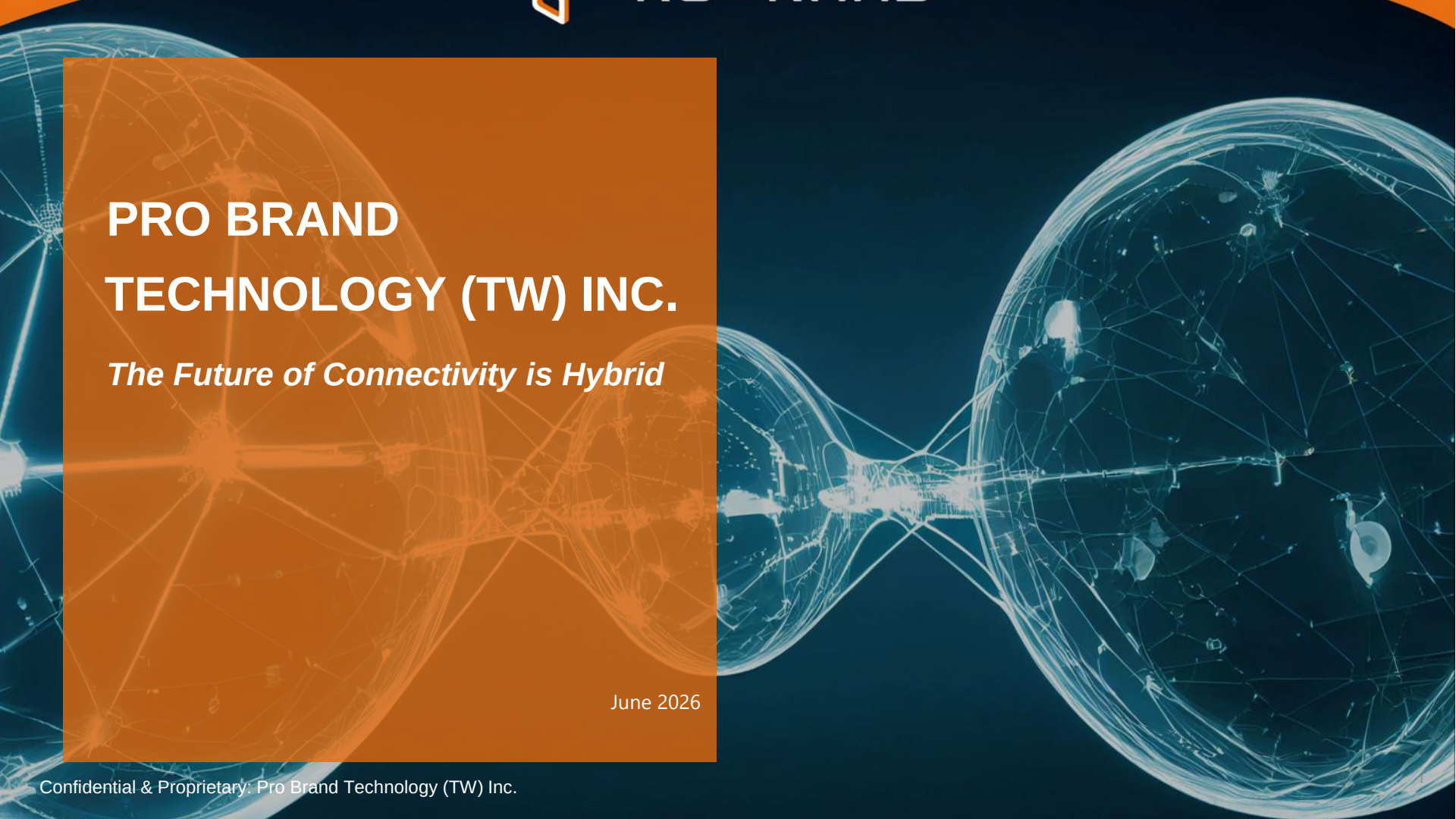




PRO BRAND TECHNOLOGY (TW) INC.

The Future of Connectivity is Hybrid

June 2026

COMPANY OVERVIEW



Founded in
2003



2025 revenue
US\$40M+



Worldwide
Employees
400+



R&D Lab



HQ Taiwan



US Office



India

Manufacturing Facilities
4(+2) SMDs

COMPANY STRUCTURE



Pro Brand Technology (TW) Inc.

PBT USA
(PBI)



PBT India
(Vivaan)



COMPANY POSITIONING

An Omni Solution Provider

We specialize in comprehensive ICT design and manufacturing. Our expertise spans across satellite communications, networking and broadband.



CORE BUSINESS PILLARS



Satellite Infrastructure

Specializing in ground terminal equipment and advanced frequency up/down converters for global networks.



Networking Solutions

Pioneering FTTH routers and 5G CPE networking solutions for high-speed terrestrial connectivity.



Broadband Solutions

Proven expertise in the design and development of high-performance waveguide components
engineered for exceptional power-handling capability and robust structural integrity, ensuring high reliability in demanding operational environments.

PROVEN TRACK RECORD & KEY CUSTOMERS



From satellite LNBs to microwave waveguide components.
20+ years of RF expertise trusted by global Tier 1 operators.

Key Customers



■ Satellite

Tier 1 telecom/DVB operators in Germany, India, Spain and USA.

■ Networking

Leading telecom operators in the Philippines, Nepalese, Sweden.

■ Broadband

Waveguide components : Ministry of National Defense, national research institutions and aerospace companies in Taiwan.

Shipping Performance

■ Broadband

Waveguide components : Ministry of National Defense, national research institutions and aerospace companies in Taiwan.



Application	Volume	Remark
Missile platform RF Filter	300 + units	Taiwan defense project
Long range UAV Duplexer & Dual Filter	≈ 100 sets	Overseas defense customers

WHY PBT?



Links
The
World



- **Strong R&D expertise** in microwave design, antenna systems, and RF transceiver modules for high-performance communications.
- **Tailored ODM/OEM solutions** that meet specific technical requirements and branding for global operators.
- **Scaled manufacturing capabilities** across global sites ensuring speed-to-market and reliability.

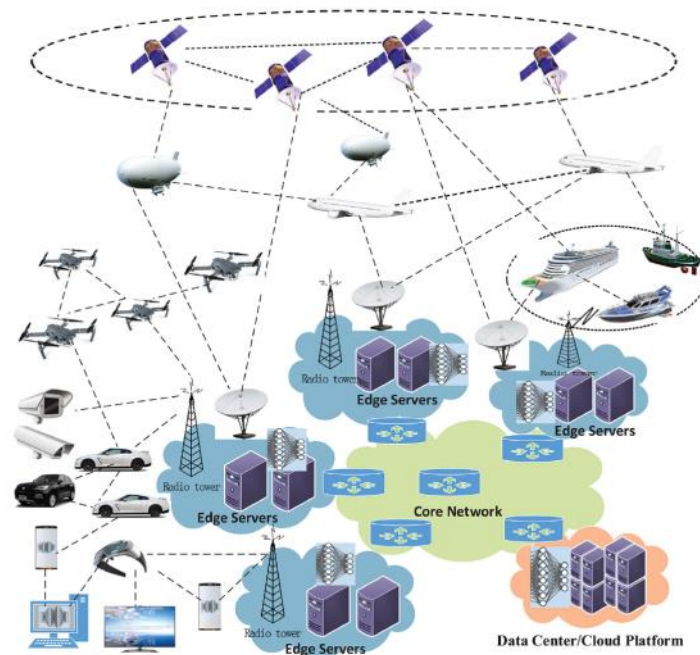
6G Vision : Space Air Ground In the Network (SAGIN)

From "Terrestrial Coverage" to "Full-Dimensional 3D Networks"

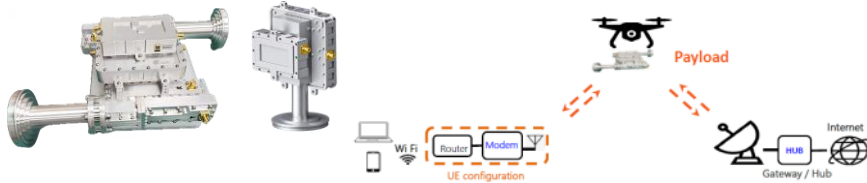
Full-Dimensional Spatial Coverage: 6G networks will break physical boundaries to seamlessly integrate land, air (UAVs), space (LEO / MEO / GEO satellites), and maritime domains.

Cyber-Physical Fusion & Interaction: Supporting Augmented Reality (AR), Mixed Reality (MR), and high-precision industrial applications, driving extreme transmission requirements for ultra-low latency and massive data volumes.

Decentralization & Intelligent Nodes: Future network architectures will shift from centralized systems toward a distributed P2P (peer-to-peer) model. Every hardware terminal will possess edge computing and AI collaboration capabilities, serving as an active service provider within the network environment.



Payload – Airborne Relay/Regenerative Payload



Airborne Networking Capability

NK01 enables UAVs to serve as airborne network relays, supporting Ku-band data, voice, and video links with high reliability. Its small-form factor and cost-efficient design make it ideal for rapid-deployment operations.

Seamless Field Integration

NK01 integrates with minimal cabling and a simple operator interface. Even without satellite expertise, operators can establish Ku-band connections within minutes.

Universal Modem Compatibility

Fully compatible with industry-leading modems (iDirect, Hughes, Gilat, UHP, STM, and more), NK01 ensures global interoperability across Ku-band networks.

Optimized for Remote Operations

Built for airborne communications, NK01 transforms UAVs into mobile network nodes. It extends coverage in regions without terrestrial infrastructure, enabling beyond-line-of-sight (BLOS) connectivity.

RX Operation Specification

I/P Frequency Range	13.75 ~ 14.5GHz
O/P Frequency Range	0.95~1.7GHz
Conversion Gain	44dB [min.]
Gain Variation Over Full Band(750MHz)	4dB [p-p, max.]
Gain Variation Over 54 MHz	2dB [p-p, max.]
Noise Figure	1.2dB [min.]
LO Frequency	12.8GHz
LO Phase Noise @1K Hz	-70dBc/Hz [max.]
LO Phase Noise @10K Hz	-80dBc/Hz [max.]
LO Phase Noise @100K Hz	-90dBc/Hz [max.]
Impedance	50Ω
Supply Voltage	12V [min.] / 20V [max.]
power consumption	5Watt [max.]
Dimension	88mm x 56mm x 22.6mm
Weight	<250g

TX Operation Specification

I/P Frequency Range	0.95 ~ 1.7GHz
Output Frequency Range	10.7~11.45GHz
Conversion Gain	57dB [min.]
Gain Variation Over Full Band(750MHz)	6dB [p-p, max.]
Gain Variation Over 54 MHz	2dB [p-p, max.]
LO Frequency	1.2dB [min.]
LO Phase Noise @1K Hz	9.85GHz
LO Phase Noise @10K Hz	-70dBc/Hz [max.]
LO Phase Noise @100K Hz	-80dBc/Hz [max.]
1 dB Compression Point	-90dBc/Hz [max.]
Impedance	50Ω
Supply Voltage	12V [min.] / 20V [max.]
power consumption	15Watt [max.]
Dimension	106mm x 106mm x 21.7mm
Weight	<450g

Applications

- UAV-based Ku-band relay for extended coverage
- Real-time Internet, video, and secure data transmission
- Supports multi-modem ecosystems
- Lightweight, modular payload optimized for UAV integration
- Ideal for defense, emergency response, and remote operations

Antenna Stabilization

Antenna Type	Circular Waveguide Horn
Antenna Gain	10dB typ.
Passband	10.7~11.45GHz & 13.75~14.5GHz
Polarization	Left or Right Circular polarization (Mechanical Switched)
Material	Aluminum T6061

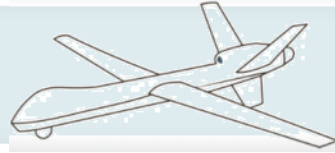
Mechanical Specification

L x W x H	TBD
Weight	1.8Kg
RF Input	Circular Waveguide Horn
RF Output	Circular Waveguide Horn

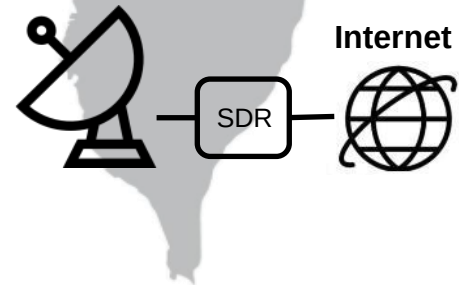
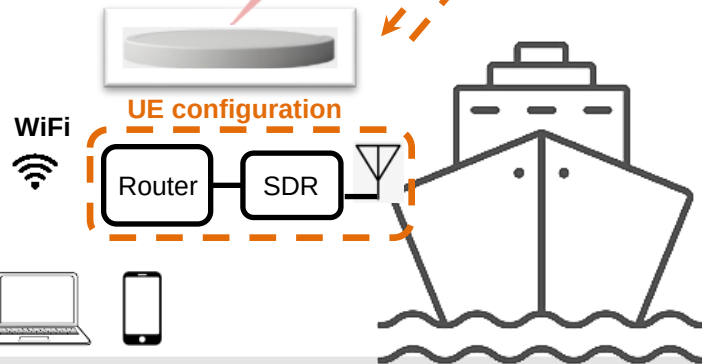
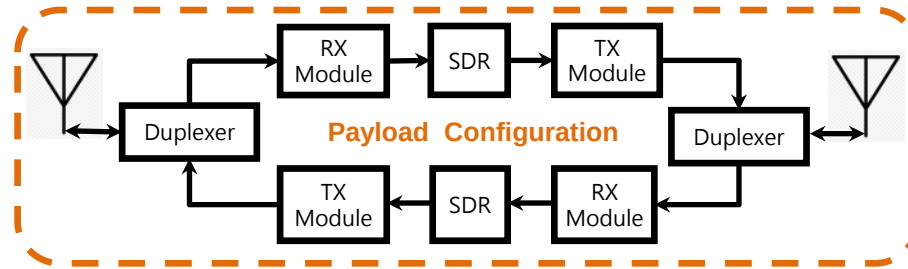
Working Environment

Operating Temperature:	-25°C ~ 55°C
Storage Temperature:	-30°C~85°C
Humidity:	Up to 100% @ 40°C
Wind Speed : Water Proof	60m/sec max from any direction
Operating Temperature:	IP56

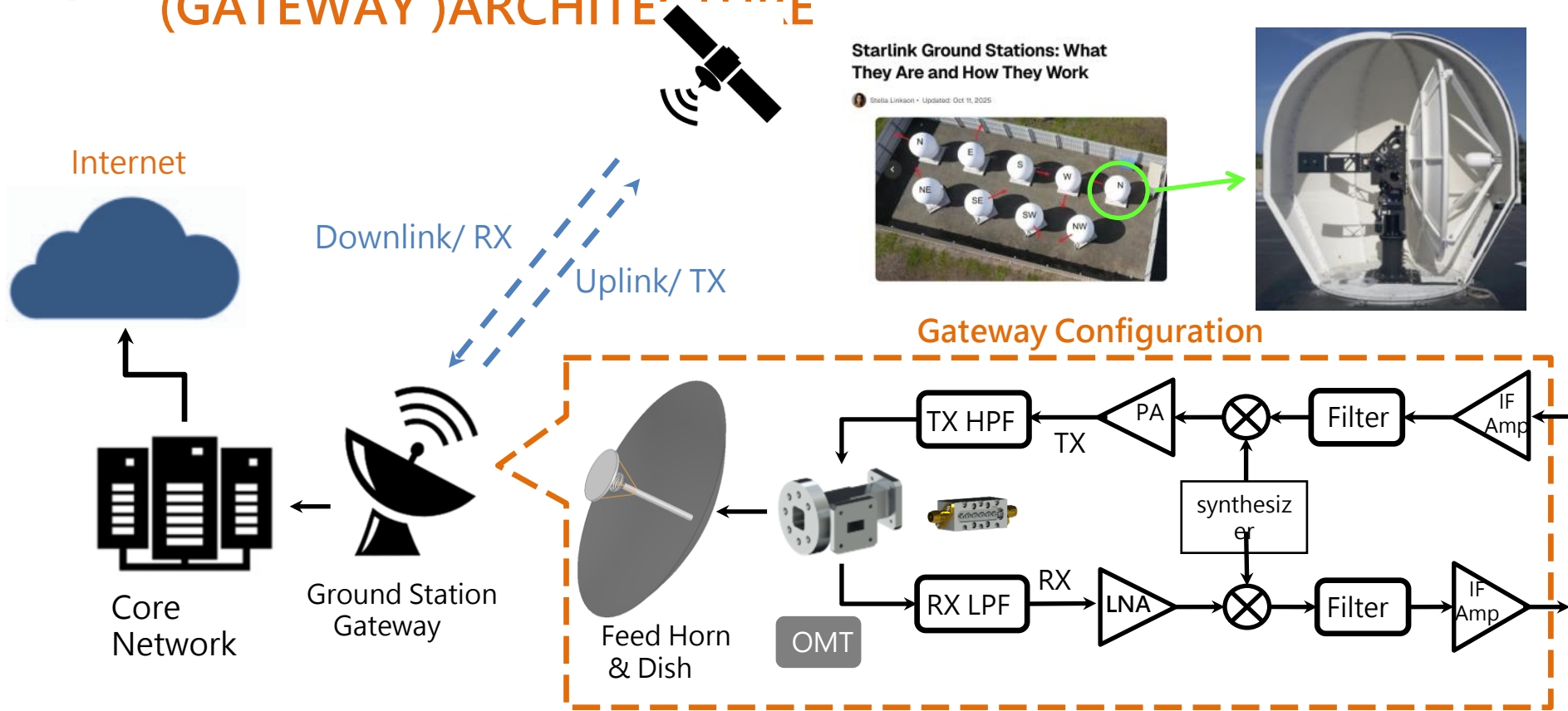
Scenarios and Applications



20Km < Height < 50 Km



SATELLITE GROUND STATION (GATEWAY) ARCHITECTURE



Refer to : <https://www.starlinkinfo.com/starlink-ground-stations>

MAJOR PRODUCT LINES



Defense-Grade Waveguide Components



Filter

- Microwave communication
- 0.9~42GHz
- Customized design
- High Q/ low loss



Diplexer

- Microwave communication
- 0.9~42GHz
- Customized design
- High Q/ low loss



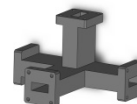
OMT

- Microwave communication
- 2~42GHz
- Customized design
- High Q/ low loss



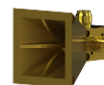
Coupler

- Microwave communication
- 2~42GHz
- Customized design
- High power rating



Magic tee

- Microwave communication
- 5~42GHz
- Customized design
- High power rating



Quad-ridge horn

- Microwave communication
- 0.9~40GHz
- Customized design
- Wide band (BW > 20%)

Next-Gen RF Systems



Blade Antenna

- UAV application
- L, C, S, X Band
- Customized design
- Gain 7dBi +/- 1dBi



High Power Amplifier

- Enables long-range, high-bandwidth communication,
- High Power Efficiency
- Customized design



Universal & DSWN LNB

- Microwave communication
- 0.9~40GHz
- Customized design
- High Q/ low loss



VSAT

- Real-Time Two-Way Communication
- Multiple Frequency Band
- Options: Ku / Ka / C Band
- Compact Antenna Terminal



BUC

- Compact & Lightweight Design
- Multiple Frequency Band
- Options: Ku / Ka / C Band
- High Linear Output Power



Ku Payload

- Satellite simulator/ Aero relay
- Rx 13.75 - 14.5GHz; Tx 10.95 - 11.7GHz
- Antenna beamwidth 30deg
- 7dB typ.

COMPANY OVERVIEW – CHINA FACTORY

Pro Band Technology (China) Co., Ltd.

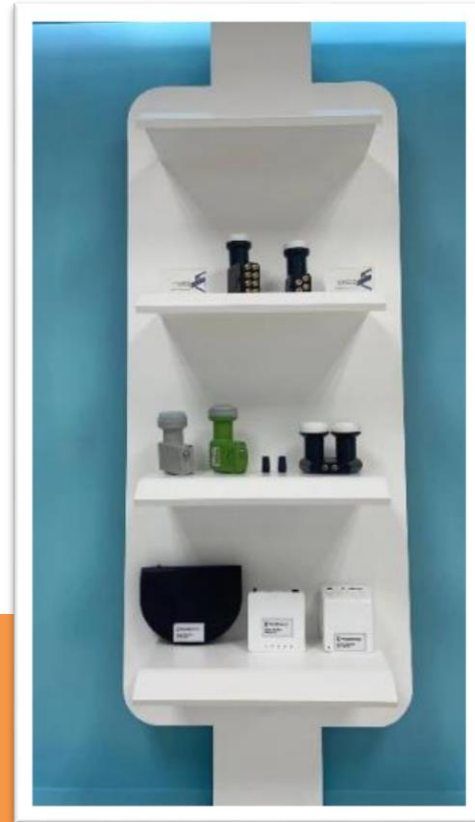
Size: 39,761 square meter

ISO 9001 Certified

No. 16 2Rd. QianJin, 3rd Industrial Area, TanZhou,
ZhongShan City, GuangDong, China



Sample Room



Sample Room



COMPANY OVERVIEW – INDIA FACTORY

VIVAAN Electronic Technology Pvt. Ltd.

Size: 35,000 square meter

ISO 9001 Certified

Plot No - 573 & 569, Sec-8, IMT Manesar, Gurugram - 122051,
Haryana, India



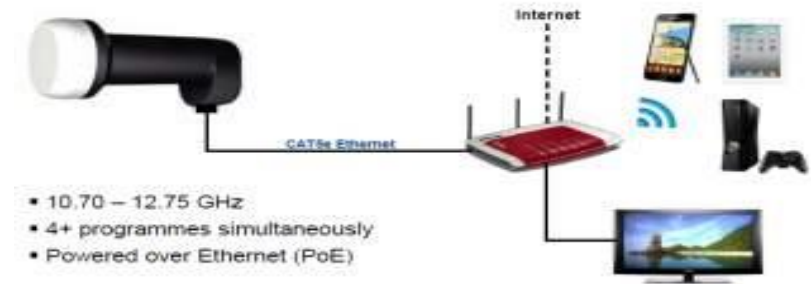
Who We Are

- **VIVAAN Electronic Technology Pvt. Ltd.** has been an additional manufacturing base in India since 2015.
- We **combine core technologies with electronic manufacturing capabilities and capacity** to serve operators in India, providing high-quality, reliable, and affordable **DVB-C Set Top Boxes and LNBs**, as well as **Electronic Manufacturing Services (EMS)** in the Indian subcontinent region.
- In addition to DTH products, we have expanded our product portfolio to include accessories such as **RCUs, adaptors, FTTH and cables**.
- We manage all processes, from **PCB surface mount technology to the completion of finished products**.



What We Do

- We provide high-quality **DVB-C STBs**, complemented with some of the world's **best chipsets, including Ali, Montage, and MSTAR**. Additionally, we offer MPEG-4 HD boxes and variants of MPEG-2 and MPEG-4 technology in SD boxes.
- Since 2019, we have successfully played an important role as a major **LNBF supplier to the majority of the 1st tier DTH operators in India**.
- We are capable of enhancing cost-competitive manufacturing services and providing direct engineering support to **EMS businesses**.
- Along with the 5G FWA developed by PBT (TW), we are also introducing **Wi-Fi 5/6 GPON ONU/SFU/MESH, 5G CPE, and FTTH products**.



DTH Products

• Set Top Boxes

- ✓ DVB-C MPEG-2 SD, MPEG-4 SD and MPEG-4 HD STBs.
- ✓ MPEG-4 Hybrid Wifi OTT STBs.
- ✓ DVB-S, DVB-S2 Satellite STBs for Retailer.



• LNBF

- ✓ Key supplier position for worldwide leading Satellite Pay-TV operators



Production Flow-Automatic SMT Line

Full range of in-house production lines, including SMT, assembly line, production quality, and all customized packaging.



Production Flow



100% Complete test



Electrical characteristics Test on Production Line



Water proof assurance



FQC and Packing for shipment

Production Flow



Production Assembly Line



Reliability Test



Detailed functional test



Packing

Ai Vision AI Solution Design House



Competitive Advantages

1. AI Products Fully Developed In-house, Not Resold
2. Core Technologies Owned, Enabling Broad Development Potential
3. Flexible and Adaptive Strategies
4. Strong Relationships with Upstream and Downstream Partners, High Customer Loyalty
5. Specialized Professional Teams Enabling Diverse Project Development
6. Commitment to Customized Projects, Delivering High-quality Outcomes
7. Ability to Localize and Tailor Complete Systems for Clients
8. Real-time Algorithm Updates, Lowering Barriers to Project Development
9. Forming Strategic Alliances and Signing Partnership Agreements



Clients & Achievements

Semiconductor Sector



Manufacturing Industry



Engineering Industry



Education and Healthcare



Food Industry



Other





LED Defect Detection



Application Scenarios:

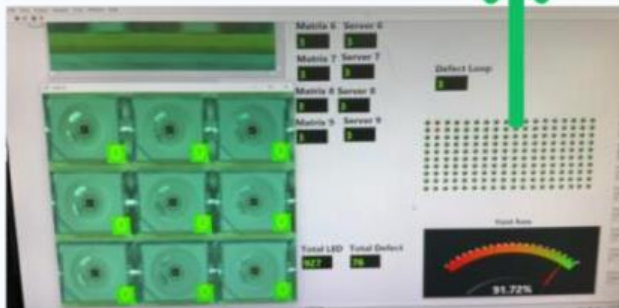
1. LED Die Inspection
2. Customized Mechanical Structures
3. Secondary Inspection for Traditional AOI Systems

Marking Defect Locations

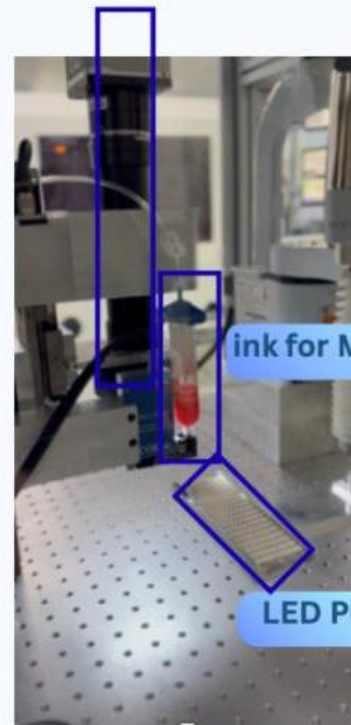
Captured Footage



Recognition Screen



Specialized Imaging System



Ink for Marking Machines

LED Platform

Manual inspection: ~6,000 lights/hour → causes eye strain

AI inspection: ~40,000 lights/hour → faster, consistent, fatigue-free



Safety Gear Donning Training

部門：Material

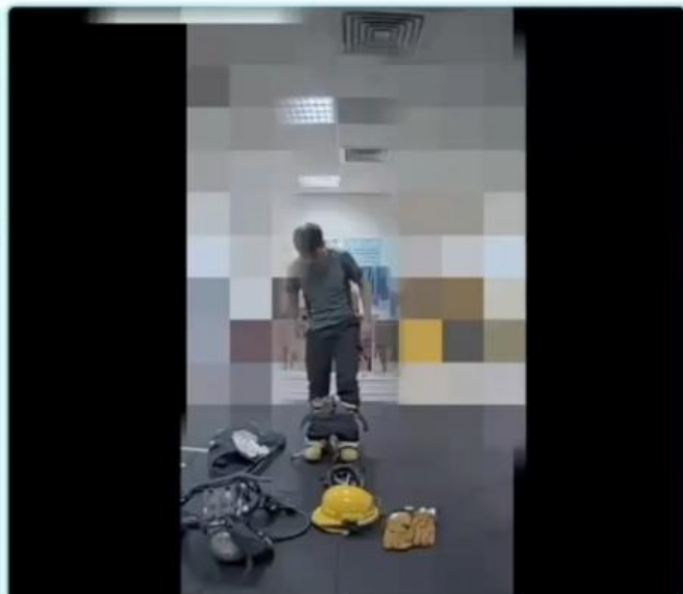
類別：A

姓名：余怡伶

編號：10

訓練流程

- 防銹頭套掛於頸部
- 消防靴穿上
- 消防褲穿上
- 消防褲鬆緊帶拉好
- 消防上衣拉鍊拉好
- 肩帶調整
- 腰帶調整
- 面罩戴上
- 面罩氣密度測試(直視鏡頭)
- 裝上肺力閥
- 將防銹頭套覆蓋至面罩邊緣
- 戴上安全帽
- 戴消防手套



消防衣：(未通過)
A級防護衣：(未通過)
C級防護衣：(已通過)

手動開始

手動結束

錄像回放

練習模式

消防衣

合格時間 02:30

穿戴時間 00:00

請站在方框內指定位置



開始姿勢：背對螢幕手舉高，
點擊圖片可以手動開始。



結束姿勢：背對螢幕手舉高，
點擊圖片可以手動結束。

切換模式

重新練習

示範影片

登出系統

Application Scenarios:

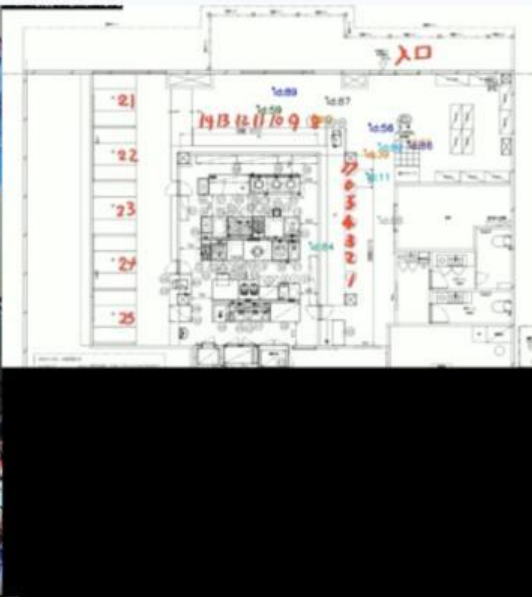
1. Personnel Training
2. Gear Donning Tests
3. Workflow Inspection



Cross-camera Tracking

Application Scenarios:

1. Personnel Tracking
2. Personnel (Object) Positioning





Client Self-labeling Platform

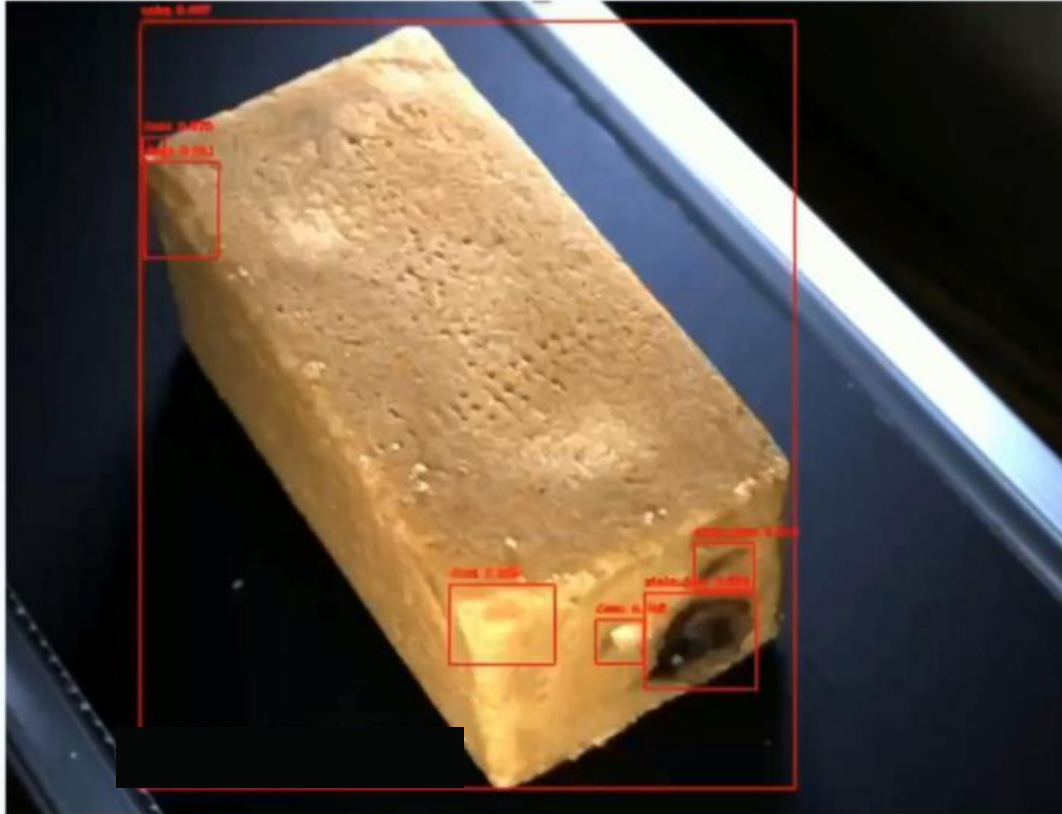


Application Scenarios:

1. Customers can add data independently
2. Customers can define their own defect standards
3. Customizable user interface



Production Line Defect Inspection



Application Scenarios:

1. Surface Defect Inspection for Various Products
2. Customized Mechanical Structures
3. Secondary Inspection for Traditional AOI Systems



CIC Inspection Abnormalities

- 1.Loss of Camera Connection**
- 2.Blackout on Camera Feed**
- 3.Image Flickering or Noise Interference**
- 4.Visual Obstruction (such as leaves, nests, etc.)**
- 5.Intentional Camera Movement**
- 6.Video Recording/Storage Malfunction**
- 7.Abnormality in Designated Area (e.g., obstructed IR detector)**



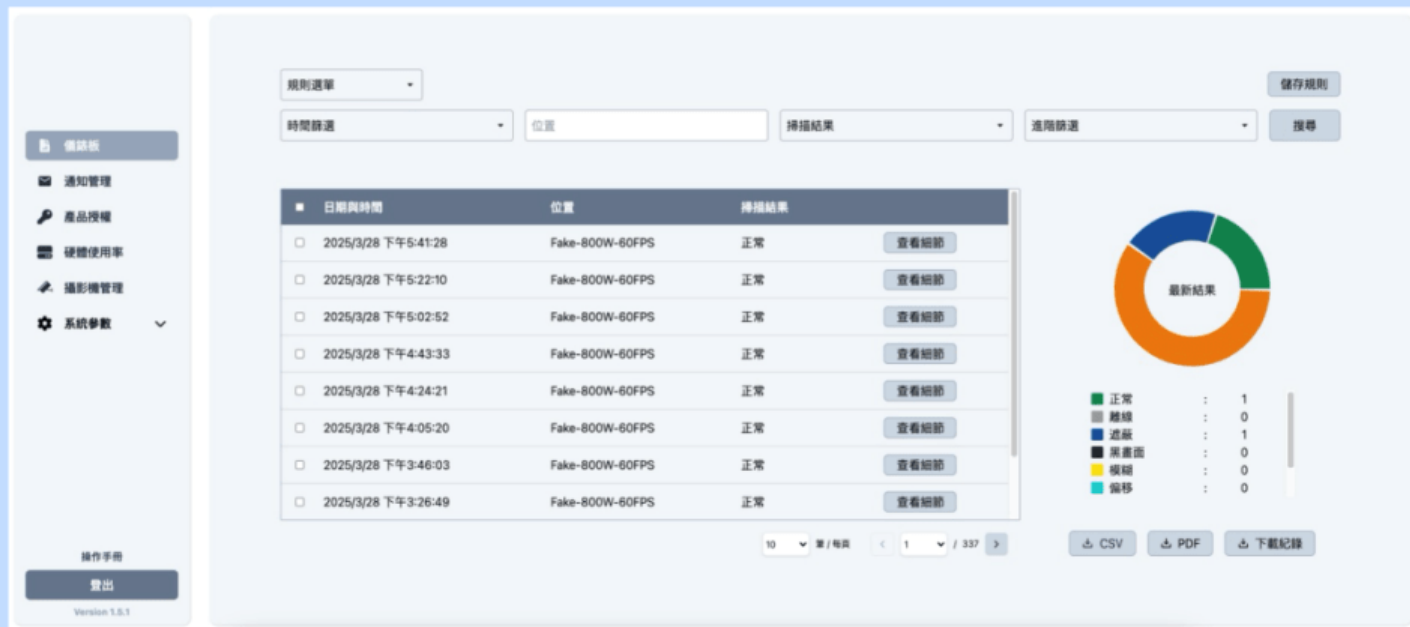
Golden Image Comparison

Captures one image every hour, totaling 24 images per day



Report

Allows users to view the current status of cameras in the system and check for abnormalities.





Thank You.

ProBrand Links The World
<http://www.pbt.com.tw/>

sales@pbt.com.tw