exchange of information represents the most important element in an ecosystem's development, and having decision-making power upon that exchange is the main element that favors the consolidation of a decentralized ecosystem.
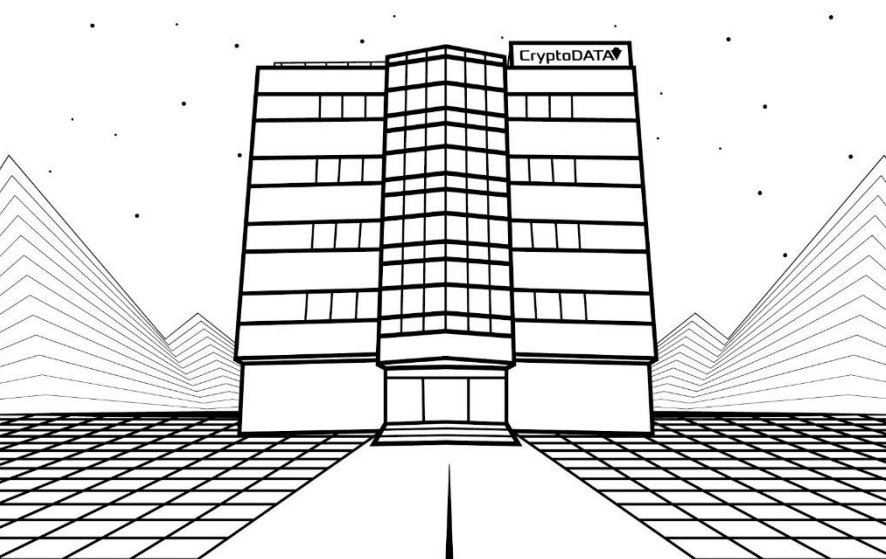
"Information has the highest value.

Ovidiu Toma
CryptoData **CEO**

CryptoDATA

The main characteristic of the modern world is speed - its speed to change and to evolve. As a representative of CryptoDATA, I make sure, and assure you as well, that the company's promises to its customers are and will continue to be honored and that we will pursue innovation through our technologies, products and services.

Our company's mission is to overcome technology's limitations and share the social progress with the entire community. The technology of informational communications is developing fast, thus it has become a necessity for both industries and corporations, as well as for any individual. Our goal is to create a global communication network for data transfer so as to overcome the limitations of current technology.

Nowadays, the digital sphere represents a new smart world that everyone is part of, whether being in the period of transition or active participation. Within this ecosystem, all devices are connected to one another - smartphones, laptops, cars, homes, everything.

Having accumulated extensive experience both in the blockchain and A.I. fields, CryptoDATA dared to embark on the industry of communication and information transfer in a unique way. The implementation of blockchain algorithms in the communications system has led to the development of the Voice Over Blockchain Protocol [VOBP] technology. This technology employs an innovative architecture which has taken information security to a new level. We consider that, currently, this is the most powerful and efficient data transfer algorithm and, to strengthen our claim, our company is offering a considerable amount of money to whomever is able to prove otherwise, through our recently launched hack-tournament.

Another necessity arising as a result of the digitalization and development of global technology is represented by electric power. Every device in the world needs power in order to fulfill the purpose for which it was created. Our solutions to be implemented will remove all the imposed limitations of the current technologies.

From my point of view, electric power represents an infinite resource that everyone has the right to produce, transfer or trade. The implementation of the Bank of Energy digital platform and Smart Battery Sharing concept will eliminate the borders of mobility. Electric cars will no longer be conditioned by recharging time and autonomy, smart portable devices will no longer become immobile when we need to restore their capacity, and electricity will become a digital asset similar to money and stocks.

The greatest challenge for us is the development and implementation of the Blockchain Interplanetary Decentralized Data Communication [BIDDC] ecosystem. This represents a complex objective which could be accomplished through determination and collaboration between the CryptoDATA's team and the blockchain users. Our work is oriented towards Research and Development and towards instilling knowledge to our users. The community's mission is to share the information, educate other members of the network and send us feedback concerning their experience and needs.

The testing of the first satellite in the Globar-LINK network brings us closer to the BIDDC technology's implementation and helps us overcome the current barriers. This satellite network will provide users global coverage with incredible speed which works on architecture based on complete security.

As we work towards our goals, we'll always employ a high level of cyber-security and users' protection solutions' development. Our promise, and especially mine, is that we'll invest all the necessary resources for creating an ecosystem that will provide privacy, decentralization, security and innovation to the people.

research & development

CryptoDATA
ELECTRONICS

Project & Activity Report

What is CryptoDATA?

A cutting-edge technology company focused on developing both internal and external projects. CryptoDATA offers design, development and production solutions within a wide range of fields.

Software
Our programming team develops software incorporating a complex architecture to offer solutions for every project's development.

Gaming
CryptoDATA develops both internal and external projects in the gaming industry, with technologies usable in PC and Mobile domains.

Graphic Design
Our company can analyze the products' objectives and visually develop a design that offers a unique user-experience through engineering design, cinematographic effects, as well as app and web interface and design. As a result of the vast experience acquired by each team member and of the wide variety of programs, CryptoDATA can provide development solutions in design stages.

Economics
In the digital era, transactional platforms' development represents a requirement. CryptoDATA develops platforms and offers solutions for connecting financial resources with the digital world. The complete solution package for customers may consist in: product analysis, identifying issues and target audiences and, also, prices and competitors' analysis.

Hardware
Our research and development center offers the possibility of developing electronic equipment and industrial machinery destined for both personal and industrial use.

Blockchain
CryptoDATA is a blockchain technology pioneer. Our company delivers solutions and strategies for the development and understanding of this new technology. With the help of our team, you can develop computing processing equipment, software and, also, financial platforms that employ blockchain technology.

CryptoDATA

Domains of activity

Software Development

Software development represents the key factor in the evolution of information technologies, having an applicability extended within every domain of activity.
The concept of "software development" is a very complex one and includes a series of processes for carrying out a functional project. Team CryptoDATA possesses all the necessary resources for being able to develop any type of software, both for internally designed products, as well as for the external ones.

Electronic Equipment Development

The development of electronic equipment is one of today's most dynamic industries. Due to constant innovations, products that once represented only an ideal, are now real and continuously expanding. Launching new products on the market represents every player's strategy for gaining capital.
CryptoDATA provides solutions for developing a wide range of electronic equipment, from PCB to complex industrial machines. Our company can develop both internally conceived products, as well as products designed in partnership or for other companies.

Security Solutions Development

Cyber-security represents the practice of protecting systems, networks and programs against digital attacks. These cyber-attacks are usually targeted at accessing, changing or destroying sensitive information, extorting money from users or disrupting normal business processes.
Nowadays, applying efficient measures of cyber-security is extremely difficult because there are more devices than people, so attackers are becoming more innovative.
Through its patented encryption technology - the Voice Over Blockchain Protocol [VOBP], CryptoDATA provides the perfect solution for securing and encrypting the communication channel between two connected devices. Identities' decentralization offers total privacy because the system doesn't employ servers for information distribution and validation.

Game Development

The video gaming industry represents a niche that has been facing a very accelerated growth over the past years due to the evolution of several areas of technology. Technological advancement of computers and mobile phones, together with the high internet speed for data transferring, has led to an increased supply and demand for video games.
Releasing a video game in its final form requires following a complex plan. CryptoDATA team offers solutions and has all the necessary resources for developing video games and delivering them in their final form. The company is substantially investing both in techniques', as well as in employees' evolution for creating such complex platforms.

Graphic Development

The digital graphics domain has progressed so much that physical borders and limitations have disappeared. The evolution of this technology has eased work, reduced execution time and released visible outstanding results, both in the film industry, as well as in the marketing industry.
Through its graphics department, CryptoDATA offers the possibility of developing projects starting from their concept state up to the state of graphic reality and transposition into virtual reality. Predicting a product's final form is much easier now through the computing power provided by Cloud - the data processing datacenter.

Financial Platform Development

Finance digitization has created a world full of new opportunities, however, even with this technological evolution, these features are not easy to reach for all people. In addition to the financial advice that CryptoDATA can offer, the company comes prepared, also, with a series of solutions for developing, instructing and implementing different platforms in order to ease both companies', as well as individuals' activities.
CryptoDATA's most important projects have been gold and electricity digitization and its placement on the market for being traded and exploited by every user, whether experienced or not.

Autonomous Decentralized Network Systems

To help the current community and expand the technology across the Globe, CryptoDATA is working on implementing the BIDDC communication system. The company's aim is to develop a decentralized satellite network named GLOBAR LINK. The launch of the first test satellite KDCT01 is planned in Q3-2020.
The technologies developed for setting up and expanding this project have as main mission the improvement by changing the current communication architecture between the worldwide spread devices. The BIDDC infrastructure is based on the implementation of the B-IPFS architecture, information processing being enabled with the help of the ZIXXAR artificial intelligence chip.

Artificial Intelligence and Cloud Computing Research and Development

CryptoDATA is currently investing more and more resources in the A.I field in order to develop innovative technologies. Together with both our partners and our services' users, we are building the largest decentralized network based on artificial intelligence that exploits both data processing resources from CryptoDATA's data-centers, as well as the resources of the users' devices.
The ZIXXAR chip working on the VOBP technology preserves the originality of the data. The decentralized validation doesn't allow data alteration, offering the self-repair function.

Electric Autonomous Vehicle Development

Technology development is a necessity for the evolution of humanity. For the CryptoDATA team, the electric vehicle represents a revolutionary innovation in the automobile field and, also, a great challenge.
Through the MOMENTUM models, our team brought solutions for some of the greatest deficits of electric vehicles. These deficits have led to innovative technologies' development that became part of the MOMENTUM ecosystem. All MOMENTUM electric vehicles are equipped with ultimate technologies developed by the CryptoDATA engineers to provide more safety, security and driving ease for the improvement of our customers' lives. CryptoDATA wants to turn every device into a validation node, so that each user becomes an active worker within the network. Thus, security becomes impenetrable given the data encryption and validation by several members of the network. The innovative technology that has been implemented into the MOMENTUM ecosystem is unique and revolutionizes the entire automotive system.
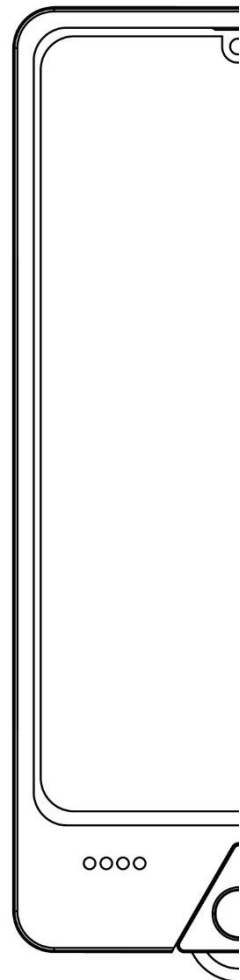
Area of Services

CryptoDATA exploits a wide range of programs and technologies for developing revolutionary products. The many challenges that have arisen over time determined the team to expand its development spectrum in order to achieve the desired goals. The most important assets of every technology company are adaptability and progress. The company's evolution is based on determining and motivating its employees throughout their search for innovative solutions for the new technologies' implementation. All this time, CryptoDATA has gained the necessary experience in using software applications and has expanded its activity's orientation towards different technologies that are useful for people.

Visual Art   **Security**   **Computer**   **Robotic**   **Web**   **Mobile**

Mobile App Development
- Android
- IOS
- Custom OS

Software development
- Windows
- Linux
- IOS

Custom OS Development
- Mobile
- Computer
- Industrial Devices

Drivers Development
- Specific
- Custom

Industrial & Home Robotic Development
- Software
- Hardware

Network Architecture
- Hardware
- Software
- Custom Infrastructure

Security Infrastructure
- Servers
- Software
- Hardware
- Custom systems

Update Services
- Mobile OS
- Computer OS
- Application
- Drivers

CryptoDATA

Test & Improvement solutions
- Web
- Mobile
- PC
- Game Platforms
- Financial Digital system
- Cybersecurity
- Network Systems

Web Development
- Custom Database
- Concept & Design
- Custom Architecture

Game Development
- Mobile Platform
- PC Platform
- Architecture
- Augmented Reality
- Virtual Reality

Prototype and Product Development
- Concept
- Construction
- Test
- Industrial
- Mass Production

Electricity Systems
- Green energy solutions
- Smart Energy

Hardware Equipment Development
- Mobile Phones
- Tablet
- Computers
- Processors
- Smartwatch
- ATM
- Communication Network
- PCBA

Artificial Intelligence Development
- Neural Network
- Machine Learning
- Deep Learning
- Custom Architecture

Autonomous Equipment Development
- Vehicles
- Robots
- Drones
- Networks
- Devices

Cinema Development
- CGI Concept & Design
- Movie
- Sound Composer
- Script Creator

Graphic Design & Concept
- UI & UX
- Web Design
- Animation

Programming Area

- Java
- Golang
- Typescript [AngularJS, Value.js]
- JavaScript
- Kotlin
- Flutter
- Python
- Kubernetes
- Docker
- Sql
- Objective C
- C
- C++
- C#
- Typescript
- React JS
- React Native
- HTML
- CSS
- Unix Shell Scripting
- MATLAB
- PHP
- Arduino

- Raspberry Pi
- Swift

- HSL Shaders
- Cinema 4D
- Zbrush
- Houdini
- DaVinci
- Blender
- Maya
- Adobe Illustrator
- Adobe Photoshop
- Adobe Premiere Pro
- Adobe After Effects
- SketchUp
- Unreal Engine
- Unity Engine
- Augmented Reality
- VR
- Motion 5
- Final Cut Pro
- Cubase

Business Activity

CryptoDATA's activity is oriented towards technology development and its implementation in society for offering users a unique experience. The most important moments that turned CryptoDATA into a global tech provider have been the datacenter's transformation into Europe's biggest GPU data-processing Cloud Center and, also, the creation and implementation of the Voice Over Blockchain Protocol [VOBP] technology into the IMPulse K1 smartphones.

As a development strategy, the company has invested into both keeping the existing customers through satisfying their needs and, also, into turning prospects into customers. The wide range of delivered products and services has been developed and implemented to make people's lives easier. Every technology, project and product launched by CryptoDATA has the customer at the center of their operation. Our team is trying to bring awareness to its users through recommendations and guides in order to keep them secured and informed about the benefits of the company's products, how they work and why they should rely on them.

Products & Services Distribution
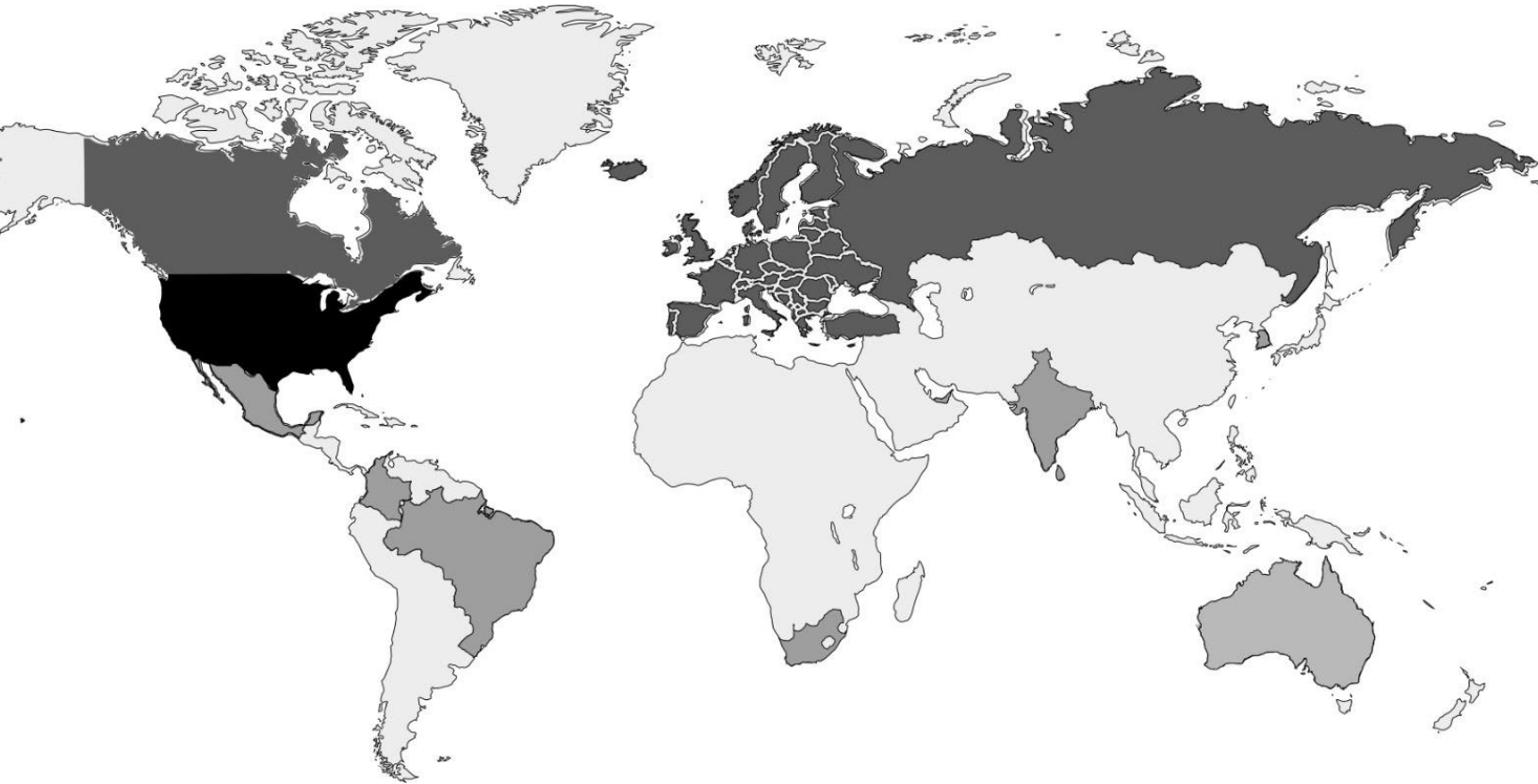
DEVICE	TECHNOLOGY	USERS
Impulse Phone	▼OBP	220.000
Whim Laptop	▼OBP	147.000
Whim Defender	▼OBP	42.000
CRYPTODATA BIDDC	MINING	250.000
CRYPTODATA VAULT	FINANCING	530.000
WISP ENCRYPTED	▼OBP	400.000
BANK OF ENERGY	ENERGY	200.000
TOTAL		1.789.000

14%

12.3%

22.3%

11.1%

TOTAL
1.789.000
USERS

8.2%

2.3%

30%
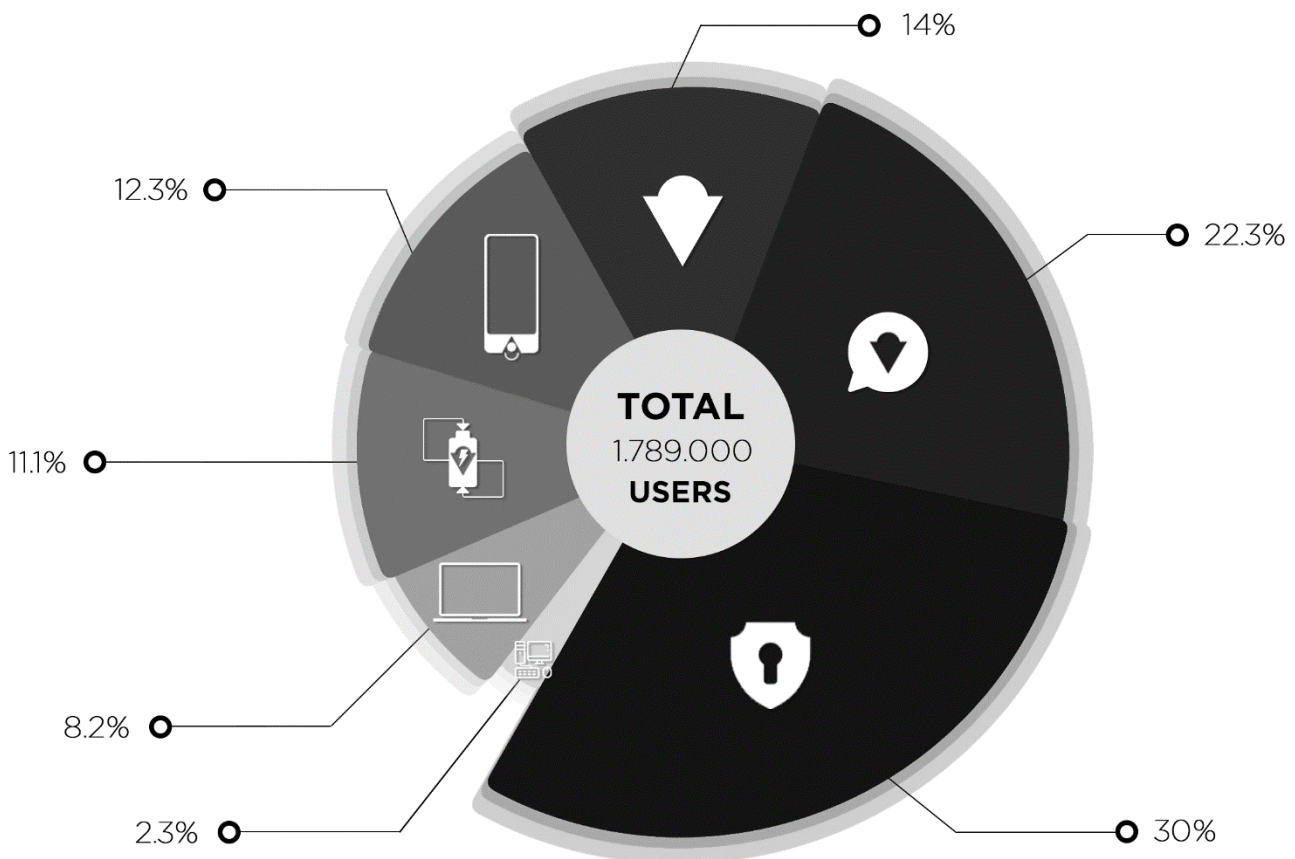
The future of **communication** is fully encrypted

PRIVACY

IS THE NEW
ORDER//
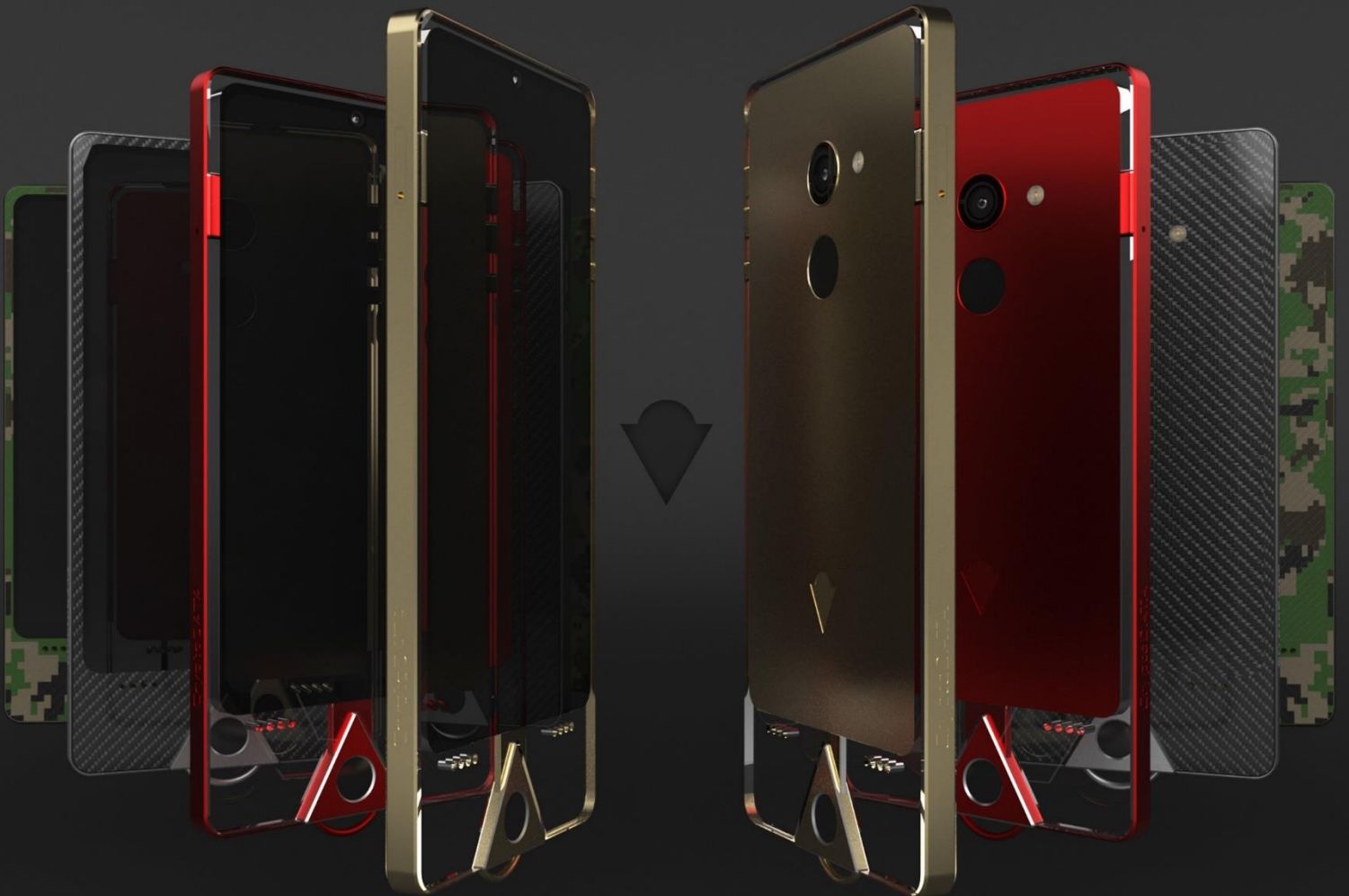
•·||‖|·• PULSE ·||·

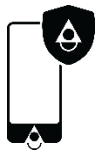## What is IMPulse K1 ?

IMPulse K1 is the world's first Blockchain smartphone that employs the Voice Over Blockchain Protocol [VOBP] technology to secure information transfer and protect users' data. IMPulse K1 is an encrypted smartphone that offers an outstanding user experience, the special design highlighting its distinctiveness.

Impulse K1 Core Values

Privacy
One of the core values of IMPulse K1 is privacy. You can rest assured; all your information is completely safe. When you buy the phone, you use your Private Key to generate a unique number, which represents your own digital ID.

Decentralization
IMPulse K1 doesn't rely on one central point of authority like the traditional smartphone. Instead of being kept on a server, all information is distributed across many different devices, guaranteeing the privacy of our users.

Security
The entire communication and file transfers are fully encrypted, from text messages, regular and video calls to photos, documents and video file transfers. The end-to-end encryption eliminates third parties and only relies on peer-to-peer links, allowing only the smartphone's user to access their private information.

Innovation
IMPulse K1 is the first smartphone to use blockchain technology in an innovative way, its main purpose being to ensure every user's safety. The VOBP technology is an exclusive technology, accessible for IMPulse K1 users only.

CryptoDATA▼

How Does it Work ?

IMPulse K1 is not only a regular smartphone, but an encrypted communication platform which can perform the necessary functions in accordance with the users' needs.
This platform incorporates all functions of a computer, mobile phone, data center and of a connection and transfer node.
The IMPulse K1 Smartphone uses asymmetric communication algorithms that incorporates blockchain's innovative architecture.
In order to preserve users' uniqueness, our smartphone employs the blockchain's protocol for configuring and protecting the encryption key. The IMPulse K1 represents only a node, all the necessary information being accessed with the Private Key's help.
The communication channel is peer to peer and employs the algorithms of blockchain ecosystems for choosing the encryption methods, therefore having increased protection through End to End encryption [E2EE].
The smartphone can be used in 2 ways:

The Regular Mode [**SIM Card**]

IMPulse K1 can be used like any regular smartphone because it also fulfills the functions of such devices. It can make a stable connection with other communication devices developed by different companies via SIM Card or Internet through applications such as WhatsApp, Telegram, etc.
Communication channels are insecure because the connection of telephone providers is used.
Multimedia functions are included in the IMPulse K1 platform to help the user in everyday life.
The smartphone supports the installation of applications compatible with Android and IOS systems depending on the external developers.

The Encrypted Mode [**VOBP**]

This mode offers users the unique experience of communicating, working and transferring files in the most secure way available on the market.
In order to work in encrypted mode, the phone incorporates in its architecture many innovative technologies.
VOBP is an encrypted communication technology that ensures a secure connection between 2 or more IMPulse K1 users. The blockchain architecture opens End-to-end encryption communication channels, the connection between users being peer-to-peer.
Final storage is based on B-IPFS technology and transforms IMPulse K1 into a secure portal to encrypted files using the Private Key.

CryptoDATA

Technology

VOBP Voice over Blockchain Protocol

VOBP is the cutting-edge security system that keeps data completely protected. Developed by CryptoDATA engineers, Voice Over Blockchain Protocol combines knowledge in a variety of scientific fields to increase smartphone security.

MATRIX ID

Master Key that allows each user to create unlimited phone numbers to be used within an infinity of organizations, all from a single device. Each organization can serve a distinct purpose, and always switching SIM cards is no longer necessary.

EWTL

Military security technology that ensures user privacy. It encrypts location and then only reveals it to a user-chosen contact, allowing for complete control over who can access this information.

B-IPFS STORAGE

Decentralized, peer-to-peer network enabling infinite global data storage, complete with backups and automatic versioning - data isn't just safe, it's also resilient since it doesn't exist on a central server. Plus, file sharing is always secured and communication always encrypted.

BR-LINK

Guaranteed backup for the encrypted data stored in the blockchain, particularly useful in retrieving files from a lost IMPulse K1 phone . Thus , this system enables user's permanent access to their secured data.

WORM GUARD

Technology for protection against cyber-attacks: **it shields each unique private key** from unwanted access and **encrypts all devices** making attempts.

CryptoDATA

Private KEYS

The IMPulse K1 comes with physical keys that are unique for every device. The users Private Key is part of the innovative CryptoDATA technology, used to access all the private blockchain data, the user being verified and granted access based on it.
You can use the same key both for your IMPulse smartphone and your WHIM laptop.

UNIQUE Private KEY

Represents your Virtual Identity and it helps you connect with other users when being inserted into the IMPulse K1 smartphone
The Unique Private Key provides you instant access to your information that is stored on blockchain and it is used for:
-Accessing the Vault application and its functions
-Connecting your WISP identities
-Communicating securely with other WHIM or IMPulse K1 Users through the WISP application
-Changing your Matrix IDs security settings
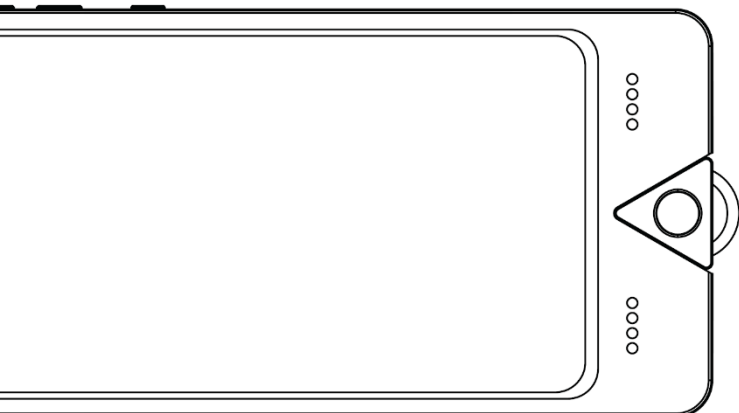-Accessing your Photos, files and other from B-IPFS stored information

RED BACKUP KEY

Described as the Master Key, it represents the heart of IMPulse K1, being the most important component used for:
-Configuring New Unique Private Keys
-Deleting Unique Private Keys
-Security changes within the user's account

24 BACKUP WORDS

Backup Words represent the main security element generated by the blockchain when an account is created. These words recover lost data and enable the owner to have full access to the related identities or information.

CryptoDATA

SPECIFICATIONS

Intended Use / Category:	GSM, GPRS, EDGE
RF output power:	GSM900: 31.77dBm, GSM1800: 30.31dBm, EDGE1800: 25.78dBm, EDGE1800: 27.20dBm (Conducted)
Frequency range (MHz):	GSM900: Tx: 880-915MHz, Rx: 925-960Mhz, DCS1800: Tx: 1710-1785MHz, Rx: 1805-1880MHz
Modulation:	GMSK, 8PSK
Antenna type:	Integral

Intended Use / Category:	WCDMA, HSDPA, HSUPA
RF output power:	WCDMA Band 1: 22.94dBm, WCDMA Band 8: 22.79dBm (Conducted)
Frequency range (MHz):	WCDMA Band 1: Tx: 1920-1980MHz, Rx: 2110-2170MHz, WCDMA Band 5: Tx: 824-849MHz, Rx: 869-894MHz
Modulation:	BPSK
Antenna type:	Integral

Intended Use / Category:	FDD-LTE Band 1, 3, 7, 8, 20, TDD-LTE Band 38, 40
RF output power:	FDD-LTE Band 1: 22.27dBm, FDD-LTE Band 3: 22.72dBm, FDD-LTE Band 7: 23.48dBm, FDD-LTE Band 8: 22.59dBm, FDD-LTE Band 20: 21.63dBm, TDD-LTE Band 38: 21.49dBm, TDD-LTE Band 40: 22..90dBm (Conducted)
Frequency range (MHz):	FDD-LTE Band 1: Tx: 1920-1980MHz, Rx: 2110-2170MHz, FDD-LTE Band 3: Tx: 1710-1875MHz, Rx: 1805-1880MHz, FDD-LTE Band 7: Tx: 2500-2570MHz, Rx: 2620-2690MHz, FDD-LTE Band 8: Tx: 880-915MHz, Rx: 925-960MHz, FDD-LTE Band 20: Tx: 832-862Mhz, Rx: 791-821MHz. TDD-LTE Band 38: Tx: 2570-2620MHz, Rx: 2570-2620MHz, TDD-LTE Band 40: Tx: 2300-2400MHz, Rx: 2300-2400MHz
Modulation:	QPSK, 16QAM
Antenna type:	Integral

Intended Use / Category:	Wi-Fi (802.11b, 802.11g, 802.11n-HT20/40)
RF output power:	Max. 15.30dBm (EIRP)
Frequency range (MHz):	2412-2472MHz for 802.11b/g/n (HT20), 2422-2462MHz for 802.11n (HT40)
Modulation:	DBPSK, BPSK, DQPSK, QPSK, 16QAM, 64QAM
Antenna type:	Integral

Intended Use / Category:	Wi-Fi (802.11a, 802.11n - HT20/40, 802.11ac-VTH80)
RF output power:	Max. 12.43dBm (EIRP)
Frequency range (MHz):	5180-5240MHz
Modulation:	BPSK, QPSK, 16QAM, 64QAM, 256QAM
Antenna type:	Integral

Intended Use / Category:	Wi-Fi (802.11a, 802.11n - HT20/40; 802.11ac-VTH80)	Intended Use / Category:	GPS
RF output power:	Max. 11.12dBm (EIRP)	Frequency range (MHz):	1575.42MHz Receiving
Frequency range (MHz):	5745-5825MHz	Antenna type:	Integral
Modulation:	DBPSK, BPSK, DQPSK, QPSK, 16QAM, 64QAM		
Antenna type:	Integral		

Intended Use / Category:	Bluetooth v5.0	Intended Use / Category:	NFC
RF output power:	6.09dBm (EIRP)	RF output power:	21.86dBuA/m(@3m)
Frequency range (MHz):	2402-2480MHz	Frequency range (MHz):	13.56MHz
Modulation:	GFSK, Pi/4 DQPSK, 8DPSK	Modulation:	ASK
Antenna type:	Integral	Antenna type:	Integral

SPECIFICATIONS

◎	Network Technology	GSM, WCDMA, CDMA/EVDO, HSPA, LTE
▱	Display	5.71" HD+Touchsreen
⧉	Platform	CryptoDATA™ O.S.
▣	Chipset	MTK
▥	CPU	MTK6762, Octa-Core
▥	GPU	IMG GE8320
▤	Memory	64 + 32 + 32 GB
▦	RAM	4 GB
▮	USB	Type-C
◉	Camera (Front/Back)	5MP/13MP
▯	Battery	3400mAh
⌖	Wi-Fi	802.11 a/b/g/n/ac
▤	Dual SIM	Dual Nano SIM
◉	GPS	GPS & GLONASS

The future of **communication** is fully encrypted

ıｌ|**ı|ı|ı|**PULSE

PIXEL
ARMY
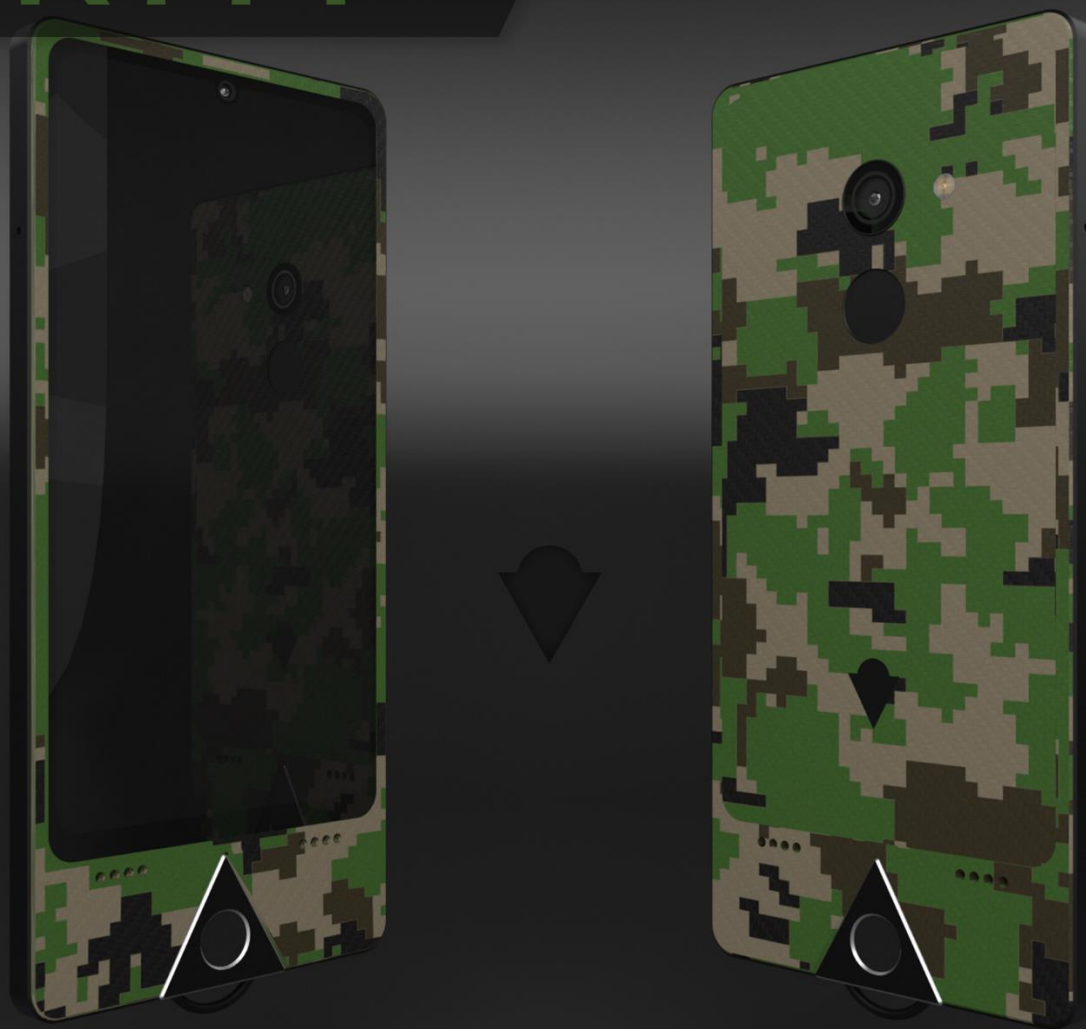
Combat Design
Groundbreaking

SOFTWARE

CryptoDATA OS

CryptoDATA OS is the operating system developed by CryptoDATA for the company's commercialized electronic equipment. It is a system purpose-built for enabling devices' connection to Blockchain technology, its security being protected by WORM Guard, a software integrated in the source code's architecture.

This operating system uses the decentralized computing power cloud and Artificial Intelligence in order to procure current information regarding the newly arisen cyber-threats and needs.

The Update system is integrated into the CryptoDATA OS, representing a strongly-secured and protected internal service. CryptoDATA develops its products' software, applications, operating system and update service internally only, the access of an external, third-party company or partner not being granted. This security policy is rigorously respected in order to protect users' identities and data integrity.
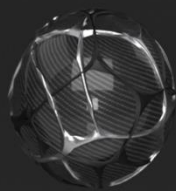
CryptoDATA's developed operating system and applications are specially conceived to ensure both user-protection and their needs' satisfaction. The IMPulse K1 platform grants its users the possibility of installing certain third-party applications available on regular smartphones that employ the Android or IOS operating systems, to enable the communication with other devices, as well. CryptoDATA OS comes together with the suite of CryptoDATA's internally developed and secured system applications.

VAULT

Vault is a system application which encrypts IMPulse K1's Private Keys, creates the users' Blockchain account identities and enables the secured deposit of their digital assets.

STORE

CryptoDATA Store is a digital distribution platform developed and managed by CryptoDATA Tech Co. This application allows IMPulse K1 users to browse, download and install apps designed by CryptoDATA or by other priorly verified developers.

WISP

WISP is a system application that transforms the IMPulse K1 Smartphone into a secure and private communication platform due to the VOBP technology employed. The application's user-friendly interface enables users to communicate via voice or video calls and transfer text messages, files and documents in a private and accessible way.

B-IPFS

B-IPFS is a service developed by CryptoDATA that operates in a decentralized mode and can be accessed using the IMPulse K1 or WHIM devices. This technology enables users to securely store all their information and documents within the Blockchain, accessing them instantly through the Private Key's identity.

CryptoDATA

CONTACTS

"Contacts" is a system application developed by CryptoDATA through which the users can securely access both the phone numbers and the encrypted identities of their contacts. The safe access to this application is ensured by the Private Encryption Key.

MANAGER

"Manager" is a system application that enables users to securely batch uninstall and backup applications. The application quickly lists all the applications installed on the IMPulse K1 device, displaying information about each one of them, allowing users to decide whether to un-install, backup or read detailed information about each app.

MESSAGES

"Messages" is a system application developed by CryptoDATA that allows the IMPulse K1 users to communicate with other regular smartphone-users. The app works only if a Nano-SIM card is inserted into IMPulse K1. This communication channel is not encrypted. The entire information-flow uses the SIM Network; therefore, users' security and privacy are affected by the intervention of a third-party network provider.

WORKPLACE

"Workplace" is a system application integrated into the IMPulse K1 Smartphone that enables users to store, sync and share work files easily and securely with the members of their organizations. Any folder can be linked to a Workplace Group to keep members updated as the users' files and documents suffer modifications. When new people are added to the group, they will automatically get access to the users' shared folders.

B-EMAIL

"B-EMAIL" is a system application that transforms the IMPulse K1 Smartphone into a secured and private electronic mailing platform due to the VOBP technology employed. The apps' user-friendly interface enables users to communicate and transfer messages, files, documents and photos in a private and accessible way inside their organizations.

CALENDAR

"Calendar" is a system application with optional CalDAV synchronization that provides users everything they need for organizing their daily schedule. This app enables the creation of recurring events and set-up of reminders, also displaying week numbers. The Storage permission is needed only for exporting or importing events from .ics files. The Contacts permission is needed only at importing contacts' birthdays and anniversaries.

CryptoDATA

GALLERY

Gallery is a system application developed by CryptoDATA which stores all users' photos and videos into a secured place. This application allows users to upload very fast all files in the blockchain Cloud.

SETTINGS

Settings is a system application developed by CryptoDATA which enables the configuration of IMPulse K1. By accessing this application users can upgrade the operating system, set extra protection with more security options, connect IMPulse K1 with other devices and customize language and display.

CLOCK

"Clock" is a system application that includes all timing-related functions. This app enables users to set alarms, add timers, run a stopwatch and, also, keep track of time around the world by displaying different time zones.

MERCHANT

"Merchant" is a financial system application that offers bank accounts in different currencies and enables users to make electronic payments fast and securely. The app also provides access to cryptocurrencies.

MUSIC

"Music" is a secure system application that provides access to millions of songs. This application enables users to listen to music albums, playlists, and podcasts wherever they are, for free.

CAMERA

"Camera" is a system application developed by CryptoDATA that enables users to capture their life's moments through photos and videos, to edit and store them privately and securely.

DOCUMENTS

"Documents" is a system application that includes a suite of secure office programs created by CryptoDATA made for easy unit access and a private office experience on the go.

HELP

"Help" is a system application developed by CryptoDATA through which users can learn how to use their IMPulse K1 at maximum performance and discover all its functions from the basics to the most advanced.

CryptoDATA

Custom Functions for IMPulse K1

Private Organization
CryptoDATA offers users the opportunity to create their own private organization and offers the entire architecture and consulting solution for autonomous management. In the private organization, the owner can implement its own algorithms, functions or applications according to needs.
Through this solution, the user is offered the server hardware architecture, the theoretical modules for staff training but also the terminals for encrypted communications.

Matrix ID Flexo
User identities can be customized by the owner so that several organizations can be accessed with the same identity at the same time depending on the access level set by the users of the organizations.

Encryption Algorithm Integration
CryptoDATA offers the possibility of integrating external encryption algorithms proposed or owned by the client in any of the functions of the secure communications system. At the same time, the company can develop new encryption algorithms according to customer requirements to be implemented in different sequences or in the devices necessary for the end user. The cryptographic architecture can be customized and improved according to the operational requirements and needs

Custom Apps
Devices developed by CryptoDATA can support user applications for installation to increase efficiency and operational performance. At the same time, the company offers availability in the development of custom applications according to customer requirements.

New devices development
This service offers customers the opportunity to choose to implement the cryptographic algorithm in any device. Through a detailed analysis we can offer the secure communication solution in the following types of devices:

· Old platform
· New platform
· Custom platform

Private management for organization
This solution gives the user the ability to control the functions and users of the organization he owns without affecting its security. In this function, access panels can be developed on the security Layers for a high-performance control.

Autonomous System
CryptoDATA offers the availability to create a private server and device architecture and offers administration and management courses for client operators. All this solution offers an autonomous management to the owner of the organization in order to carry out the activity without external operators.

Secret Group Links
This option can be implemented by CryptoDATA in different private organizations to be able to communicate securely in groups from different independent organizations. This feature generates new encryption keys that can be exchanged between organizations in order to organize secure conferences without affecting the integrity of organizations or their members.

CryptoDATA

Custom panel

Control panels can be developed for private organizations for an efficient and total management of users and their activity

- Tracking Location & Services
- Conversation Report
- Account Generator
- Organization Generator

Password Generator Vault & Wisp

For Increased Security CryptoDATA can provide generation methods for access passwords in WISP or VAULT. Passwords can be generated by other devices or by the private network administrator and transmitted through other encrypted communication methods. This method can be used to extra secure through an asymmetric and unique layer the data of the user's device and thus the same access code will not be used. This feature can be used by operating users when there is a risk of a device being lost.

VPN Architecture & Panel

CryptoDATA can develop for users a customized Virtual Private Network Access architecture to secure the connection routes of the user and the organization. This method is used to hide the real location and to be able to access any service regardless of where you want to communicate.

IMEI Changer - Random & Organization

This function is valid only in the private organization and can be used only if the owners of the organization have special authorizations depending on the regulations. It is a function that is implemented for operational users to be able to connect in a secure way in GSM networks without being able to be discovered. Changing the IMEI can be done by both the user and the network administrator depending on needs or situations.

MAC WIFI – Changer

This function can be implemented in any device that uses the WIFI connection for internet connection or for data transfer. It is a function used by operative users to leave no traces and not to be discovered at the time of a connection. The MAC change can be made by the user or by the network administrator depending on the need and situation.

Panic Code

This function is an important security asset that can be implemented both by PIN code software and hardware by pressing a physical button in a certain way. The panic method can be implemented in several ways:
· May send an alarm message to the network administrator or to a designated person to start other operations
· It can delete or reset the phone and its identities by returning to the factory settings
This function can be implemented in operational users who can transmit certain signals at necessary times.

- SOS
- Wipe Phone
  - Code
  - Admin

MATRIXID REMOVE: Automatic & Admin

The identity management function can be implemented in a control panel for the administrator of a private network.
Through this function you can set rules for generating and deleting identities depending on time or operational areas.

CryptoDATA

Push to TALK Group

CryptoDATA can configure the devices created by the company in a special way. The Push To Talk function can be used by users to create groups in which real-time communication is required. Thus, the phone turns into a station and all users are securely connected for an exchange of new encryption keys. Through this method, the devices are transformed into Transmission-Reception Stations through an encrypted and unique communication channel.

Large Group Conference - Video

This feature gives the device interoperability between organizations. Thus, secure and encrypted video conferences can be organized between the members of different organizations. This feature can be used by separate institutions that want fast communication without allowing others access to their organizations.

IMPulse K1 Advantages

Security
Encryption
Decentralization
Privacy
Mobility
Flexibility
interoperability
Adaptability
Does not require the use of a SIM Card
Easy data recovery
Availability
Support for Custom Development and Implementation
WorldWide bandwidth for connectivity

IMPulse K1 is a customizable secure communications platform according to the needs and requirements of users
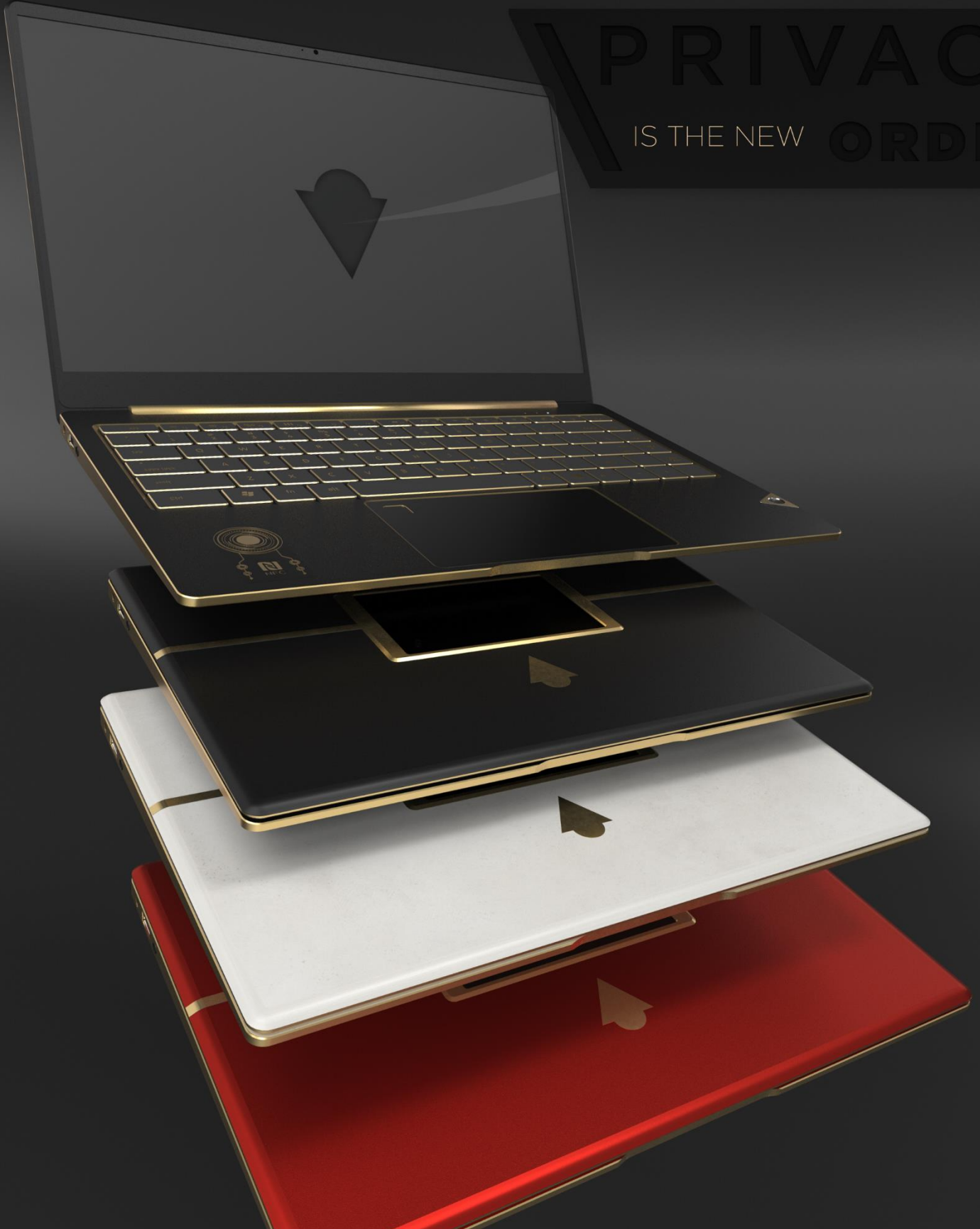
CryptoDATA has total control over the hardware components, over the software and over the operation and connectivity of the devices and between the devices.

The company offers its availability to control and test all cryptographic methods but also the hardware and software components of smartphones.

CryptoDATA

What is WHIM ?

WHIM is the first laptop that offers integral protection in accessing and transmitting data with the help of the physical encryption key. The system architecture's base is represented by the [VOBP] technology. WHIM has a unique design and offers a particular experience for personal and business organization use

WHIM Core Values

Privacy
One of the core values of WHIM is privacy. You can rest assured; all your information is completely safe. When you buy the laptop, you use your Private Key to generate a unique number, which represents your own digital ID.

Decentralization
WHIM doesn't rely on one central point of authority like the traditional laptop. Instead of being kept on a server, all information is distributed across many different devices, guaranteeing the privacy of our users.

Security
The entire communication and file transfers are fully encrypted, from text messages, regular and video calls to photos, documents and video file transfers. The end-to-end encryption eliminates third parties and only relies on peer-to-peer links, allowing only the encrypted user to access their private information.

Innovation
WHIM is the first Laptop to use blockchain technology in an innovative way, its main purpose being to ensure every user's safety. The VOBP technology is an exclusive technology, accessible for encrypted users only.

Mobility
WHIM comes as an addition to the IMPulse K1 smartphone. The portal to the blockchain opens the user account with the help of the Private KEY to have instant and secure access anytime and anywhere.

CryptoDATA▼

How Does it Work ?

WHIM allows users to access the blockchain technologies in order to enjoy maximum product performance.

VOBP is the communication protocol that opens the encrypted communication channel to send messages, make video calls, send emails, documents and files.

B-IPFS is a technology made available as a service through WHIM or IMPulse. It is the engineering that allows users to store on blockchain an infinite number of files. This service allows you to work directly on files or allows them to be downloaded to your device using the Private Key.

In order to provide complete protection to its users, WHIM comes with 2 different operating systems on Hardware. Through this device we try to offer the connection of 2 ecosystems necessary to the needs of people.

Regular Mode [**O.S**]

WHIM offers users the possibility to stay connected with other devices that do not use blockchain technology. It provides a separate storage to install the desired operating system (Windows, Ubuntu, etc.) and to configure the device according to their needs.

Due to this feature, the user can install and configure the laptop in the same way as any computer available on the market. This way of operating offers WHIM a great advantage as this laptop can be used in any field of activity.

Encrypted Mode [**CryptoDATA O.S**]

This mode offers users the unique experience of communicating, working and transferring files in the most secure way available on the market.

In order to work in encrypted mode, the laptop incorporates in its architecture many innovative technologies.

VOBP is an encrypted communication technology that ensures a secure connection between 2 or more Whim and IMPulse K1 users. The blockchain architecture opens End-to-end encryption communication channels, the connection between users being peer-to-peer. Finisher storage is based on B-IPFS technology and transforms WHIM into a secure portal to encrypted files using Private Key.

Technology

VOBP Voice over Blockchain Protocol

VOBP is the cutting-edge security system that keeps data completely protected. Developed by CryptoDATA engineers, Voice Over Blockchain Protocol combines knowledge in a variety of scientific fields to increase smartphone security.

MATRIX ID

Master Key that allows each user to create unlimited phone numbers to be used within an infinity of organizations, all from a single device. Each organization can serve a distinct purpose, and always switching SIM cards is no longer necessary

EWTL

Military security technology that ensures user privacy. It encrypts location and then only reveals it to a user-chosen contact, allowing for complete control over who can access this information.

B-IPFS STORAGE

Decentralized, peer-to-peer network enabling infinite global data storage, complete with backups and automatic versioning - data isn't just safe, it's also resilient since it doesn't exist on a central server. Plus, file sharing is always secured and communication always encrypted.

BR-LINK

Guaranteed backup for the encrypted data stored in the blockchain, particularly useful in retrieving files from a lost device . Thus, this system enable user's permanent access to their secured data .

WORM GUARD

Technology for protection against cyber-attacks: **it shields each unique private key** from unwanted access and **encrypts all devices** making attempts.

CryptoDATA

Private KEYS

The WHIM comes with physical keys that are unique for every device. The users Private Key is part of the innovative CryptoDATA technology, used to access all the private blockchain data, the user being verified and granted access based on it.
You can use the same key both for your IMPulse smartphone and your WHIM laptop.

UNIQUE Private KEY

Represents your Virtual Identity and it helps you connect with other users when being inserted into the WHIM Laptop
The Unique Private Key provides you instant access to your information that is stored on blockchain and it is used for:
-Accessing the Vault application and its functions
-Connecting your WISP identities;
-Communicating securely with other WHIM or IMPulse K1 Users through the WISP application
-Changing your Matrix IDs security settings
-Accessing your Photos, files and other from B-IPFS stored information

RED BACKUP KEY

Described as the Master Key, it represents the heart of WHIM, being the most important component used for:
-Configuring New Unique Private Keys
-Deleting Unique Private Keys
-Security changes within the user's account

24 BACKUP WORDS

Backup Words represent the main security element generated by the blockchain when an account is created. These words recover lost data and enable the owner to have full access to the related identities or information

CryptoDATA

FEATURES

Software

⚙ CryptoDATA O.S.

🛡 Encrypted Blockchain - Email VOBP

▦ Blockchain Workplace

🗄 B-IPFS Storage Cloud

🔒 Encrypted Web Navigation

👤 Blockchain Social Media Platform

🗄 Vault Box

👛 Wallet Manager

⬇ Cryptodata App Market Place

Hardware

👁 Physical Activation - Microphone/Camera

📍 Unique Private Key

🔌 Universal Charger

☌ Touchpad Fingerprint

▭ Second LCD Display

▦ SIM Card Slot

CryptoDATA▼

SPECIFICATIONS

	Main Display	14.1" 1920 x 1080 FHD
	Second Display	5" 1280 x 1080 IPS
	Processor	Intel i3 8th Gen
	RAM	8 GB
	Battery	7.4V / 6000mAh
	Camera	2 MP
	Connectivity	Bluetooth / Wi-Fi Wi-Fi - 2 BANDS ETHERNET
	SIM Card	4G
	Fingerprint	
	NFC	
	SSD M.2 No.1 Encrypted	256 GB
	Operating System	CryptoDATA O.S.
	SSD M.2 No.2 Regular	256 GB
	Operating System	Windows 10
	GPU	INTEL HD 5500
	Case	Full metal
	USB	2x Type A 2x Type C

CryptoDATA

The future of **communication** is fully encrypted

WHIM
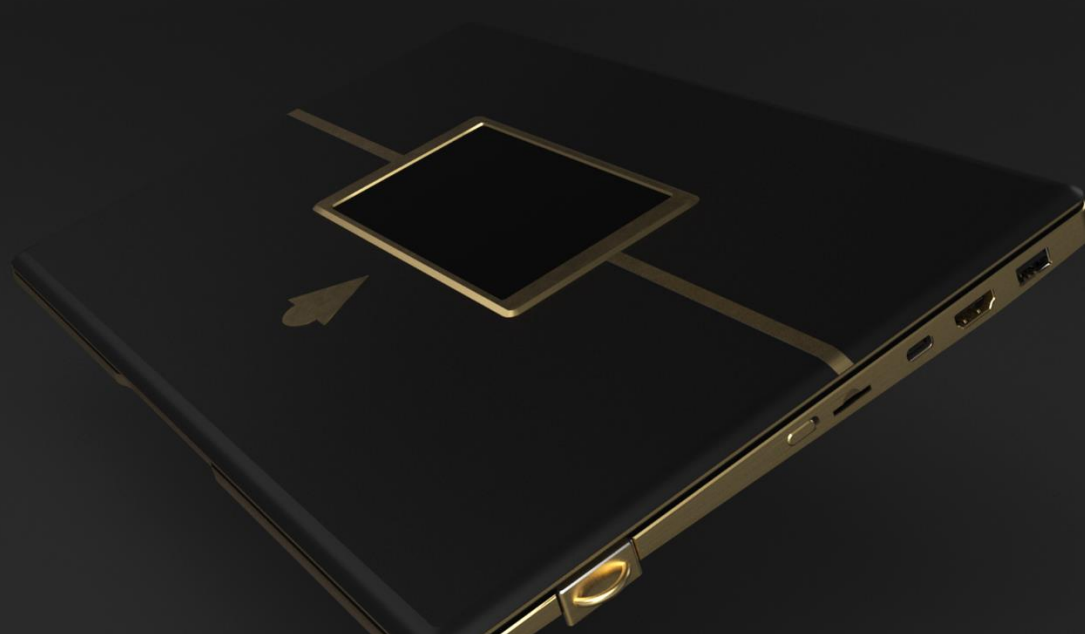
PRIVACY

IS THE NEW ORDER

The future of **communication** is fully encrypted

WHIM

PRIVACY
IS THE NEW ORDER

WHM

PRIVACY
IS THE NEW ORDER

ACCESSORIES

WHIM

CryptoDATA OS

CryptoDATA OS is the operating system developed by CryptoDATA for the company's commercialized electronic equipment. It is a system purpose-built for enabling devices' connection to Blockchain technology, its security being protected by WORM Guard, a software integrated in the source code's architecture.

This operating system uses the decentralized computing power cloud and Artificial Intelligence in order to procure current information regarding the newly arisen cyber-threats and needs.

The Update system is integrated into the CryptoDATA OS, representing a strongly-secured and protected internal service. CryptoDATA develops its products' software, applications, operating system and update service internally only, the access of an external, third-party company or partner not being granted. This security policy is rigorously respected in order to protect users' identities and data integrity.

CryptoDATA's developed operating system and applications are specially conceived to ensure both user-protection and their needs' satisfaction. The WHIM platform grants its users the possibility of installing certain third-party applications available on regular computers that employ the WINDOWS or Ubuntu operating systems, to enable the communication with other devices, as well. CryptoDATA OS comes together with the suite of CryptoDATA's internally developed and secured system applications.

VAULT
Vault is a system application which encrypts WHIM's Private Keys, creates the users' Blockchain account identities and enables the secured deposit of their digital assets.

STORE
CryptoDATA Store is a digital distribution platform developed and managed by CryptoDATA Tech Co. This application allows WHIM users to browse, download and install apps designed by CryptoDATA or by other priorly verified developers.

WISP
WISP is a system application that transforms the WHIM Laptop into a secure and private communication platform due to the VOBP technology employed. The application's user-friendly interface enables users to communicate via voice or video calls and transfer text messages, files and documents in a private and accessible way.

B-IPFS
B-IPFS is a service developed by CryptoDATA that operates in a decentralized mode and can be accessed using the IMPulse K1 or WHIM devices. This technology enables users to securely store all their information and documents within the Blockchain, accessing them instantly through the Private Key's identity.

CryptoDATA

CONTACTS

"Contacts" is a system application developed by CryptoDATA through which the users can securely access both the phone numbers and the encrypted identities of their contacts. The safe access to this application is ensured by the Private Encryption Key.

MESSAGES

"Messages" is a system application developed by CryptoDATA that allows the WHIM users to communicate with other regular smartphone-users. The app works only if a Nano-SIM card is inserted into WHIM SIM Card Slot.
This communication channel is not encrypted. The entire information-flow uses the SIM Network; therefore, users' security and privacy are affected by the intervention of a third-party network provider.

B-EMAIL

"B-EMAIL" is a system application that transforms the WHIM Laptop into a secured and private electronic mailing platform due to the VOBP technology employed. The apps' user-friendly interface enables users to communicate and transfer messages, files, documents and photos in a private and accessible way inside their organizations.

MANAGER

"Manager" is a system application that enables users to securely batch uninstall and backup applications. The application quickly lists all the applications installed on the WHIM device, displaying information about each one of them, allowing users to decide whether to un-install, backup or read detailed information about each app.

WORKPLACE

"Workplace" is a system application integrated into the WHIM Laptop that enables users to store, sync and share work files easily and securely with the members of their organizations. Any folder can be linked to a Workplace Group to keep members updated as the users' files and documents suffer modifications. When new people are added to the group, they will automatically get access to the users' shared folders.

CALENDAR

"Calendar" is a system application with optional CalDAV synchronization that provides users everything they need for organizing their daily schedule. This app enables the creation of recurring events and set-up of reminders, also displaying week numbers. The Storage permission is needed only for exporting or importing events from .ics files. The Contacts permission is needed only at importing contacts' birthdays and anniversaries.

CryptoDATA

GALLERY
Gallery is a system application developed by CryptoDATA which stores all users' photos and videos into a secured place. This application allows users to upload very fast all files in the blockchain Cloud.

SETTINGS
Settings is a system application developed by CryptoDATA which enables the configuration of WHIM. By accessing this application users can upgrade the operating system, set extra protection with more security options, connect WHIM with other devices and customize language and display.

CLOCK
"Clock" is a system application that includes all timing-related functions. This app enables users to set alarms, add timers, run a stopwatch and, also, keep track of time around the world by displaying different time zones.

MERCHANT
"Merchant" is a financial system application that offers bank accounts in different currencies and enables users to make electronic payments fast and securely. The app also provides access to cryptocurrencies.

MUSIC
"Music" is a secure system application that provides access to millions of songs. This application enables users to listen to music albums, playlists, and podcasts wherever they are, for free.

CAMERA
"Camera" is a system application developed by CryptoDATA that enables users to take photos and videos, to edit and store them privately and securely. This function allows users to communicate live with other users through communication channels.

DOCUMENTS
"Documents" is a system application that includes a suite of secure office programs created by CryptoDATA made for easy unit access and a private office experience on the go.

HELP
"Help" is a system application developed by CryptoDATA through which users can learn how to use their WHIM at maximum performance and discover all its functions from the basics to the most advanced.

CryptoDATA

AC ADAPTOR INPUT   USB 3   HEADSET

PRIVATE KEY   MIC&CAMERA ON/OFF   SD CARD READER   USB C   HDMI   USB 3
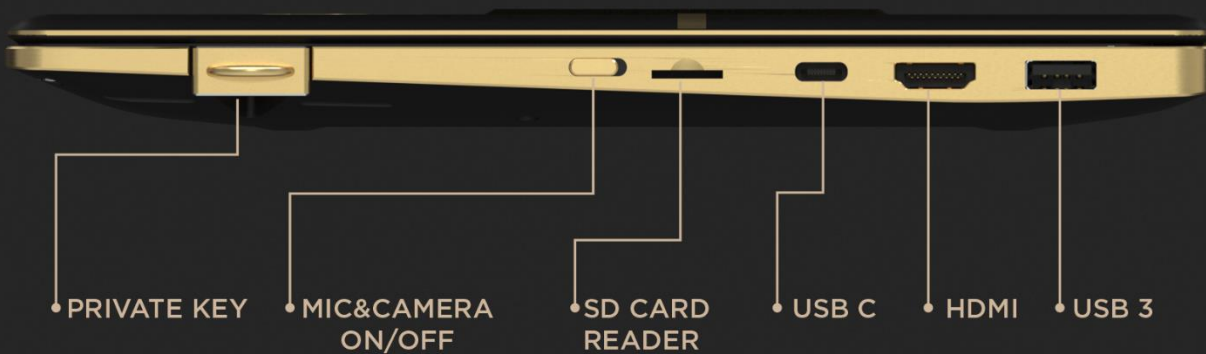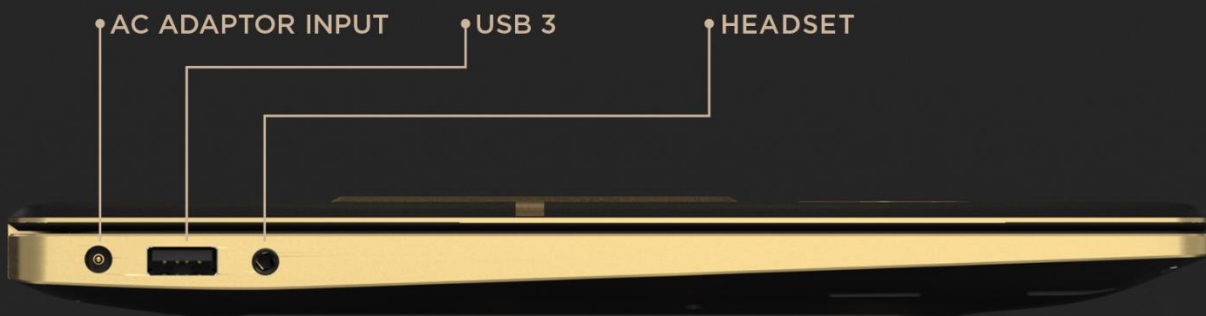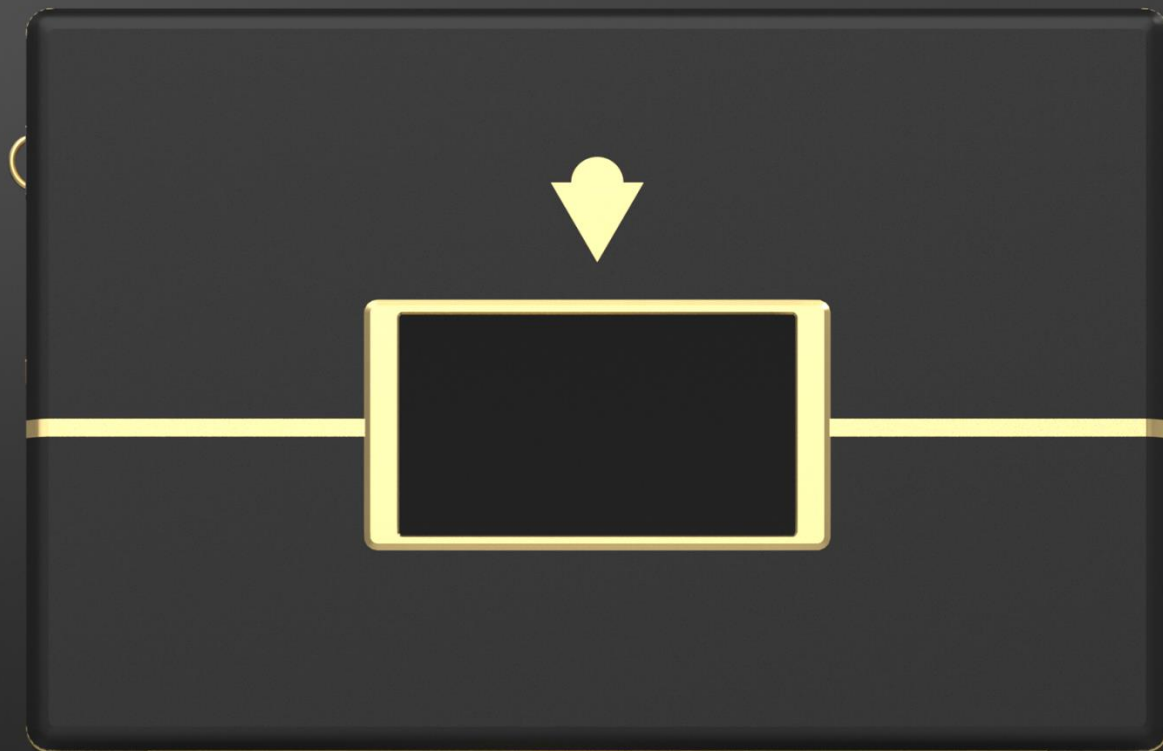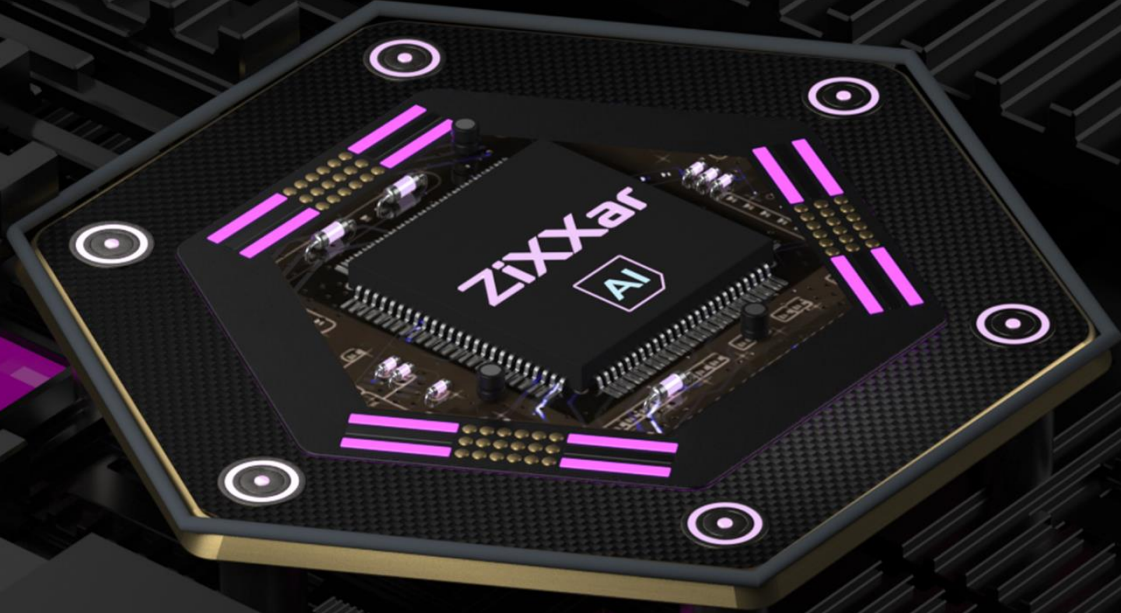
What is ZIXXAR

ZIXXAR is a device built on an artificial intelligence architecture that learns and develops continuously in order to simulate human intelligence in any circumstances.

Why ZIXXAR

The adoption of the A.I. technology and its integration in ZIXXAR are aimed to develop and improve consumers' necessary services and to reduce the related operational costs. This objective is attainable and can develop fast if the number of users, pieces of information and applications increases.

ZIXXAR in CryptoDATA

CryptoDATA has launched the ZIXXAR artificial intelligence chip providing the edge computing service for the company's commercial devices. This is the first model of A.I. COP developed by CryptoDATA which is used for deep learning, requiring a low resource consumption and having a small size.
ZIXXAR is built to help small-sized devices achieve advanced deep learning technologies through quantization tools and compilers. The ZIXXAR chip uses the blockchain architecture in its operational algorithm, transforming every device into a secured validation node that contributes to the stable and efficient functioning of the ecosystem.
Through the implementation of the Global digitalization concept in which all devices use the ZIXXAR chip technology, CryptoDATA seeks the development of a new decentralized community that will actively participate/work in the development of practical and innovative technological solutions.

What is A.I

Artificial intelligence represents a machine's ability to perceive and mimic human cognitive functions. In order to achieve this, the machine must learn from detected patterns, adapt the newly gathered information, take action and improve to become aware of the process.

The ZIXXAR architecture

The built-in multiprocessor system for computing uses an innovative methodology for designing programmable processing cores with associated memories connected through blockchain. This architecture is purpose-built for the instruments and devices that communicate through VOBP.
This architecture was built for the general purpose of scientific computing and has been adopted to fulfill the purposes of applications and platforms for transmission and processing of encrypted signals. This increases the performance level of the integrated systems and attains an efficient yield. The irregular memory system lowers power consumption and software control provides real-time predictability for system calculations.

INPUT LAYER

HIDDEN LAYER A

HIDDEN LAYER B

HIDDEN LAYER X

HIDDEN LAYER Z

OUTPUT LAYER

CLOUD POOL

EXTERNAL
DATACENTER NODE

ASIC

GPU

FPGA

CPU

CRYPTODATA
DATACENTER

ASIC

GPU

FPGA

CPU

CryptoDATA

Left Panel
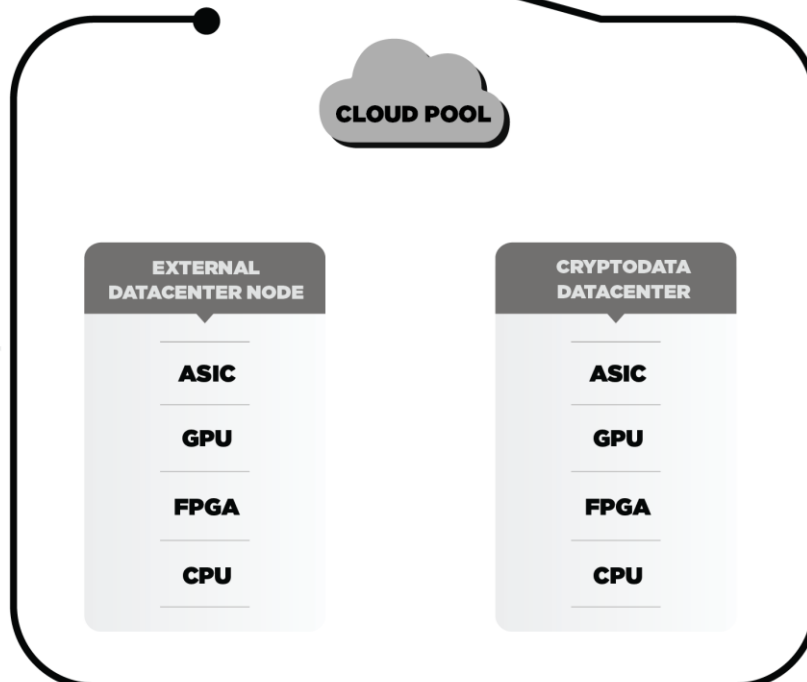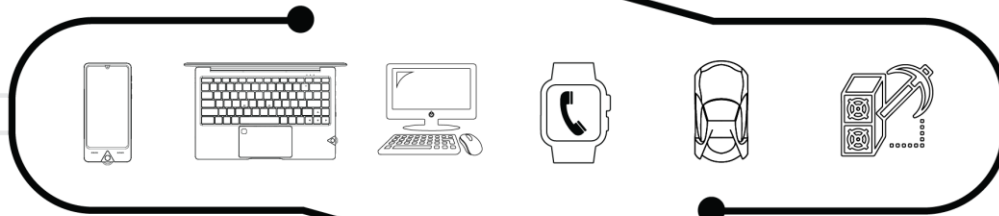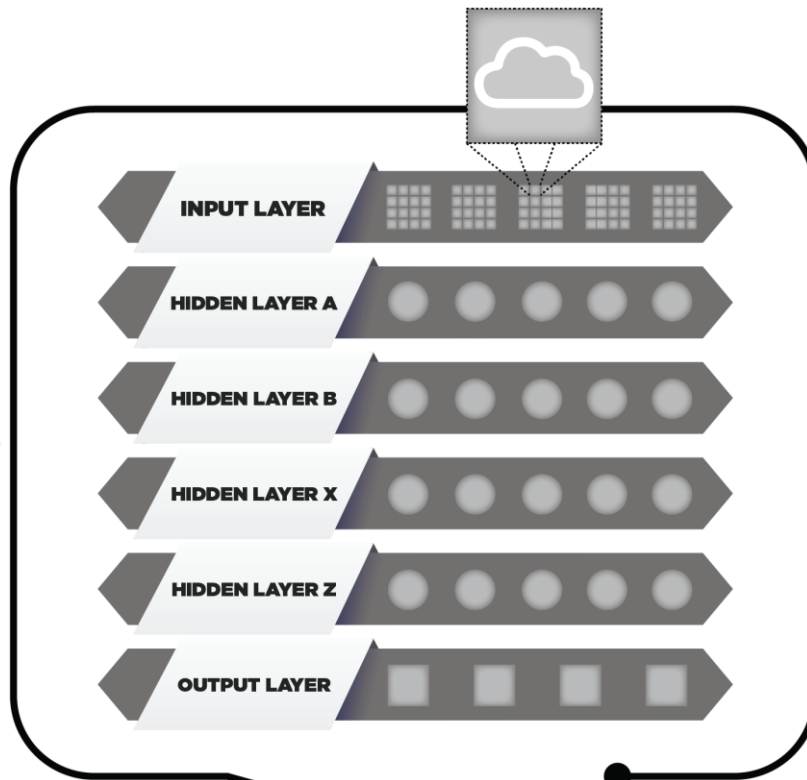
CRYPTODATA OS

CRYPTODATA DRIVERS

HIGH PERFORMANCE

COMPUTING ACCELERATION

PACKAGE MANAGEMENT DEPLOYMENT

ANACONDA

FRAMEWORKS

CYD KERAS MXNET

PYTORCH THEANO

Right Panel

LOW LATENCY

SECURITY AND ENCRYPTION

PRIVACY

CRYPTODATA COMPUTING POOL

DECENTRALIZATION

AUTOMATIC INFRASTUCTURE

SCALABILITY

CPU

GPU

FPGA

ASIC

FLEXIBILITY · EFFICIENCY

CRYPTODATA DEVICES

USER DEVICES
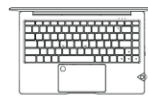
CryptoDATA

Applicability & Capabilities

The applicability of artificial intelligence is endless, as this technology can be integrated into many different sectors and industries. CryptoDATA invests considerably in the development and applicability of the ZIXXAR chip to facilitate the evolution of our society and ease users' task performance.

Video and Photo Analysis

By using the power and resources of cloud computing, the ZIXXAR chip is able to analyze images and to detect, perceive and organize the content from those images.

Another additional integrated task that is in a continuous development process is to perceive images by associating them with sounds in order to offer accurate forecasts. This technology can be implemented in industries such as:

Medicine - for the analysis and interpretation of the results of X-rays or generated tests;

The Military field - to discover hardly identifiable dangerous objects;

In the security of photographic objectives by the automatic interpretation of the images taken by surveillance cameras

In the analysis and efficiency of e-commerce and marketing systems.

SECURITY

ZIXXAR employs an unsupervised learning algorithm and develops self-protection techniques against cyber-threats. This protection system is integrated into CryptoDATA's commercial devices through the WORM Guard software.

ZIXXAR technology is able to test and eliminate applications and software that can cause damage and are unsafe. As an additional property, ZIXXAR developed an auto-improving system to counterattack and eliminate cyber-threats.

PRIVACY

In order to comply with security standards and to respect the rights regarding personal data, the ZIXXAR chip uses blockchain architecture for communication. This architecture is used for secure and efficient encryption of the channels and of the data used for the chips to communicate. ZIXXAR represents a huge node with a decentralized processor that sends information continuously to improve the encryption algorithm and repel cyber-attacks.

CryptoDATA

Intelligent Urban Center

The intelligent urban center represents the concept regarding the cities of the future that would be able to perform an infrastructure and resource management based on artificial intelligence. The cloud computing system could be integrated through the B-IPFS technology and materialized by the integration of ZIXXAR chips in all electronic devices. The city's central processing unit is decentralized and uses the blockchain algorithm for the communication between devices and data recording. Through the machine learning and deep learning algorithms, the system can automatically and efficiently perform a computing power and energy resources self-management. Thus, the computing power can be declared as infinite because devices are Globally connected and data integrity is verified in a decentralized way.

APPLICABILITY
- Traffic management
- Surveillance system management and interpretation
- Tax service management
- Payment systems management
- Resources and infrastructure management
- Efficient channeling of resources for a sustainable development
- Air traffic and transport services management
- Provision of solutions through a highly-accurate predictability
- Management of the security systems concerning the human-machine relationship
- Correct and incorruptible management of the voting system
- Protection of citizens' identities

What is Bank of Energy [B.O.E]

The Bank of Energy represents an interconnected energy system, consisting of a set of electromagnetic installations organized in a digital ecosystem in order to attain the production, transmission and distribution of electrical energy on a Global scale.

The Ecosystem Bank of Energy

Electricity is the core element of modern economies, contributing to the electrical energy services' development. The demand for electrical energy will further increase due to population growth, to the electrification of transport, living needs and industries, and to the continuously increasing demand for digital devices.

In terms of social development, the Global demand for electric energy is 2,1% per year, leading to an increase in the charging time of mobile devices and to the need for less polluting technologies. The aforementioned growth of electrical energy demand is particularly high in developing economies in which current government policies and market conditions require the development of new and innovative technologies.

The need for the flexibility of power systems is growing even faster than the demand for electrical energy due to the increase in the share of variable renewable resources and to the growing demand concerning the operation of electric vehicles.

The integration of the Bank of Energy system is essential in order to facilitate the evolution of mobility and to determine the fusion of digitalization and active energy, as the system is built on the energy mix architecture.
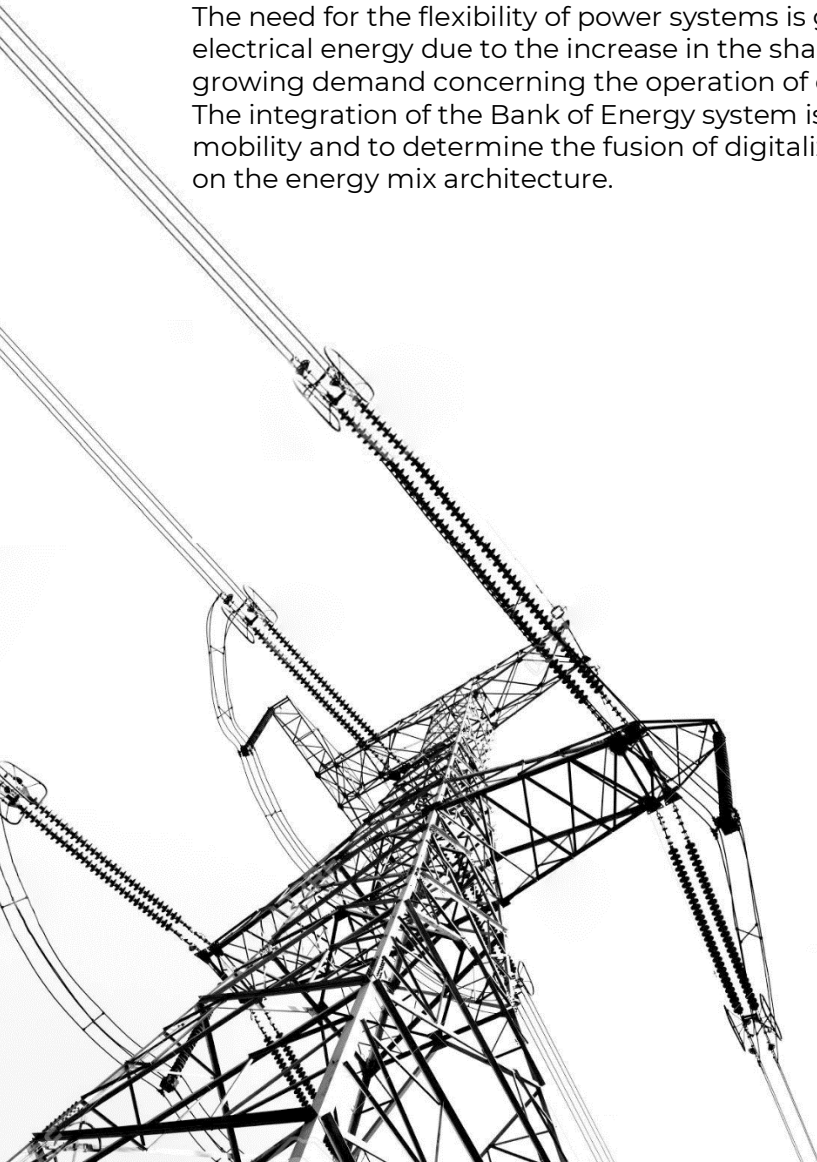
Bank of Energy's Architecture

The Bank of Energy system is built on several subsystems that can function independently, however, having the possibility of improving their performance by employing encrypted communication between one another.

Recharge Point [R.P]

The RPs represent the physical centers in different locations where users have the possibility of recharging their electronic devices from mobile phones to electric automobiles.

Power Bank Rack [P.B.R]

The P.B.R. represents the electricity charging station. Although small-sized, this device provides many possibilities for electrical energy distribution. The Power Bank Tack can store different types of recharging modules, but can also be connected directly to the electric automobiles or electronic devices to provide them with electrical energy.

Power Bank Module [P.B.M]

The P.B.M. is the recharging mobile device. It consists of a battery varying in sizes and capacities that offers efficient control and protection for the devices to which it is connected. There are several types of P.B.Ms depending on the user's needs.

The System's Interface [UI & UX]

The UX/UI system's interface is purpose-built so that the user could access the Bank of Energy system from smart devices. This interface presents two usage modes - the searching and accessing the P.B.M. mode and the for trading electricity through virtual assets mode. The interface is developed for any type of operating system like Android, IOS, Windows, Ubuntu, thus being available to everyone, or it can be accessed through autonomous vehicles with artificial intelligence.

The Payment System [P.S]

In order to be accessed under any circumstances, Bank of Energy has multiple payment systems. Thereby, services can be paid by card, virtual currency, electrical energy within the trading system or through financial services like Revolut or PayPal. In order to increase the system's security, transactions are recorded in the blockchain are validated through a decentralized system.

Distribution Channels [D.S]

The recharging modules' distribution service employs an algorithm built on a decentralized architecture. Distribution management is performed by artificial intelligence in order for it to be efficient and resources to be directed to meet the high speed and low cost.
The available distribution channels enable the user to access the necessary energy at any time and in any circumstances. The user can receive the necessary resources by Drone transport, from other nearby users who have additional energy or from passenger or food transport services.

Communication Channels [C.C]

Communication between devices is achieved through the VOBP technology, therefore communication channels are fully secured. By using these innovative methods, the user's identity remains protected and system frauds are eliminated.

CryptoDATA

POWER BANK **RACK**

Bank of ENERGY

Scan QR CODE

Bank of ENERGY

S.D.

CryptoDATA▾

POWER BANK **RACK**

SHARING

SMART

BATTERY

E.V.

CryptoDATA
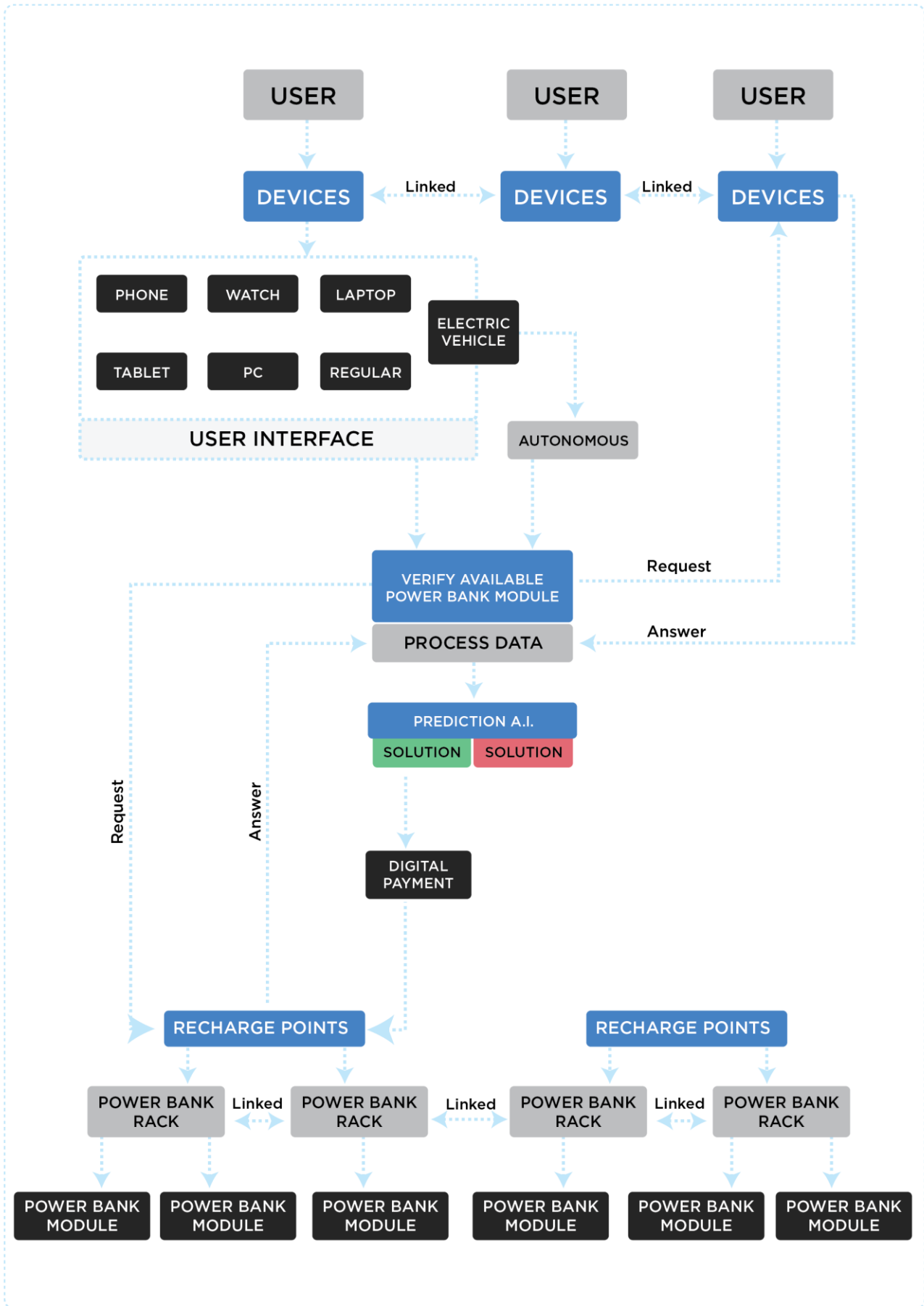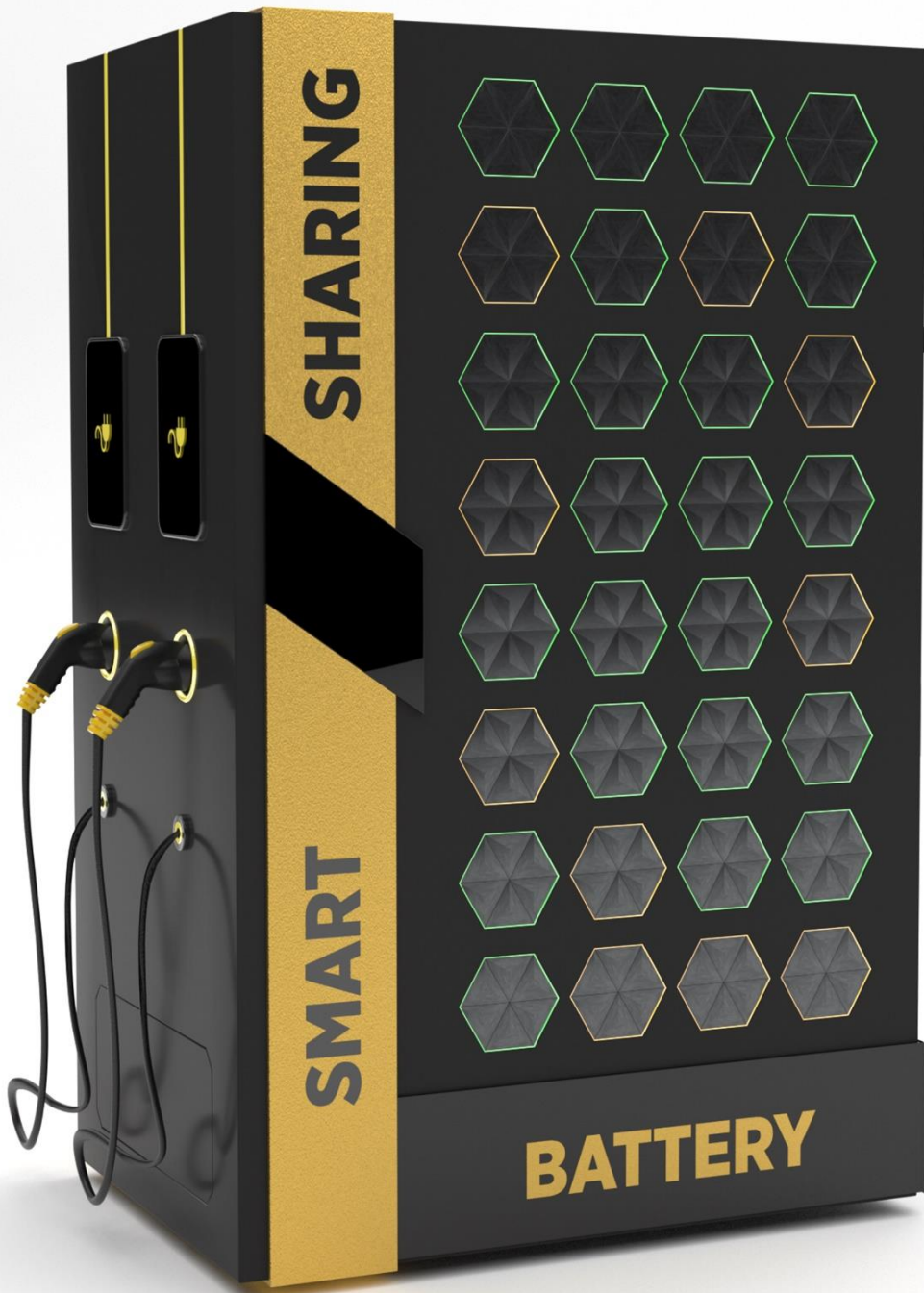
POWER MODULE

S.D.

Electric Vehicle

General Terms

An **electric Vehicle** is an automobile that is propelled by one or more electric motors, using energy stored in rechargeable batteries. Electric cars are a variety of electric vehicles (EV). The term "electric vehicle" refers to any vehicle that uses electric motors for propulsion, while "electric car" generally refers to highway-capable automobiles powered by electricity.

Just as there are a variety of technologies available in conventional vehicles, plug-in electric vehicles (also known as electric cars or EVs) have different capabilities that can accommodate different drivers' needs. A major feature of EVs is that drivers can plug them in to charge from an off-board electric power source. This distinguishes them from hybrid electric vehicles, which supplement an internal combustion engine with battery power but cannot be plugged in.

There are two basic types of EVs: all-electric vehicles (AEVs) and plug-in hybrid electric vehicles (PHEVs). AEVs include Battery Electric Vehicles (BEVs) and Fuel Cell Electric Vehicles (FCEVs). In addition to charging from the electrical grid, both types are charged in part by regenerative braking, which generates electricity from some of the energy normally lost when braking. Which type of vehicle will fit your lifestyle depends on your needs and driving habits

Types of Electric Vehicles

EVs (also known as plug-in electric vehicles) derive all or part of their power from electricity supplied by the electric grid. They include AEVs and PHEVs.

AEVs (all-electric vehicles) are powered by one or more electric motors. They receive electricity by plugging into the grid and store it in batteries. They consume no petroleum-based fuel and produce no tailpipe emissions. AEVs include Battery Electric Vehicles (BEVs) and Fuel Cell Electric Vehicles (FCEVs).

PHEVs (plug-in hybrid electric vehicles) use batteries to power an electric motor, plug into the electric grid to charge, and use a petroleum-based or alternative fuel to power the internal combustion engine. Some types of PHEVs are also called extended-range electric vehicles (EREVs).

Why to use

Advantages

Environment-Friendly
Less cost
More efficient
Improved safety
Energy security
Instant power
Safe to drive
Low maintenance
Reduce noise pollution

Disadvantages

Recharge stations
Electricity cost
Short range
Long recharge time
Silence
Battery replacement
Expensive
Security bugs

CryptoDATA

MOMENTUM

ELECTRIC VEHICLE

Designed for **EMOTIONS**

Built for **PERFORMANCE**

By combining EMOTIONS and PERFORMANCE, CryptoDATA created the perfect sports car offering drivers pure adrenaline and protection.

MOMENTUM Huvra, as a full electric supercar, mixes innovative technologies to obtain Best Performance in all conditions.

CUSTOM SETTINGS	1.8s	800 KM	300 KM/H
SETTINGS	0-100	RANGE	TOP SPEED

SPECIFICATION

TOP SPEED	330 KM/H
ACCELERATION (0-100KM/H)	1.8
SEATING	2
TYPE	COUPE
WEIGHT	1.400 KG
RANGE MAX	800KM
WHEELS	22'
FUEL	FULL ELECTRIC
DRIVE	ALL DRIVE 4WD
POWER	720+ KW
DISPLAY	TOUCH SCREEN
TORQUE	1600NM

TECHNOLOGY

Customize driving Settings

OR USE

Factory Drive Mode

	CITY	LONG ROAD	SPORT	RACETRACK
RANGE	700 km	800 km	350 km	10 Laps
TOP SPEED	180 km/h	230 km/h	290 km/h	330 km/h
POWER	250 hp	350 hp	750 hp	950+ hp
TORQUE	600nM	600nM	1200nM	1600nM
SUSPENSION	Active	Comfort	Sport	Race Active

EXTRA Power
comes with
EXTRA Safety

MOMENTUM Huvra is built to protect the driver.

○ Low center of gravity → Very low Rollover Risk

Carbon Fiber Frame

Combined Architecture Shock Protection

Front Impact Protection

Shock Absorber

Side Impact Protection

Rear Impact Protection
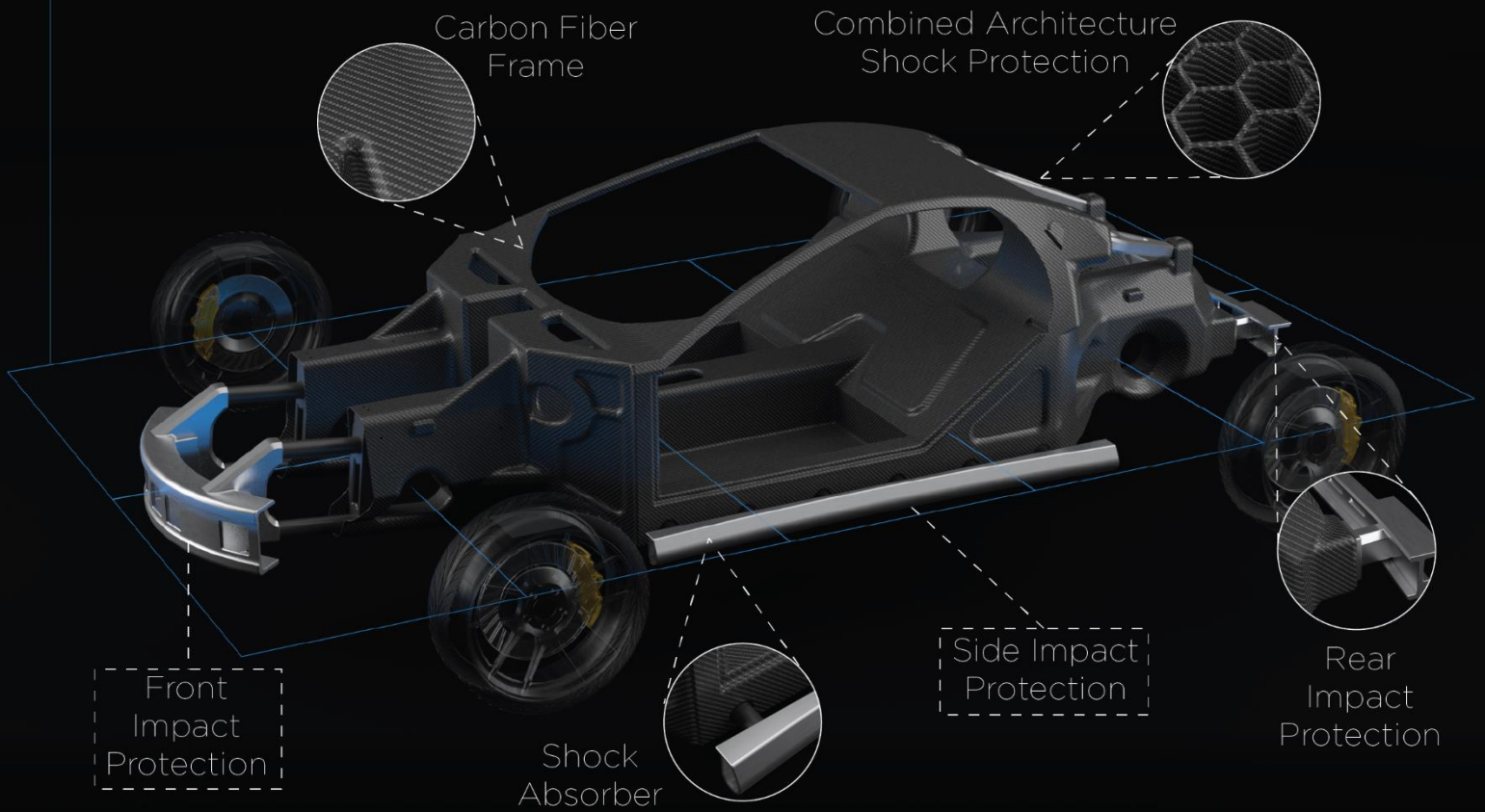
Power Management by **A.I.**
with **ZIXXar** and **Cloud Computing**
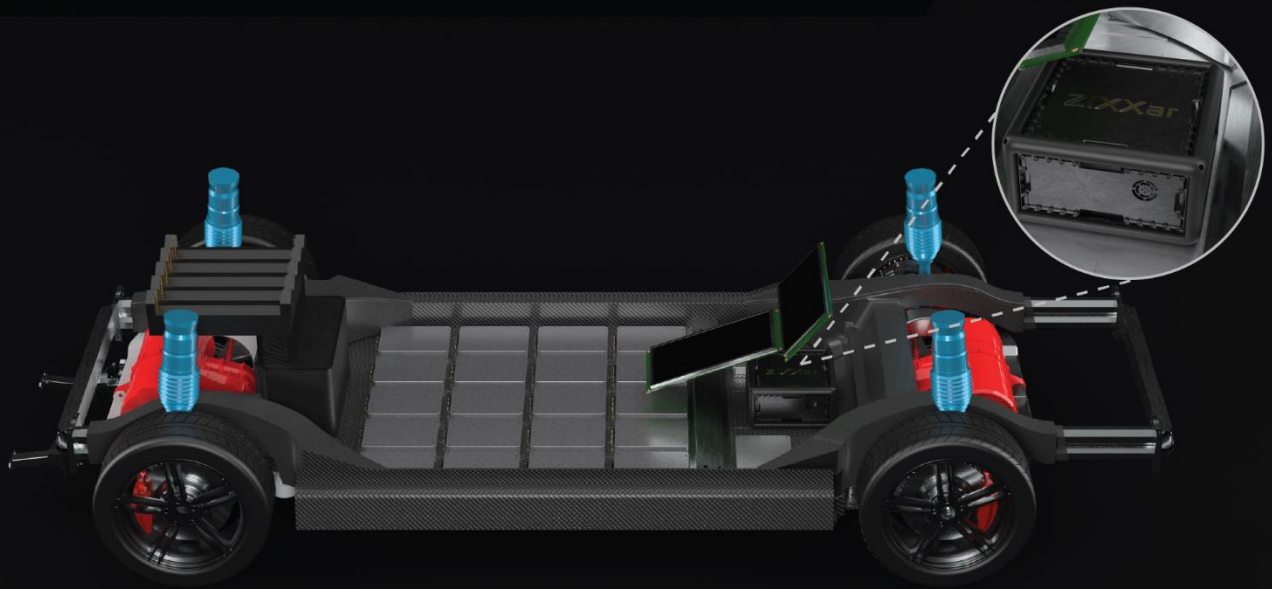
- Instant TORQUE and POWER.

- SMART Traction on each wheel.

- INTELLIGENT and efficient energy for total mobility.

- QUICK replace battery system for extra range with Bank of Energy.

- Smart Fast Charge and Smart Battery Sharing with power bank Module.
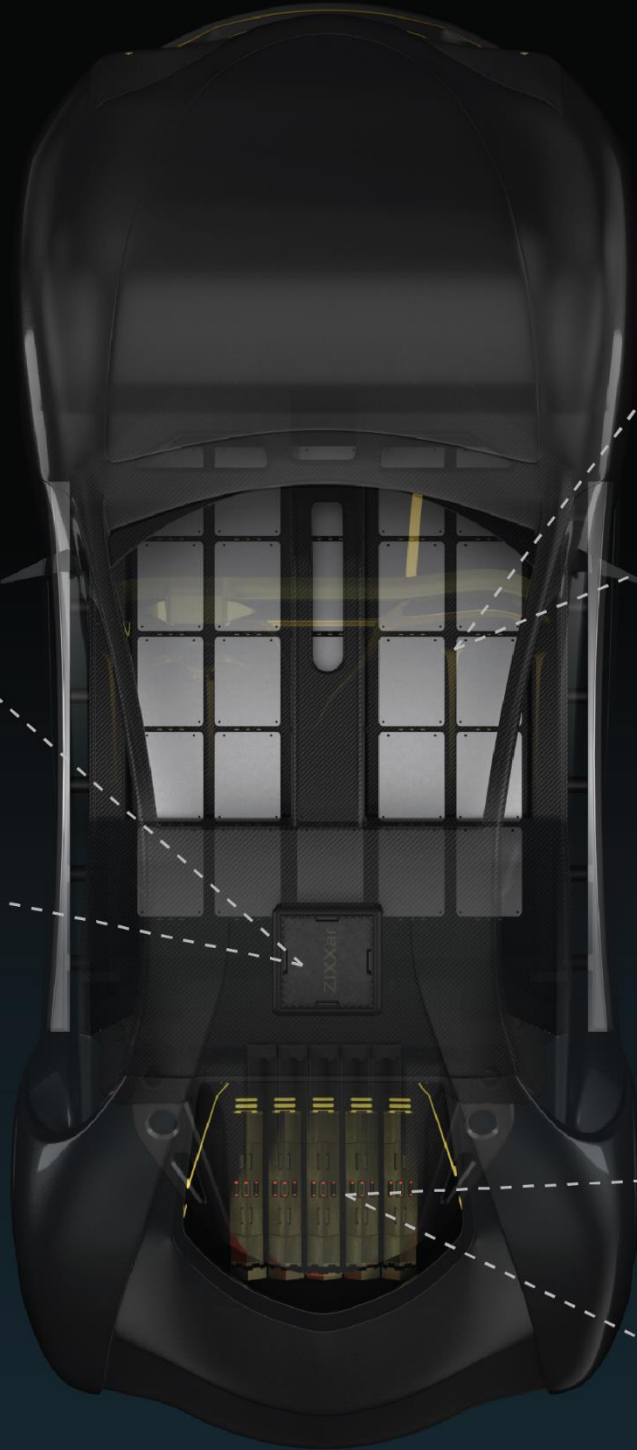
Fixed battery
module
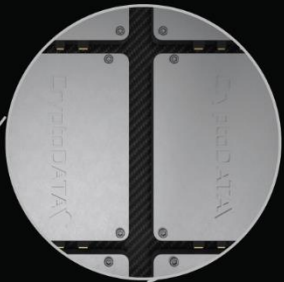
Zixxar A.I.

Mobile Power
Module

A.I. and Blockchain Communication

ZIXXar communicates with all Smart Devices in cloud pool and

ANALYZES all information

PROCESSES all Data

SENDS new solution

A.I. map in digital
- private, encrypted and
  secured

SOLUTIONS for:
- traffic management
- emergency situations
- safety drive solutions for
  impact calculation
- update blockchain with
  drive style

What is VOBP

VOBP is a new age security system that ensures users a complete protection of their data Developed by the CryptoDATA engineers, the Voice Over Blockchain Protocol manages to efficiently combine strong elements and knowledge gathered from a variety of scientific fields to increase the security of your communication devices.

How does it work?

Voice Over Blockchain [VOBP] is a communication protocol that uses Blockchain technology in order to attain the encryption of the users' data and of the communication channels.
The Encryption Type
The VOBP's architecture is built on asymmetric and continuous encryption that is embedded on a blockchain protocol selected based on the fastest response time. The encryption is structured on several levels and uses the unique Private Key.

Transfer Speed

Data transfer uses more than one channel, because all data is divided into millions of pieces, encrypted by specific algorithms and sent through the fastest blockchain at that time.
This architecture leads to an incredibly short transfer time and increases data's security and level of protection.

Coverage and communication

The communication can only be established between 2 devices using VOBP technology, so the devices must be registered, identified and verified by the blockchain.
In order to open the communication channel and be identified, the users have to connect their Private Keys every time. The communication channel is secured with End to End Encryption [E2EE] and uses peer-to- peer[P2P] data transfer. No transmitted information will be verified by a third party, nor decrypted or interpreted. To increase security, each sent message becomes a new encryption Key added as an appendix to the previous one.
In this modern world's digital era, the Internet is omnipresent and imperative for every action. The VOBP service operates on the Internet, as well, therefore it's covered Globally, the connection being stable and continuous.

Security

According to the tests performed by different entities, the VOBP technology is currently the safest method of data transfer and communication.
The full encryption, the decentralized verification and the asymmetric transfer through an infinite number of channels provide users complete security. Decentralized user verification through well-defined algorithms eliminates fraud and increases security. Users' privacy represents the main objective of VOBP technology, therefore every identity that is generated in the system is unique and validated by a decentralized computer system.

VOBP vs Current technologies

Files and data are transferred securely and their encryption and decryption are made using the users' UNIQUE Private Key.
The network load through the transferred data volume is very well balanced because there are used several communication channels and data packing employs the Merkle Tree algorithm which underlies the Blockchain system.
The authenticity of information is verified by a decentralized computer system, computers that are owned by the network's members. This system follows clear rules and is incorruptible at all times.

CryptoDATA

Voice Over blockchain Protocol is a complex cryptographic system, developed by the company CryptoDATA that includes officially known cryptographic algorithms and customized algorithms, specially developed for increased security and performance. The cryptographic architecture uses blockchain technology to generate unique encryption keys but also to secure channels and sign data packages transmitted between 2 or more devices.

As important properties, the cryptographic architecture has:

· The architecture is unique

· The genesis block is generated by the user from the physical encryption key

· Communication channel is peer to peer (P2P)

· Communication between users is end to end ecryption (E2EE)

· Each message sent modifies the encryption algorithm and makes it stronger because it increases the length of the encryption keys both vertically and horizontally.

· Brute force cannot be used to decrypt this algorithm or decrypted using Quantum Computer. Brute force decryption requires the simultaneous attack on the blockchain used but also on the individual encryption algorithms.

· Encryption is unique and individual and does not affect the integrity of the group

· The organization cannot be affected by hacking an user's system because each user has a unique and private key

· Validation of identities is produced decentralized by the blockchain and thus duplicates are eliminated using the double spending principle and thus fraud is excluded

Encryption Algorithms

- Unique Private Key Encryption
    - User Password
    - AES-CBC
    - RSA 256
    - Chacha20
    - Poly1305Aead

- Communication Channel Encryption
    - XEdDSA
    - VXEdDSA
    - Double Ratchet
    - X3DH - Extended Triple Diffie-Hellman

- Data Package Encryption
    - Curve25519
    - AES-256
    - HMAC-SHA256

- Discovery nodes Encryption
    - TSL 1.3
    - RSA - 256
    - HMAC-SHA256

CryptoDATA▾

What is **MATRIX ID**

Matrix ID is an innovative technology created by CryptoDATA, that revolutionizes the procedure in which a person creates an account for any platform: e-mail, phone, account, device or identification number.

How does it work?

The Matrix Id allows users to create an infinite number of unique and private accounts, that can be used to communicate, but also to transmit information in an encrypted and secured manner.

Blockchain and information

Blockchain is a transparent, public, decentralized and secured ledger that stores information in an efficient, verifiable and permanent way. By applying these properties on a structure, we create an innovative architecture.
This ledger enables the adding, but not the modification or duplication of information. Within a Blockchain there can be created an infinite number of identities by the addition of new blocks.
The information that appears in the system is verified in a permanent and decentralized way by the members of the network, even if it is viable or not, and the result (hash?) is registered in a new block. Thus, every information is integrated and generates effects only after validation.

The uniqueness of identities

Within the blockchain system, every block is unique because it contains both the previous and the registered information. Thus, every identity generated has a unique identification code, which means that there can be no other information with the same source code, this property eliminating fraud and identity theft.

Privacy and security

Matrix IDs are utilized by users as virtual identities through which they can communicate or access their own digital information. The access and administration of identities are granted only to the person who created them. All the information stored by the identities in question is encrypted by the unique Private key and can be accessed with the Public Key.
The anonymity and protection of the users is done by the blockchain in a decentralized way, and so, the blockchain does not verify the data of the individual, it verifies the integrity and validity of the virtual identities.

Matrix ID vs. Current Technology

Digitalization is increasing exponentially and the need for a new technology that offers absolute security and control over information has led to the emergence of MATRIX ID technology.
The easiness of using this feature provides a unique experience to every user, thanks to the possibility to access and control their information from anywhere with the Unique Private Key.
Users can create and configure multiple unique accounts, which they can utilize according to their personal and business needs. Matrix Ids can have multiple functionalities:
- can store and access digital currency funds or deposits;
- can be used as phone numbers, email accounts or other identification codes;
- can access encrypted and secure information;

The security of every identity is very impressive, mostly because the validation and verification are done entirely by the decentralized blockchain system.

CryptoDATA

What is **BR-LINK**

The BR-LINK is a data recovery software that accesses blockchain technology to maintain direct contact with the user and its virtual identity. BR-Link is also the interface that permanently tracks the data associated with the Matrix ID of a user.

How does it work?

The BR-LINK is an algorithm built on a complex structure that includes overlapping layers. This technology ensures the safe and continuous operation of the entire system.

Portability and Mobility

Nowadays, mobility is a very important factor in the digital era evolution. The BR-Link is a software designed for users to access the blockchain identity and all associated information. Identity retrieval is achieved simply by entering the 24 unique words generated when the identity was created.
This simple and efficient method offers the users the portability and mobility they need to perform their tasks.

Blockchain and decentralization

BR-LINK uses blockchain technology to record and access information. Decentralization increases the security and confidentiality of the data and ensures an on-going functional system. Blockchain is a transparent, public, decentralized and secured ledger that stores information in an efficient, verifiable and permanent way. By applying these properties on a structure, we create an innovative architecture. The user-created identity is registered in the blocks in the blockchain. The validity of the identities is verified in a decentralized mode by other users' devices through an encryption algorithm.

The identity user can access the information by rewriting a new Private Key using the 24 backup words.

Speed and coverage

Data transfer uses multiple channels of communication through several blockchains. This architecture makes information to be accessed instantly and security to be impenetrable. The BR-Link service uses the Internet to operate and this factor ensures a global connection and continuous operation.

Security and Privacy

Integral encryption, decentralized verification and asymmetric transfer made through an infinite number of channels offer users absolute security. Decentralized user verification through well-defined algorithms eliminates fraud and increases security. The exclusive 24 words and identity are generated by the blockchain at the time of user registration. All user information is encrypted with the Private Key and can be accessed with the backup words anytime and anywhere.

What does Worm Guard offer to the world?

- An easy and secure method that helps users to access and retrieve data and identity.
- Secure software with high transfer speed and efficient operation.
- An interface easily accessible to users without having any programming knowledge.

CryptoDATA

What is **WORM GUARD**

Worm Guard is a software specially created by the CryptoDATA team, that protects all the devices that are put available for the users by the company.

Role

Verifies system integrity and protects against cyber-attacks.
Repairs the software part of any device in which it is installed and that has been affected by cyber-attacks, with the help of Artificial Intelligence.
Maintains Privacy by encrypting and protecting files and device locations.
Blocks user access to channels and applications that can affect the integrity and security of the devices. Encrypts and counteracts threats that affect devices protected by it.

How does it work?

Along with the modernization and technical advancements of our smart gadgets, might appear many cyber threats that can affect the integrity of the users' devices. For a healthy and continuous development, CryptoDATA launched a security software for all its devices, called WORM Guard.

Blockchain and Decentralization

Blockchain is a transparent, public, decentralized and secure ledger that records information in an efficient, verifiable and permanent way. WORM Guard is a software that integrates blockchain framework with all network users in a decentralized way. The computing power of all devices is used to encrypt information, to discover threats and eliminate them.

Artificial Intelligence

Cyber-attacks are a true digital threat and they come in many forms and all at the same time. In order to cope with these attacks, Worm Guard uses artificial intelligence in a cloud system to increase power and internal protection measures.

Artificial intelligence plays an important role in the protection system because it uses passive learning (Unsupervised learning) and automatically adapts according to the threats it receives. Therefore, the system develops better tactics while fighting against threats, but also efficiently manages the resources in order to have optimal consumption.

Security and Protection

Worm Guard is specially developed to protect users' devices, eliminating threats in an ingenious way. It uses an algorithm based on artificial intelligence that makes the system to develop new tactics for both its protection and the security of other devices.
Worm Guard uses 3 working modes that it automatically manages:
Defensive mode is used to protect systems in the event of an attack.
Preventive mode is a new way in which Worm Guard tests the channels and sources that intervene on the devices or with the ones which the devices will come into contact.
The Offensive mode is specially designed to maintain a healthy network. Worm GUARD not only prevents threats, but also counteracts in order to eliminate them. It uses encryption to disable any unsafe or malicious source.

What does Worm Guard offer to the world?

- Device protection without requiring user intervention in the remediation mode.
- Verification of the sources with which the devices will come into contact.
- Self-Learning and Developing Threat Control Techniques, which means that users are permanently protected regardless of new threats.

CryptoDATA

What is **B-IPFS STORAGE**

The B-IPFS is a new technology that works on an efficient structure regarding data transfers and storage. B-IPFS changes the resource allocation mode by transforming each user into a node. This system is based on a decentralized distribution and encrypted communication.

How does it work?

The B-IPFS architecture offers an innovative and valuable way of transferring data between the users of a network, mostly because it is a global network that eliminates current infrastructure problems. In this system, each user or device becomes both a distribution server and a verification server.

Upload and Download

In a standard system, the files are uploaded to the central servers and the information download is made by default rites from the same central server.
The B-IPFS does not use central servers, because each device is transformed into a server, which makes available an encrypted and well-defined storage space. The files are distributed randomly between network users, that means that one file is being placed in several nodes. Download and access is done through the fastest route using the unique Private Key.

Speed and transfer time

In the digital age, mobility and speed are essential for evolution and performing tasks better. The B-IPFS technology changed the approach of transferring and accessing files and information.
This technology uses the same blockchain transfer algorithms as Voice Over Blockchain Protocol. Information is divided into smaller portions and it is encrypted with the help of the unique Private Key, and then it's recorded in a block on a secure communication channel. The information is available on every active device in the network
This algorithm increases the transfer speed because several communication channels are being used at the same time and bits of information are being transferred through them.
The transfer time is reduced for 2 reasons:
1) - data packets are transferred simultaneously on several channels and
2) - the transfer is made from the nearest devices. It is an automatic load - balance of the network in which all online users actively participate.

Coverage and Uptime

B-IPFS works with the Internet, so it is a global service. The most important aspect in the operation of a network and servers is that the availability time is permanent and at 100% of capacity.
Information is distributed in the blockchain registry and it becomes active on all devices, therefore it is being recorded in encrypted blocks. This architecture involves all devices and it has a redundant automatic system. The information circulates automatically between the active devices in the ones that become active so that it is available 100% of the time. The advantages of this network is that each user or device helps to keep and distribute the information.

Security and Privacy

The biggest threat in the digital age is how the information is being transmitted. The main ways where security can be affected are: attacks on communication channels and on storage servers or on devices that communicate.
B-IPFS represents a decentralized system and each device in the system is also a user and server, which makes the attack much harder to perform. The communication channels are open randomly and there are multiple ways to make the information impossible to intercept.

Encrypting information with the unique Private Key provides unbeatable system security because the attack must be performed on all devices and blockchain at the same time. The blockchain verifies the integrity of the data, and any modification on it is valid only with the acceptance of 51% of the validators. This architecture makes B-IPFS impossible to affect from a security point of view, by the existing means.

B-IPFS VS Current technologies

The B-IPFS does not use a central server, all devices are both servers and users. Therefore, the risk of a security attack is impossible to perform.
Each device, being both server and user, creates an automatic balance for the information transfer. The network maintains an active communication flow and thus the transfer speed is high and constant.
Through the decentralized architecture, B-IPFS maintains the information valid 100% of the time, eliminating the risk of failure and inactivity of transfer and validation functions.

CryptoDATA
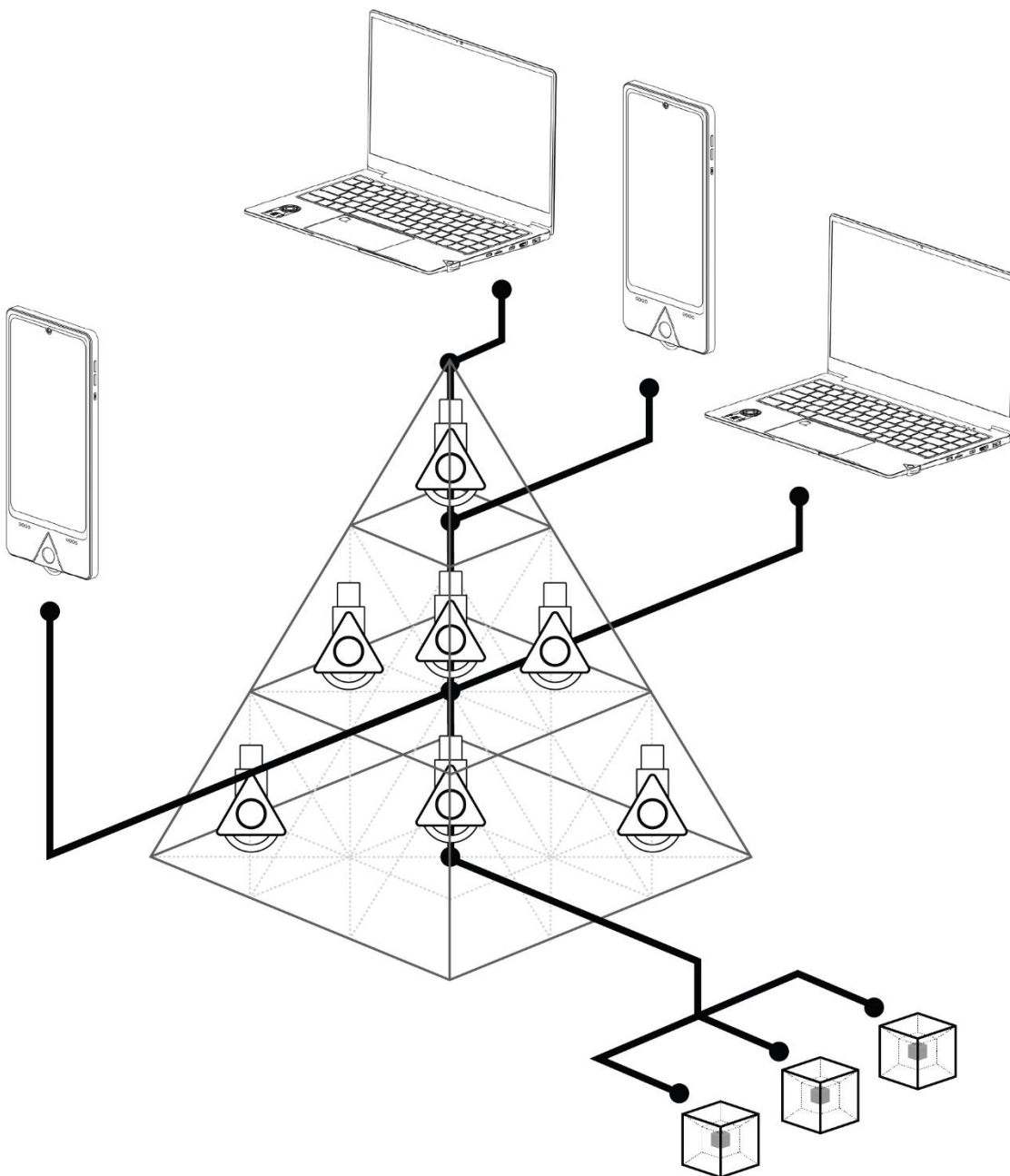
What is Raptor SKA?

Raptor SKA represents the addition that makes the Momentum Huvra's carbon fiber chassis unique. This system enables the vehicle's frame so-called 'adaptability' in the event of a collision.
The role of the Raptor SKA system is to absorb as much energy as possible in case of a frontal or lateral impact, in order to increase the security level of the vehicle. Therefore, this is a CryptoDATA genuine and innovative vehicle passive safety system.

How does it work?

The core element of the Raptor SKA system is the "EAC" (Energy Absorbing Cartridge). Each EAC presents two relatively rigid plates at each end and the active material, a cylindrically shaped high-end absorbing foam.

The entire system contains four additional subassemblies, two in front and two on the sides of the vehicle. In order to fulfill its purpose, each aggregate should be located between the impact bars and the carbon fiber chassis, otherwise stated, between the potential hazard and the Momentum Huvra's driver.

For the two front aggregates, the cartridges are arranged in four series of four EACs each. Here, each row of four EACs is placed in a carbon tube, fixed inside the carbon chassis front lobes. A common impact bar, connected to four piston-mountings, pushes the cartridges inside the tubes in the event of a frontal impact and squeezes the energy-absorbing foam. Two rigid pillars provide a stable base between the elastic (EAC series) and rigid (chassis) systems.

Moreover, the direction of the system-controlled deformation is 6 degrees down, so it pushes up the chassis to increase chances of overcoming the obstacle. Even if the impact is extremely violent or the incidence direction is straight, generating great lateral efforts, then the carbon tubes and the entire system could be deformed, but in a controlled manner, keeping safe the carbon fiber chassis and, most importantly, the driver.

The lateral aggregates of the Raptor SKA system are less complex. These subassemblies consist of an impact bar and six EACs on each side of the vehicle. In case of a lateral impact, the rigid bar distributes the effort along its entire length and, consequently, the six EACs take over the effort in parallel.

According to the simulations, the Raptor SKA system is capable of a dimensional compensation around 300 mm in case of front impact and 75 mm for lateral impact, without any damage of the chassis.
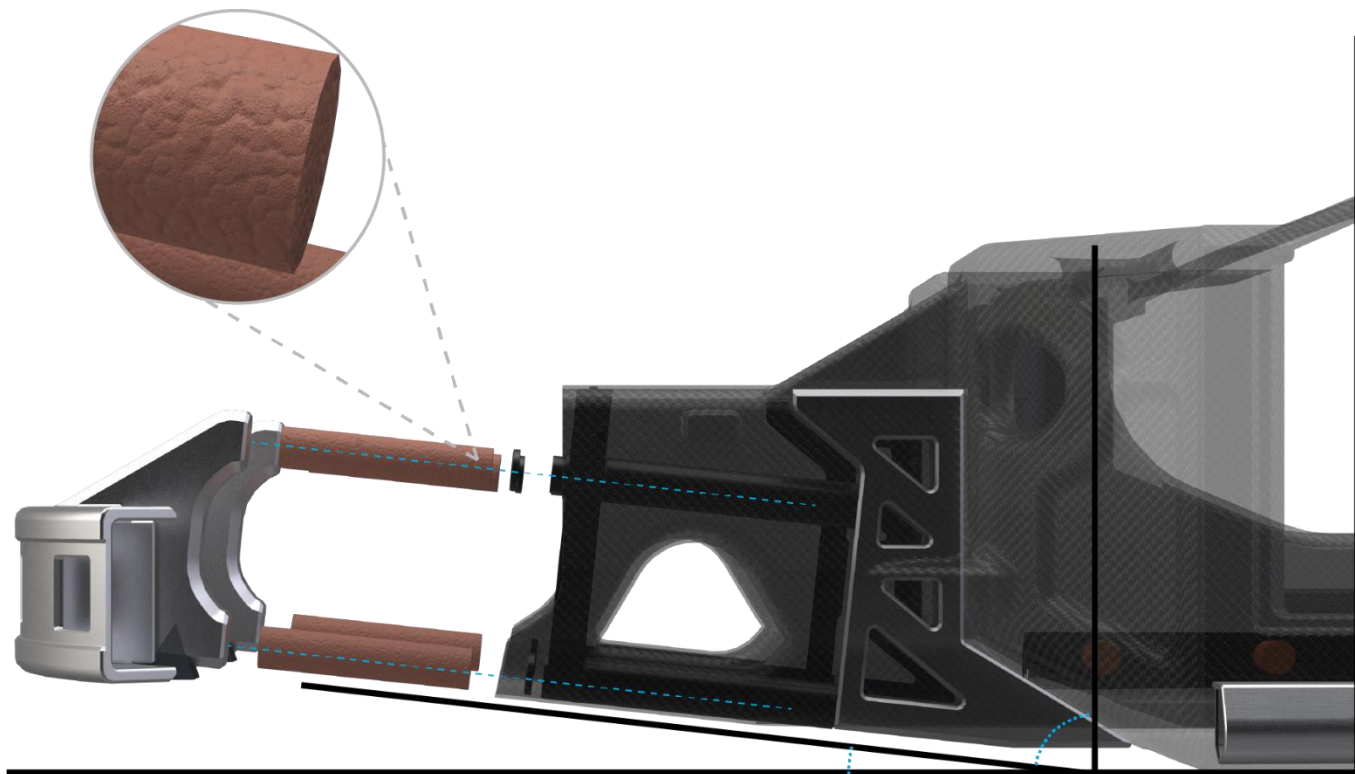
Where is the Innovation?

In terms of the passive safety systems in automotive industry, the Raptor SKA concept claims to be a top-level solution. Even if all of the important automakers implemented passive safety items, such as reinforced carbon fiber monocoque and vehicle deformation control, there is no similar system on the market that enables not only the passengers' safety, but the car chassis' as well, involving minimum costs.

However, the fact that the concept revolves around one key element, the EAC, that can be used whether in front or on the sides of the vehicle, gives the system a high level of modularity.

In conclusion, a system exclusively created for a precise purpose, as the foam and cartridges of the Raptor SKA system, will always be preferable instead of trying to find best compromise related materials, geometry and impact dynamics in case of an unfortunate incident.

What are the Advantages?

High safety level due to the EAC's foam purposely designed to absorb as much energy as possible at the time of the impact;

The secondary passive safety function, which allows the chassis to go slightly up, compensating the dynamic loading of the front axis during breaking, improving the impact dynamics and, finally, increasing the chances of survival in case of a frontal impact;

The modularity of the system, produced by the EAC component used in both front and lateral subassemblies. This advantage, together with the economical EAC manufacturing, brings up the cost-effectiveness advantage of this system;

The best protection for the carbon fiber chassis in case of soft or medium impacts. The rolling chassis is probably the most expensive item in the Momentum Huvra vehicle and a non-reusable post-accident part (in case of damage), hence this feature represents a great advantage;

The second level of protection in case of a major incident when the passive elements of the system would have collapsed in a controlled manner (when the foam in all EACs would have already collapsed);

The system's attribute of integrating simultaneously both user-friendliness and efficiency.

CRYPTODATA
VISION, MISSION & STRATEGIES
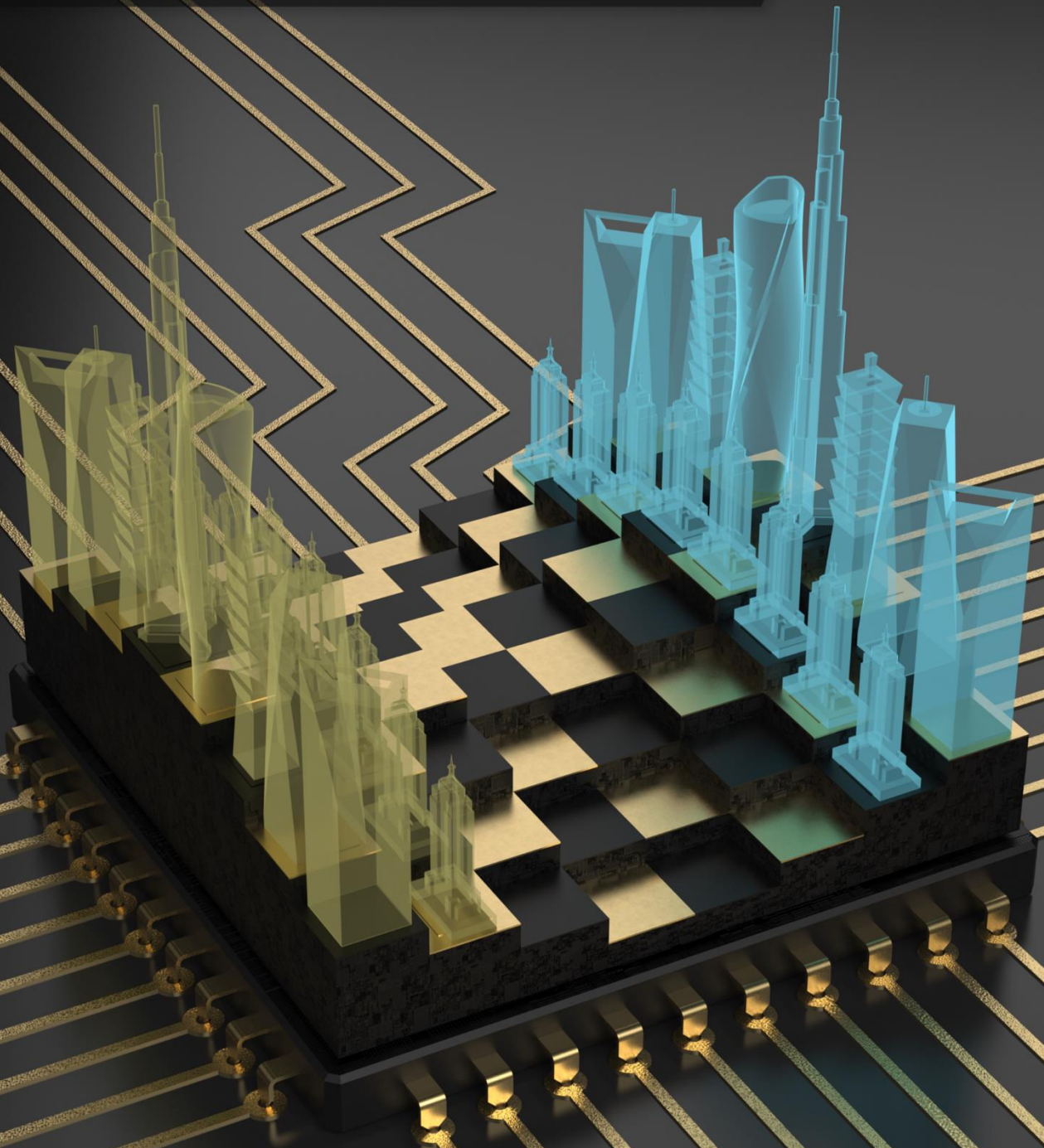
CryptoDATA's Vision, Mission & Strategies

Our company's mission is to bring technology development and digitalization to every person and organization for creating a smart and completely connected world.

In our vision, access to information through connectivity is and should be a basic right that underlies human progress for helping economic growth and, consequently, improving the standard of living.

The success of good connectivity is given by the transparency of the services provided to customers. Users should have the right to decide what and how it is happening while being protected by the technology they use.

For an immediate acquiring and fast assimilation of the new launched technologies, CryptoDATA should understand its customers' needs in order to provide a personalized experience to each and every one of them.

The coordination and collaboration between CryptoDATA and its users will stimulate a fast and large-scale innovation of technology. Thereby, a personalized experience will be available to everyone while respecting both the user's and company's uniqueness.

Unlimited Access through Digitization

Data and information can be found everywhere. Our mission, as technology promoters, it to integrate everything in the form of intelligent platforms using the blockchain technology, but at the same time, to preserve uniqueness through decentralization.

For keeping up with fast changes and with the large flow of information, CryptoDATA had to incorporate all these and adapt its strategies, organizational structures, processes, research and development, as well as marketing and services.

In the company's operating policy, the implementation of digital platforms is absolutely necessary and we consider that without decentralized and fast access, a successful digital transformation cannot take place.

The Future Means Mobility and Autonomy

Digitization without mobility is impossible. All products and services should ensure people's instant access at any time and from anywhere. CryptoDATA's mission is to develop products and services that can overcome the challenges brought by the users' needs.

The launch of the VOBP and B-IPFS technologies and, also, their implementation in the physical products - IMPulse K1 and WHIM, have shown to both the company's members and to the people that the future is about mobility and secure access. Through the launch of these products, we managed to overcome the difficulty of bringing both unlimited access and security into one system.

In CryptoDATA's vision, autonomy can be approached in two equally important ways that can be treated both independently and together.

In terms of electronic products, we can refer to autonomy as both the duration of use, as well as the possibility of making decisions by themselves. CryptoDATA has channeled its resources into research and development to facilitate both conditions. The current limits imposed by the operating life have been exceeded by the development of the Bank of Energy concept and Smart Battery Sharing technology. The implementation of this concept has led to the emergence of a new battery patent and a decentralized digital platform for energy use and transfer.

Being a new concept and quite difficult to understand by most users, artificial intelligence has been adopted, adapted and implemented by CryptoDATA in its

developed products. This A. I. has created the need of a very high computing power and a new architecture for transferring and storing information. In order to face these new challenges, the development of data-centers for data and cloud service processing was necessary. Through all these, CryptoDATA has offered users access to a huge computing power and necessary mobility.

The development of the A.I. Zixxar chip represents a great asset to users because it offers them a unique experience and makes their life easier. This technology has been introduced into the autonomous drive ecosystem and implemented in the Momentum automobile. Its implementation will also take place in future technologies as BIDDC and GlobarLink, but also in technologies that, at the moment, are in the concept stage, such as Smart City.

The main mission of our company remains, however, channeled on the user's technology acquisition. For us, the user represents the core of the whole ecosystem and all the work done by our company is based on providing a unique experience in accordance with the customers' needs and requirements. In order to achieve a successful implementation, our mission is based on the user's proper acquisition, communication and use of technologies with the help of CryptoDATA.

Industry Trends

Advanced technologies, especially A.I and Cloud Computing, were developed during the fourth Industrial Revolution. These technologies open the door to a new world where everything has senses and intelligence and everything is connected, leading to great changes in our way of living, working, learning and communicating. Every economy, industry and user should and will employ these intelligent connectivity technologies in order to overcome the limits and borders of development and evolution more quickly.

In the era of technology, industries within every field of activity explore the methods of developing products and services that have the user's needs as their core functioning element.

Smart devices must WORK for users' needs only.

As smart devices become more widely used, bundled with a multitude of applications, we want to share, manage and secure our information in more ways than ever before. New technologies, especially the A.I, enable our devices to be more intelligent, so they can provide us an increasingly efficient help.

Traditionally, smartphones, smart home appliances and smart speakers function independently, storing data and applying new features locally. A. I will change this by connecting these devices to one another for enabling more power through connectivity, synergy and knowledge. The new architecture is built around smartphones, accessible through tablets, personal computers, portables, TVs, speakers and car devices incorporating IoT control over home appliances, lighting, security, audiovisual and surveillance systems. This strong connectivity of smart devices creates an intelligent user-focused ecosystem that knows what users need.

CryptoDATA

Building a new communication network

As a technology provider, CryptoDATA considers that it is the company's responsibility to build an ecosystem based on security and innovation that offers users all the necessary freedom. Together with our partners and our network's users, the technology of the future could digitize the entire world in a unique way.

All people's products and needs tend towards digitization, the need for intelligent machines becoming more and more urgent. Analyzing all these trends, CryptoDATA invests important resources for the implementation of the BIDDC network for the users' benefit.

New Technologies: Blockchain and Cloud Computing

As the digital industry and human needs evolve, CryptoDATA invests in the development of innovative algorithms that can exponentially increase computing speed and data transfer. Because of the increasing diversity of applications, data becomes more and more complex and the implementation of blockchain technology is required.

All these future-oriented developed architectures need low energy consumption, also, maximum performance. The algorithms implemented for processing power use high-quality GPUs, but, also, A.I chips. Discoveries on quantum computing and neuromorphic computing will take computing power to a new level, however, these technologies' implementation still requires much more research and development.

Digital Collaboration in a Decentralized Way

New opportunities always bring up new challenges. The technologies developed by the involved communities need to be embraced by both CryptoDATA and all technology users. Every digital space should be used to the maximum in order not to miss the growth opportunity. This development and knowledge of technologies will help the protection of both global and individual economies as we move on a smart growth's fast track. It is necessary for us to be working together in order to build secure and reliable networks, to ensure a continuous connection, but also innovative applications and platforms.

Electricity Future Energy of Smart Mobility

At the same time with the development of technology and global digitization, a new need has emerged - the need for electricity. As the digital future is near, the industry's trend is to develop new technologies based on electricity, energy that should be clean, renewable and infinite. CryptoDATA makes research and invests many resources in the development of smart energy technologies and concepts.

One of the fast-developing branches is the automotive industry that tends to change its activity and implement mobility through electricity. CryptoDATA team works on implementing the concept of Smart Energy Sharing [SES] in order to eliminate the existing borders and revolutionize the industry.

CryptoDATA