

COMPANY PROFILE · PARTNER PRESENTATION

Changsha Puneng Electronic Co., Ltd.

长沙浦能电子有限公司

Engineering the signal infrastructure trusted by broadcast & broadband networks worldwide.

National High-Tech Enterprise · Innovative SME · A-Grade Taxpayer



Complete Product Lineup

CATV

FTTH

Broadcast

OEM / ODM

1 Executive Summary

Changsha Puneng Electronic Co., Ltd. ("Puneng") is a high-tech, innovation-driven manufacturer specialized in **broadcast & broadband network components** — covering CATV / digital-TV signal protection, optical communication devices, and bespoke electronic components for telecom and broadcast operators.

Headquartered in Changsha, China, and certified as a **National High-Tech Enterprise (2024)** and **Innovative SME**, Puneng combines a proprietary patent portfolio, vertically integrated production, and full import/export authority to deliver reliable, cost-efficient signal-infrastructure products to network operators, system integrators and OEM partners across multiple continents.

We are **not a trading company**. We are the engineering partner that operators quietly rely on to keep their networks on-air.

National High-Tech Enterprise

Innovative SME

A-Grade Taxpayer

VAT General Taxpayer

Full Import/Export Authority

6 Granted Patents

2 Corporate Background & Strength

Founded in late 2019, Puneng was built around a clear thesis: **the world's broadcast and broadband networks need a specialist — not a generalist — for the unglamorous but mission-critical components that sit between the headend and the home.**

While most peers chased consumer electronics, Puneng focused its capital and engineering talent on the **signal-protection and optical-distribution layer** of CATV, DVB-T, FTTH and broadcast networks — the layer where a single failed lightning protector or a degraded fiber splitter can take an entire neighborhood off-air.

In under six years the company has:

- Built a **proprietary patent portfolio of six granted utility patents**, each protecting a product family in active production.
- Earned **National High-Tech Enterprise** recognition — a designation granted only to companies whose R&D intensity, IP depth and technical capability meet national thresholds.
- Been classified as an **Innovative SME** and **A-Grade Taxpayer**, reflecting both innovation output and fiscal compliance.
- Secured **full import/export authority**, enabling direct global shipment and OEM/ODM engagement without intermediary friction.

The company is wholly owned and led by its founder, **Mr. Wang Wen**, ensuring short decision cycles, stable long-term strategy, and direct accountability to every customer relationship.

Strategic Location

Puneng operates from the **Wangcheng Economic & Technological Development Zone** in Changsha — a national-level development zone with mature electronics supply chains, direct expressway and rail-freight access, and proximity to the Yangtze River Delta and Pearl River Delta component clusters. This gives Puneng both cost discipline and component sourcing agility.

3 Core Products & Technical Advantages

Puneng's catalog is organized into four product lines, all engineered in-house and protected by patents where applicable.

FLAGSHIP

3.1 CATV & Digital-TV Signal Protection

The company's deepest technical bench.

- **High-Shielding Lightning Protectors for CATV** — patented designs delivering high EM shielding plus surge protection. Tool-free, snap-in mounting reduces field installation time. **[Patented]**
- **Easy-Install Digital-TV Lightning Protectors** — patented U-clip mounting allows retrofit on live lines without disassembling the base, dramatically reducing truck-roll cost. **[Patented]**
- **Dual Isolators with Lightning-Proof Modules** — plug-in modular architecture; the protection cartridge is field-replaceable, so a surge event no longer means replacing the whole unit. **[Patented]**
- **Active Antenna Splitters for Digital TV** — integrated protection, ventilation and dust management for outdoor cabinet deployment. **[Patented]**



4-way signal splitter · field-proven design



Multi-output signal amplifier · high-EMI enclosure

Why it matters to operators: the lightning-protection line is the product category where downtime is most expensive and where Puneng's modular, tool-free engineering delivers the clearest TCO advantage over incumbent brands.

OPTICAL

3.2 Optical Communication Devices

- **Box-Type Fiber Splitters** — patented (CN216748214U) quick-connect housing with spring-locked, self-securing lid and bend-protection ribs that prevent fiber micro-bending, preserving optical return loss performance over years of service.
- Fiber optic devices, optical communication equipment and passive optical components for FTTH and HFC networks.



Single-mode & multi-mode fiber patch cords · FTTH-ready

BROADCAST**3.3 Broadcast & Broadcasting Equipment**

- Broadcasting & broadcast-film equipment sales, including headend-adjacent components and RF distribution hardware.
- Custom RF and signal-path components built to operator specification.



Directional tap couplers · CATV distribution nodes

OEM/ODM

3.4 Custom Electronic Components & OEM/ODM

Puneng operates an OEM/ODM desk for partners needing electronic components, electromechanical devices and communication equipment built to spec, supported by its own design, prototyping and low-to-mid volume production capability — and reinforced by its registered AI integration, data-processing and technical consulting scope, which lets Puneng also deliver the firmware and integration layer, not just the hardware.

4

Technical Edge & Intellectual Property

Puneng's competitive moat is **patented mechanical and electrical engineering applied to signal integrity and field serviceability** — not commodity component assembly.

PATENT 01

Lightning-proof dual isolator with field-replaceable protection module

PATENT 02

Anti-drop connector mechanism

PATENT 03

Active antenna splitter for digital TV (protection, ventilation, dust control)

PATENT 04

High-shielding lightning protector for CATV

PATENT 05 · CN216748214U

Box-type fiber splitter with self-securing spring-latch housing

PATENT 06

Easy-install digital-TV lightning protector with U-clip mounting

A consistent thread runs through every patent: **reduce field installation time, reduce field replacement cost, and protect signal integrity under environmental stress**. This is precisely the engineering profile that procurement teams at network operators are evaluated on.

5 Business Scale & Manufacturing Capability

Puneng operates a dedicated production base within the **Liandong Jinyu Industrial Center** — a purpose-built, multi-tenant advanced manufacturing campus — with vertically integrated capability spanning:

- Electronic component & electromechanical device manufacturing
- Optical fiber and optical communication device manufacturing
- Broadcast & broadcast-film equipment manufacturing
- In-house tooling, assembly and QC for both standard and custom SKUs



Dedicated production base · Liandong Jinyu Industrial Center, Changsha

Engineering-led, not labor-led. As a High-Tech Enterprise, Puneng's headcount is weighted toward engineering, process and quality functions rather than raw assembly — a structure that keeps unit costs competitive on mid-volume runs while preserving the responsiveness needed for custom OEM/ODM work.

Global-ready. Full import/export authority, VAT general-taxpayer status and A-Grade taxpayer standing mean Puneng ships directly to overseas buyers, issues compliant commercial documentation, and supports OEM/ODM contracting without third-party trading-house overhead.

6 Client Portfolio & Market Reach

Puneng's products are deployed wherever broadcast and broadband signals need to be distributed and protected — across **CATV operators, DVB-T / digital-TV broadcasters, FTTH/ISP network builders, system integrators, and OEM partners.**

Our components are today found in live networks reaching end subscribers across **Europe, Latin America, the Middle East and Southeast Asia**, and we are a preferred OEM/ODM source for several regional distributors who re-brand Puneng-built SKUs under their own catalogs.

Representative engagement patterns include:

- **Multi-year supply agreements** with regional CATV and broadband operators for lightning-protection and fiber-splitter SKUs, with rolling annual replenishment.
- **OEM/ODM partnerships** in which Puneng designs, validates and manufactures custom signal-path components to a partner's specification and brand.
- **Project-based supply** to system integrators rolling out headend and distribution-network upgrades.

We deliberately do not publicize named operator accounts — our partners' network reliability is their competitive advantage, and we protect it. Verified reference profiles matched to a prospect's region and use case are available under NDA.

7

Quality & Compliance

- **National High-Tech Enterprise** — R&D intensity and IP depth independently validated at national level.
- **A-Grade Taxpayer** — sustained fiscal and operational compliance.
- **VAT General Taxpayer** — eligible to issue compliant VAT documentation for domestic and export transactions.
- **Innovative SME** designation — recognized innovation governance and growth trajectory.
- Full **import/export authority** under Chinese customs and commerce regulation.

Every shipped SKU passes Puneng's in-house QC protocol; product-specific test reports and certificate-of-conformity documentation are supplied as standard with each shipment.

8 Why Partner With Puneng

What operators need	What Puneng delivers
Uptime under lightning and environmental stress	Patented, field-proven protection products engineered for surge events
Lower truck-roll cost	Tool-free, modular, field-replaceable designs — patented
Signal integrity over years of service	Bend-protection and self-securing fiber-optic housings — patented
OEM/ODM responsiveness without trading-house markup	Direct manufacturer with full import/export authority and in-house engineering
A partner whose incentives are aligned long-term	Founder-owned, single-shareholder structure; direct accountability; short decision cycles
Global logistics and compliant documentation	VAT general taxpayer, A-Grade taxpayer, self-operated export capability

"Puneng is the rare manufacturer that competes on patented engineering and field serviceability — and prices it as if it competed on unit price alone."

9 Looking Forward

Puneng is in a deliberate investment phase: extending the lightning-protection and fiber-distribution patent families, expanding OEM/ODM capacity for custom RF and signal-path components, and deepening its footprint in **Latin American and European broadcast/broadband markets** where reliability requirements are highest and where cost-efficient, engineering-led suppliers are most underserved.

We are actively seeking **operators, system integrators and regional distributors** who want a long-term engineering partner — not a transactional vendor — for the signal-infrastructure layer of their networks.

Contact

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Document prepared for partner-led client presentation.