



High-Security Products Distribution. Maintenance & Commissioning Service. Security Systems Consultancy



ZEE group is an Emirati investment firm focusing on providing the UAE and GCC market with distinct consultancy services, products and systems through its specialised technology companies.

Our aim is to serve our markets by constantly introducing state of the art technologies which positively impact the user-experience. Empower the users to develop the business ecosystem to support local economy growth.

Our approach to achieve strategic objectives is "GLOCAL", meaning to "think global, act local".





#### Vision

To be the signature provider of technology focused consultancy services, products and systems.

#### Mission

To serve our markets by constantly in-troducing state of the art technologies which positively impact the user experience, empower the local users and develop the local business ecosystem to support the local econo-my growth.





We specialize in providing comprehensive control room solutions, offering end-to-end services for high quality 24/7 control rooms. Our expertise lies in designing, implementing, and managing control room environments that ensure seamless operations and optimal performance. Our solutions en-compass all aspects of control room functionality, including advanced technology integration, ergo-nomic workspace design, and robust infrastructure setup. We understand the critical nature of control room operations and the need for uninterrupted monitoring, decision-making, and response.





We specialize in providing integrated solutions for physical access control systems, smartcards, and visitor management systems. Our expertise lies in creating seamless and secure access con-trol environments that ensure the safety and effi-ciency of your premises.

Our integrated physical access control system in-corporates advanced technologies to manage and monitor access to your facility. This includes features such as biometric authentication, prox-imity card readers, and keypad entry systems. By integrating these components into a centralized platform, we enable efficient access control management and real-time monitoring of entry and exit points.





Our expertise lies in creating immersive visual displays and seamless control systems that enhance the productivity and efficiency of studio operations. Our video wall solutions utilize highresolution displays and advanced video processing technologies to deliver stunning visuals and dynamic content. Whether it's a control room, broadcast-ing studio, or postproduction facility, we can design and install video walls that meet your specific requirements. With our expertise in dis-play calibration, content management, and video wall control systems, we ensure that your studio's video wall delivers exceptional performance and reliability.





## Broadcasting



We understand the unique security challenges faced by government and military entities. Our team of experts works closely with clients to assess their specific requirements and develop tailored solutions that address their unique needs. We ensure compliance with strict security standards and regulations while delivering solutions that are scalable, reliable, and userfriendly. By implementing our integrated management system, government and military organizations can achieve enhanced situational awareness, proactive threat detection, and efficient incident response. The system enables realtime monitoring of access points, video surveillance, and alarm triggers, allowing security personnel to quickly assess and address potential security breaches.





Critical communications are vital for industries such as public safety, emergency services, transportation, utilities, and more. We understand the importance of seamless and dependable communication in these demanding scenarios. Our solutions encompass a wide range of technologies and services to meet the unique needs of critical communications. This includes advanced radio systems, wireless networks, voice and data encryption, dispatch systems, interoperability solutions, and more.



# Communication



Structural health monitoring is crucial for ensuring the integrity and safety of buildings, bridges, dams, pipelines, and other critical infrastructure. Our solutions utilize advanced sensors, data acquisition systems, and analytics software to continuously monitor structural behavior, detect anomalies, and provide early warnings of poten-tial issues.

















## Zee's Partners



#### **Vertical Market Coverage**

Harnessing our expertise across multiple sectors, Tadafuq is an active participant in the defense, security, safety, telecom, education, audiovisual, interactive media, and infrastructure markets. Through our operating companies, we provide cuttingedge solutions and services tailored to meet the unique needs of each industry.





### Eyevisual Since 2009



#### About us

EyeVisual is a company focused to fulfill the increasing demand from the GCC visual technology market. The firm has been successfully operating as part of ZEE Group on the market for more than a decade due to a strong leadership and dedication to achieve goals. EyeVisual team is a coherent body of educated and imaginative individuals who will always exceed expectation

#### **Mission**

Reliably providing the best visual solutions with energy, innovation and uniqueness making your point of view different than thers

#### Vision

Reliably providing the best visual solutions with energy, innovation and uniqueness making your point of view different than thers



#### Services

Our comprehensive services cover system design, installation, onsite tech support, startup & commissioning, and consultancy. We provide end to end solutions to meet your project needs, ensuring smooth implementation, reliable performance, and expert guidance throughout.

System Design

System Installation

Tech Support

Startup & Commissioning

Consultation



#### **IP KVM**

Our expertise extends to IP KVM solutions, which offer efficient and secure remote management of servers and IT infrastructure. With IP KVM, you can access and control multiple systems from a single console, simplifying administration and enhancing productivity.



ADVANCED MATRIX SOLUTIONS

SMALL & MEDIUM MATRIX SOLUTIONS

EXTENDERS, SWITCHES & ACCESSORIES



#### **CUBES & SCREENS**

Our range includes highresolution video walls, interactive touch screens, and immersive display systems. Whether you need a largescale video wall for a command center or interactive screens for engaging presentations, we have the expertise to deliver innovative solutions that meet your visual display needs.





Products & Services



AqlUN2.0

Decode support	H.264 Mpeg4 (Part 10 AVC), Mpeg4 Part 2 & MJPEG	
Internet protocol	IPv4, IPv6	
De - interlacing	Supported	
Streaming protocols	HTTP, RTSP,& MPEG2-TS support Multicast & Unicast	
Decoding IP streams (EVH264 sources)	Up to 8 streams	Unlimited
User management	N/A	Available



With our software, you have complete control over your video processing operations. You can customize the settings, functionalities, and workflows to align with your specific workflows and preferences. Whether you need advanced video editing capabilities, realtime video streaming, or seamless integration with other systems, our software can be customized to deliver the functionality you require.



## Products & Services



#### **Perfect Service**

Hirsch Electronics aims to help organizations fulfill their business aspirations by offering cutting-edge products and intelligent IT solutions. We fully understand the client's business objectives and recommend the ultimate solution tailored to meet those needs.

#### After sale suport

Our commitment with our clients does not end after completing the project, we have established an after sales technical support guaranteed to address every questions and concerns of our clients within the agreed timeframe and scope.

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#### Client privacy & anonymity

All information provided by our clients are kept strictly confidential and we ensure that our client records are stored safe and secure.

#### **Foster Strong Partnerships**

We believe in building long-term, mutually beneficial partnerships with our clients, suppliers, and stakeholders. By establishing strong relationships based on trust, integrity, and collaboration, we can achieve shared success.

### Company's Objectives







#### ANNEX: PORTFOLIO OF PRODUCTS AND SOLUTIONS

#### PORTFOLIO OF PRODUCTS AND SOLUTIONS



Complete and integrated critical communication solutions :

#### 1. Infrastructure (TETRA and LTE):

- Network core.
- RAN (Radio Access Network) portfolio.
- Network management tools.
- Tactical and rapid deployment systems.
- 2. Control centres .
- 3. Terminals.
- 4. Solutions for rail transport.
- 5. 5G Portfolio for Industry 4.0.
- 6. Applications.





## PRODUCT AND SOLUTIONS



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NEBULA is Teltronic's infrastructure that, based on TETRA and LTE technologies, offers secure and reliable communications for critical environments, including the new generation of MCS (Mission Critical Services) services over broadband systems. Its flexibility and scalability allow it to quickly adapt to different deployment topologies, offering an optimal solution for each scenario.

In addition, the evolution to 5G allows us to further advance our commitment to private broadband networks.







NEBULA RAN



40W - MCBS: BS TETRA outdoor multi-carrier

> 10W-MBS: TETRA BS outdoor

> > **TETRA BS indoor**

75W-BSR:



Tactical

Tactical solutions

Wide range with different form factors and frequency bands: 380 - 800 / 430MHz





**K**atana

Virtualised platform based on COTS hardware. Scalability (up to 250 SBS per node). Redundancy. Switch over without call interruption. Cybersecurity. Multi-agency configuration. SDM: Synchronous Data Manager. N2A: IP interface access for external connectivity. VOIP telephone gateways. VOIP recording system.



L.





Easy-to-use hybrid management, administration and monitoring tools.



Statistics and performance tools.



## TETRA SOLUTIONS : NEBUL Infrastructure











Scalable and versatile virtualised platform based on COTS hardware.

Maximum reliability and availability. Redundancy.

Cybersecurity.

3GPP Release 14. 3GPP standard interfaces.



MCX services (MCPTT, MCData, MCVideo)



NMS





Easy - to- use hybrid management, administration and monitoring tools.



25

Statistics and performance tools.



## WIDEBAND SOLUTIONS : eNEBULA infrastructure











Portable for tactical network management



Server: EPC + MCX



eNodeB compact





## TACTICAL /EHICLE CEL











Rugged notebook with virtualised functions

eNodeB compact

Tripod, telescopic mast and radiant system ready to deploy

Approx. weight < 15 kg





## PORTABLE TACTICAL CEL



**CeCoCo** is an integrating communications platform, with multitechnology capabilities, that facilitates rapid response and efficient operation in critical environments. Whether location data, alarms, video surveillance, sensorisation or data intelligence, CeCoCo centralises all contextual information to improve the decision making process.









Teltronic's new generation of command and control room solutions provide a unified communications system and integrate multiple communications technologies and agencies:

- Reception of 112/911 calls.
- Incident management
- Radio dispatch with first responders
- Integration with IP telephony
- Integration with public cellular networks
- Integration with private broadband systems.
- MCX dispatch capabilities.
- Access to broadband data such as CCTV or video functions.



CECOCO



- Unified interface to manage communications between operators and external contacts with the control room via different networks.
- Designed for **touch screen** operation.
- **Contact** list organised by **category**.
- User profiles
- Fully configurable windows





# CECOCO CONSOLE



**Handheld devices,** mobile devices for installation in vehicles, desktop or ATEX devices for explosive environments. A wide portfolio of terminals and accessories to find the best solution. All with maximum interoperability guarantees as they work on standard technologies, including hybrid terminals with several technologies integrated on the same device







#### TETRA + LTE HYBRIDS





# **TETRA TERMINALS**



#### LTE HANDHELD TERMINALS



#### PNC550

PNC560 PNC460

Rugged terminals with PTT, emergency button and ergonomic design. Integration with multiple PoC/MCX client providers possible.



#### CoreZ5

Robust terminal with PTT and emergency buttons and ergonomic design. Integration with multiple PoC/MCX client providers possible.

Compatible with **B68** LTE.



#### PNC370, PNC380 and PNC360S (POC Terminals)

Small, light and simple terminals. One-handed operation possible. Designed for commercial users who lack private infrastructure and need very large coverage areas.



# LTE TERMINALS



#### LTE VEHICLE TERMINALS



M6P

MCPTT vehicular LTE terminal supporting QCIs and 3GPP MCX priority service.

Professional design: 5" HD touch screen, clear and secure audio, IP54 protection, large textured PTT button, multiple programmable keys.



LTE modem. Designed for mission critical needs. Vehicle accessories.



CISCO IR1101-K9

BYOD ("Bring Your Own Device") option also available. (e.g. Cisco on - board modem for private 4G mining network)



# LTE TERMINALS


#### PERSONAL CAMERAS





VM580D

Hytera





Hytera

12.00







#### SC580

GC550

#### DIGITAL EVIDENCE MANAGER



0 Port: DSJ-HLFB1A10000012 SN: 0607RD0012 Device itslied to execute file collection task "26-59(19)" Device starts excuting "Belefk®" task Device, successfully executed the rollection task "NVX-Avior, starts excuting "BEP-RG" tesk Avier accessful constant its collection task **THA**AM Device, starts courting "BFR CB" task Task "REFECTION" finished Device successfully executed file collection task "@iaRef" Device successfully executed file collection task "&id@99



### DEVICES LTE



#### CPEs



#### SPC INDUSTRIAL

- Band 40
- Industrial interfaces: RS232/RS485
- Management: Web, TR069 and SNMP
- Integrated GNSS receiver
- Dual SIM
- Robust and anti-vibration design
- Power supply 9V
- Power consumption <6w
- IP67



#### 4G FWA CPE OUTDOOR

- Global bands/CBRS
- CAT6
- PoE
- IP67
- FWA Service



#### CORPORATE CPE

- CAT 12
- Global bands/CBRS
- 4 integrated antennas
- 1 x SIM
- Management: TR069, SNMP
- DC 12v power supply
- Consumption < 12w



# LTE DEVICES



**Ensuring** train to ground communications requires specialised equipment designed to withstand the vibration, noise and temperature conditions found in a train cabin. Teltronic incorporates on-board terminals that are certified to the strictest railway standards and, with multi technology capabilities, are ready to support the FRMCS standard and meet the future needs of railway operators.







#### Multi-technology on-board equipment

- RTP-800 is a new generation on-board radio unit that includes **both narrowband and wideband** radio technologies in a single compact unit.
- It combines the advanced features of **TETRA** technology with additional data carriers based on **LTE** and **Wi-Fi** technologies.
- The best choice for all communication needs in the demanding transport sector:
  - Voice
  - Short critical data
  - Data for railway signalling
  - Broadband data for CCTV and other applications





### RAIL TRANSPORT SOLUTIONS : CAB RADIO





# **5G REVOLUTION**

#### New Core (5G NC) 5G CORE NETWORK ARCHITECTURE New radio (5G NR) 5G<sub>NR</sub> .... New devices





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N R

**5G** 

frastructure



- 3GPP SBA architecture
- 5G Core Rel.16 SA
- Low footprint in BareMetal (binaries or containers)
- GUI management tool (web browser)
- Management of subscribers, groups, networks and slices
- Real-time system monitoring
- Alarm monitoring and troubleshooting
- Design for Flexibility, Scalability and Efficiency (NFV): up & down scalability
- Redundancy options available







## CORE 5G



- EU Registration
- UE Authentication (5G AKA, SUCI&SUPI)
- EU Authorisation
- EU subscriptions (SIM/eSIMS): add, edit, delete
- Quality of service levels, priorities and preferences
- Dynamic profiling of subscriber data flows
- Multiple data streams for a single UE with for each data stream.
- QoS parameters

- Mobility management
- Standard / 5QI specific handling
- Inspection and classification of each type of traffic
- Signalling and synchronisation data transfer (PTP Time Sync)
- Network slicing
- PDU sessions (IPv4/v6)
- TSN
- 5G LAN





#### CU/DU (virtualised processing unit):

- Up to 4 cells and 400UEs/cell.
- GPS or sync 1588v2
- Dimensions: 482.6 x 420 x 44.5 mm (19"). 6.5Kg
- Power supply 220AC/ 48DC.
- Consumption < 35w

#### HUB:

- Star topology, up to 12 pRRU .
- Max. distance HUB-pRRU: 200 m

#### pRRU:

- Sub 6GHz band: N77/N78
- Bandwidth: 60 / 80 / 100 MHz
- RF power: **4 x 250mW**
- Dimensions: 378.5 x 278.5 x 182 mm (1.6 kg)
- PoE. 48 VDC. Consumption < 30w
- Interior.

#### CU/DU





#### pRRU





### PORTFOLIO 5G NR RAN



#### DISTRIBUTED gNB Small RRU

CU/DU (virtualised processing unit):

- Up to 4 cells and 400UEs/cell.
- GPS or sync 1588v2
- Dimensions: 482.6 x 420 x 44.5 mm (19"). 6.5Kg
- Power supply 220AC/ 48DC.
- Consumption < 35w

#### Small RRU:

- MIMO 4T4R
- Sub 6GHz band: N77/N78
- BW: 20/ 40/ 50/ 60 / 80 / 100MHz
- RF power: **4 x 5W**
- Dimensions: 360 x 115 x 260 mm (<12 kg)
- 48 VDC. Consumption < 150w
- IP67.

#### CU/DU





### PORTFOLIO 5G NR RAN



#### gNB INTEGRATED

#### All-in-one form factor

- Up to 400 EU
- Sub 6GHz bands: N77/N78
- BW: 100 / 80 / 60 / 60 / 50 / 40 / 20MHz
- RF power: 4 x 5W
- Dimensions: 378,5 x 278,5 x 182 mm (13 Kg)
- Power supply: DC -48v / AC: 220v
- Consumption < 200w
- Outdoor. IP65
- Easy and flexible implementation
- Suitable for open spaces without high traffic needs







### PORTFOLIO 5G NR RAN



Network segments can have different service characteristics, downlink capacity, uplink capacity, delay and jitter.

Network Slicing Manager (NSM) can define slice sizes, different QoS/slice, traffic and security/slice rules, including prioritisation and pre-emption rules.

A UPF can manage several slices, but one UPF/slice (Security Trust Zones) is recommended.

End-to-end network logic slice with specific network throughput and latency requirements to address specific use cases.

Performance

attributes

**Slice attributes** 

Functionality

attributes

Network

optimization

attributes



#### Slice Service Type (SST)



# **NETWORK SLICING**



#### RUGGED 5G SA SMART PHONES



PNC560



Z5 Core

Other commercial terminals also validated such as Samsumg, Ruggear, etc.



**5G DEVICES** 



#### 5G SSCs



#### 4G/5G BUSINESS CPE

- Indoor. Sub 6GHz bands
- CAT20. NSA and SA compatible
- 2xRJ45 port Gb Eth
- 1 SIM slot
- Management: Web, TR069 and SNMP
- 5G NR: N1/N28/N41/N77/N78/N79
- LTE:B1/B2/B3/B5/B7/B8/B34/B39/B40/B41
- WLAN 2,4 GHz and 5 GHz
- 12V power supply
- Consumption <24w



#### 4G/5G INDUSTRIAL SSCs

- Indoor/Outdoor. Sub 6GHz bands
- CAT20. NSA and SA compatible
- Industrial interfaces: RS232/RS485
- Management: Web, TR069 and SNMP
- Dual SIM
- Robust and anti -vibration design
- 12V power supply
- Consumption <24w
- IP67



#### 4G/5G FWA CPE OUTDOOR

- Outdoor. Sub 6GHz bands
- CAT20. NSA and SA compatible
- 1 SIM slot
- Management: Web, TR069 and SNMP
- High-speed data transmission
- Gigabit broadband access
- FWA Service
- IP67 waterproof and dustproof
- 1xRJ1 45Gb Eth
- Power supply: POE 24V
- Consumption < 24w



# **5G DEVICES**







5G NETWOR IN A BOX



**Ecosystem** of solutions that combines radio and broadband communications, and intelligently integrates valueadded applications that solve our customers' specific use cases.



- Personal cameras .
- Video analysis, such as facial recognition or number plate reading .
- Predictive maintenance and artificial intelligence applications for industrial environments .
- Capture and transmission of video from drones for rescue or maintenance .







#### DEVICES







IA **BIG DATA** 

AR/MR

Video analysis

Validation of COTS devices (BYOD)



# 0

**APPLICATIONS** 









In modern warfare, mobility has been a vital aspect. Troops must establish a system that integrates communications, command and dispatch as soon as possible so as to facilitate collaborative operations. The secure personal radio, as a key part in the system, evolves by the attention of governments of all countries and has showed its unique value in many wars.

The secure personal radio is a handheld radio for soldiers to keep in contact with members anytime inthe battlefield. By horizontally connecting infantry in a squad, the radio performs as the traditional gesture or shouting communications and therefore is called the "Squad Speaker".

The radio supports the half -duplex and full-duplex conferencing modes.

- Half-duplex: provides long range point -to-point communications.
- Full-duplex conferencing: supports the full -duplex call among up to six soldiers in the mobile ad hoc network, which frees soldiers' hands.







The HTT900 boasts small and light design, long standby time, and high IP rating.

#### Full -duplex Conference:

- Six simultaneous call authorities.
- One-button conference access without holding PTT
- VOX function
- Ad -hoc network for stable communication

#### Situation Awareness:

- Real -time situation information sharing
- Route planning sharing
- · Real -time task scheduling sharing





# Main Features





- us talk of up to six users for enhanced
- Simultaneous talk of up to six users for enhanced operational efficiency
- ◆ One -button conference access without holding PTT
- VOX feature for handsfree operation







- Non-centralized, self-organizing, selfoptimization, and self-healing
- A hops for voice and 3 hops for data, expanded communication range
- Flexible coverage, suitable for varying terrain conditions





- Up to four squads share resources in the network
- Group call PTT and network call
  PTT for easy network call and
  group call







#### Situation sharing

- Real -time sharing of situation information drawn on the map
- Display of location information
- Intelligence information

#### Command on the map

- Route planning on the map and sharing with all members
- Real -time task scheduling ٠



System security

Air interface voice and data security

Unencrypted/ Encrypted communication Device control security

- Data encryption: AES -256 encryption
- Key encryption: through PC programming software, etc.
- Manual parameter erasure: various methods such as remote parameter erasure and local parameter erasure to ensure the security of communication parameters
- Unencrypted/Encrypted communication: Encrypted devices can listen to unencrypted devices. Unencrypted devices cannot listen to unencrypted devices but can be used as repeaters of encrypted devices.









Drop (1 m)

#### **Reliable and Portable**

- Sturdy structure to withstand harsh battlefield conditions
- As light as 350 g (with battery installed), easy to carry

#### Long standby time

- Standard 2400 mAh battery, which is lighter and thinner
- Standby time up to 18 hours







3. CHIET 375, 400442 Hec:1 [1] CH:1



Basic Specifications		Transmissio	Transmission			
Frequency range	350 MHz to 450 MHz	Output Power	1W/2W/3W			
Channel spacing	20 kHz, 350 kHz	Frequency offset		Frequency offset	±1ppm	
Modulation mode	2GFSK	Receiver				
Data rate	≤ 60 kbit/s	Consitivity	-118dBm (BW=45kHz ) -110dBm (BW=350kHz )			
Preset channels	16 (adjustable knob)	Sensitivity				
Communication distance	Open ground: 2 km to 3 km City: 1.5 km Jungle: 800 m	Environmer	Environmental			
		Storage Temperature	-40°C ~ +70°C			
Antenna impedance	50 Ω	Operating Temperature	-30°C~ +60°C			
Data encryption	AES256	Water Proof	2m,4Hour			
Data interface	Serial port TTL, WLAN, Bluetooth	Vibration	MIL-STD -810G			
Dimensions (H×W×D)	≤ 152m × 60 m × 37mm					
Weight	≤ 370 g					
Battery time	≥ 18 hours					

# Specifications







# ACCEESSORIES



#### **Off - vehicle communication**



- In full-duplex conference mode, communication between members out of the vehicle and members inside the vehicle at any time
- Noise-cancelling headset for noise reduction in vehicles



## APPLICATIONS Scenario



#### **Hight - noise communication**





- Built-in noise-cancelling chip
- Noise-cancelling headset to reduce noise interference
- Intelligent PTT control for noise reduction and listening



## APPLICATIONS Scenario



#### **Chemical defense communication**



- Bone-conduction communication for enhanced sound clarity in harsh environments
- One-button conference access with PTT
- Auto transmission with VOX based on voice volume



## APPLICATIONS Scenario



### HIRSCH ELECTRONICS



#### **Table of Content**

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We are strong partner with the developer of cutting-edge radios, physical access controls, and RFID technology, With our unmatched expertise and innovative solutions, we empower businesses worldwide to achieve new heights of success.

Beyond our exceptional products, we are committed to providing exceptional service. Our dedicated team of experts is available to support you every step of the way, from initial consultation and system design to implementation, training, and ongoing maintenance. We strive to make your experience with us as seamless and effortless as possible, allowing you to focus on what matters most the growth and success of your business.

With our global reach and proven track record, we have earned the trust and confidence of businesses around the world. Join our extensive network of satisfied clients and experience the power of partnering with global leaders in radios, physical access controls, and RFID technology.





# Introduction



#### **Access Control**

With our expertise in physical security, we provide comprehensive end to end solutions for secure access control systems. Our solutions are designed to safeguard your premises, ensuring that only authorized individuals can gain entry and protecting against unauthorized access. We offer a range of advanced technologies and features to enhance security, including biometric authentication, smart cards, visitor management systems, and more. Trust us to provide a robust and reliable access control system that meets your specific security requirements and keeps your premises protected.





Products & Services Access Control



#### **Tetra Radio**

With our advanced software, we harness the power of tetra technology to deliver limitless capabilities. From seamless Bluetooth and Wi-Fi connectivity to efficient RFID integration, we enhance situational awareness and drive mission success. Our solutions empower you with unmatched versatility and superior outcomes.





## Products & Services Tetra Radio





As a global leader in satellite communications, we specialize in providing cuttingedge solutions for both commercial and military applications. Our comprehensive range of products is designed to meet the diverse needs of our clients, delivering reliable and secure satellite communication services across the globe. With our advanced technology and expertise, we enable seamless connectivity and communication in even the most challenging environments.



Products & Services Satellite Communication


### Software Development

We specialize in software development, offering tailored solutions and seamless integrations to meet your specific needs. Our team of experts excels in customizing software applications and building integrations that optimize your business processes and enhance overall efficiency. With our expertise in software development, we ensure that your systems work together seamlessly, maximizing productivity and delivering ex-ceptional results.





Products & Services Software Development



#### **Perfect Service**

01

03

04

Hirsch Electronics aims to help organizations fulfill their business aspirations by offering cutting-edge products and intelligent IT solutions. We fully understand the cli-ent's business objectives and recommend the ultimate solution tailored to meet those needs.

#### After sale suport

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#### **Foster Strong Partnerships**

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Projects References



# PIA NO MEETING TABLE REIMAGINED



### The company **PIANO**

Piano aims to create and perfect industry-leading and topnotch touch screen panels equip with amazing technology available in the world today.

We believe that the future is in our hands and it is our dream to be part of not just luxurious offices but high-traffic environments, critical facilities, and even homes soon.

Our main objective is to revolutionize the way office meetings, seminars, and presentation are conducted through products that combine the power of technology and superior craftmanship.

We are excited with the prospect of pushing technology further and we invite you to be part of our journey today.





## **Our Mission**

Our mission is to help proplr to realise their full potential. One way we do this is by offering multi touch interactive table offer the best of both worlds to save time , money and labor.





### The Product PIANO TOUCH TABLE

Nowadays, most organizations prefer to conduct meeting conferences in a seamless and convenient manner but some usually leads into purchasing additional devices such as Projectors, LCD Screens and Audio Systems separately in order to enhance the meeting experience but yet, there are numerous drawbacks that comes with it, the impractical cost and time spent in preparing the meeting room can surely be a disadvantage. This is where PIANO comes into picture.

PIANO provides an exceptional experience for organizations who are seeking to enhance their meeting experience, a state of the art Multi Touch Table with multiple touch

points allowing multiple users to work on documents, view media content and even type notes right on the table all at the same time.





Gone are the days where meeting participants have to brivng separate conference materials in order to boost the efficiency and productivity of their business, PIANO provides an all in one meeting table that comes with a highly interactive user interface with a High Definition 4K LCD display that makes meeting participation even more extraordinary.

In recent times, users are getting much more conversant with touch screen technology, this is evident with the popularity of smartphones, tablets and kiosks but what separates PIANO from the generic kind is that it is highly customizable depending on the preference of the user, it also comes with sleek materials with refined Italian made quality that is associated for elegance, luxury and meticulous build for a remarkable meeting experience.





### Remarkable and Top-of-the-line **MAIN FEATURES**

- Fast and Intuitive user interface lets you perform your tasks and setup presentation using easy finger gestures with a straightforward menu specifically designed to accomplish your work effortlessly.
- Our product is highly customizable subject to the user's preference, we can support any customizations from physical designs, software specifications to hardware capability.
- A sleek and elegant Black & Aluminum finish custom made with a smooth surface makes it ideal for any meeting room environment.

With PIANO, you don't need to worry about the tedious tasks of setting up your meeting room everytime, just launch the PIANO touch table and it will take care of all your meeting needs.

- PIANO's impressive hardware is built specifically to manage simultaneous usage to maximize the productivity of multiple users without any noticeable delay.
- PIANO makes collaboration so simple and straightforward that sharing documents, presentations or even media content can be shared without a separate laptop, just plug in the USB on the slots available or access contents through a shared folder.







Staying ahead of competition for businesses means they must hold an immense technological capacity to enable the organization's sustainability, profitability and most importantly, productivity.





#### **SOFTWARE FEATURES**

- Equipped with a user interface able to present different kinds of multimedia contents and navigate only with a simple finger gestures and touch.
  - PIANO recognizes and responds to simultaneousinteractions from multiple users without worryingabout delays that are usual for other brands.
- 03

02

Featuring PIANO's 3D Viewer Module which allows users to visualize 3D models, let the users view the content from all angles, this is a truly versatile feature and certainly ideal for technical, educational or showroom environments.





#### **SOFTWARE FEATURES**

- Instantly share contents from the PIANO touchtable to another screen via the direct sharing functionality. This feature gives you the ability to mirror any type of content you wish to present to your colleagues in just one tap.
- PIANO boosts your creativity to a whole new level; create notes, drawings and labels on your presentation with the use of the drawing toolbar and save it for future use.

PIANO recognizes the fast-growing demand for a smarter approach in dealing with workplace activities and our product exhibits the essential elements in fulfilling the desired business outcome.





#### **TECHNICAL FEATURES**

- PIANO has a premium 4K LCD Display with vibrant and rich image details designed to enhance the viewing experience regardless of the type of content viewed by the users.
- Equipped with simultaneous touch points with the latest PCAP and InGlass technology allowing multiple users to work simultaneously.
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- With fully integrated high performance Intel CPU that can accommodate heavy usage without having any significant delay, enabling users to enjoy a smooth and seamless collaborative activities.

- PIANO touch table's design is highly customizable, we give our customers the freedom to specify their design preference that suits their needs.
- Sleek, elegant black and aluminum finish with a sturdy structure manufactured in Italy marking our product's elegance, luxury and top of the line quality.
- Our product has a built in multi-speaker sound system that produces a crystal clear and quality sound, sliding panels containing USB connectors and multi standard power plugs specially designed for connecting storage devices.





#### **GENERAL INFORMATION**

Table size	187 x 125 cm for six people
Worktop	full glass (PC version) or nanotech resin bezel (IG version)
Internal LCD	face-up version Edge LED
<b>Resolution 4K</b>	3.840x2.160 pixel @ 60 Hz
Brightness	450 cd/m2
Contrast	4000:1
Colours	1.07G (10bit)
Touch tech	Metal mesh PCAP (PC version) or InGlass (IG version)
Response Time	<6ms
Cooling	Active ultra low noise <5 dB
Controller	QuadCore Intel CPU
Software	Basic version included
Software Modules	Satellite, VirtualMachine, 3D



#### **CONNECTORS & CONTROL**

Input	4x side bays with 2x multiformat power plug, 2x USB, 2x RJ45
Video Input	full glass (PC version) or nanotech resin bezel (IG version)
Video Integration	face-up version Edge LED
IR Remote Control	3.840x2.160 pixel @ 60 Hz
Buttons	450 cd/m2

#### ELECTRICAL & ENVIRONMENTAL

Power Consumption	<300 Watt
Power Supply	100V - 240V AC, 60/50Hz
Temperature	5 - 40 °C
Humidity	%85 -0 RH non condensing
Speakers	$4\Omega$ / 10 ×2W / Full Range





#### MECHANICAL

Table Height	750 mm (up to 850 with lifer, option)
LCD glass	5mm Glass, anti-reflection, anti-fingerprint (other options)
Bezel	glass or nanotech acrylic matt and soft bezel (IG version)
Basement	Metal bent stand
Installation Painting	Fusion-bond epoxy powder coating
Color	Fusion-bond epoxy powder coating Black and Aluminium, customizable on RAL scale (see right)

#### DIMENSIONS

Internal Area	143 x 180 cm
Stand	187x 125 x 74 mm (W x D x H)
Weight	~180 kg









#### **PRODUCT CUSTOMIZATION FEATURE**



PIANO envisions organizations realizing their aspirations through exceptional efficiency in terms of collaboration with the help of PIANO touch table's phenomenal attributes.



#### PIANO TOUCH TABLE FOR SEEMLESS & COLLABORATIVE MEETINGS

### DIMENSIONS & SPECIFICATIONS









# THANK YOU