

— ALNETS PCR-W SERIES · WIRELESS PROXY CHAINING ROUTER

## Dual-Chaining Architecture · Phone Farm Security

**Dedicated to High-Density Phone Farms, Cross-Border Penetration & Anti-Tracking**

Decoupled Relay transit acceleration + Landing geolocation, eliminating source IP leakage for mobile devices.

Relay + Landing Decoupling

Zero Source IP Exposure · Anti-Correlation

High-Strength Protocol Encryption

Isolated DHCP / NAT / SSID

CloudLink Private VPS Chaining

● Hardware-Grade Proxy Chaining · Up to 40 Isolated Sub-Routers · Dual Gigabit Ports

### DUAL-CHAINING

#### Dual-Chaining Proxy

Relay handles cross-border acceleration; Landing delivers pinpoint geo-location.

### ANTI-TRACKING

#### Zero Source IP Exposure

Eliminate phone farm mass ban risks with un-traceable multi-hop encapsulation.

### PROTOCOL SUPPORT

#### All-Protocol Proxy Support

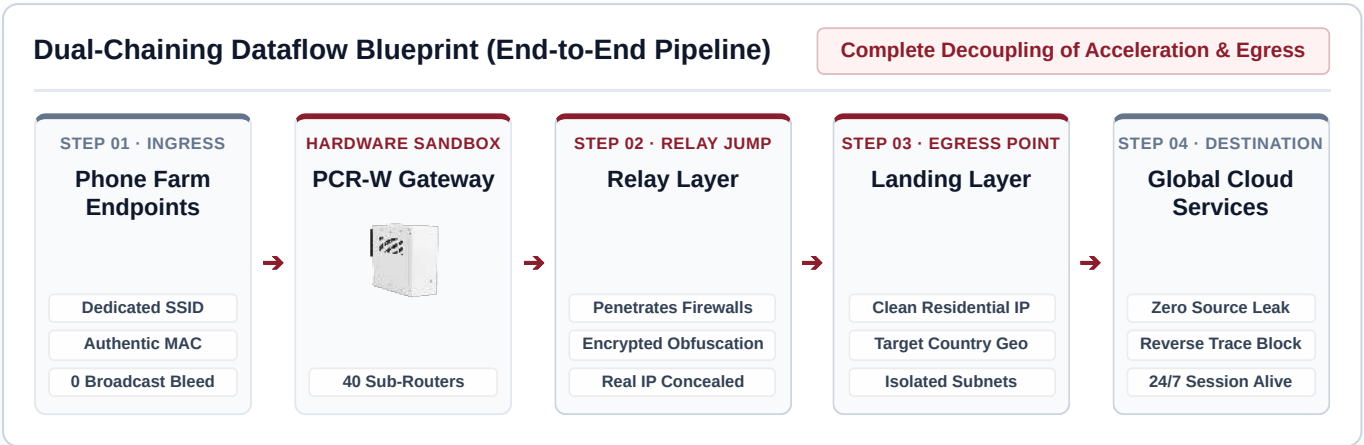
Native support for VMess, VLESS, Shadowsocks, HTTPS, and SOCKS5 proxies.

### CLOUDLINK

#### Private Node Integration

Directly chain phone farm VPS and hybrid public/private nodes with 0 CLI scripts.

# Relay + Landing Dual-Chaining Architecture Mechanics



**BREAKTHROUGH 01 / LINK DECOUPLING**

### Seamless Relay Failover & Long-Lived Session Persistence

Relay and Landing operate entirely decoupled. When a Relay node experiences network jitter or route failover, **the Landing egress IP and client session remain unchanged**, eliminating unexpected disconnections and risk controls.

- Zero-Drop Route Failover
- Session Persistence
- Multi-Line Self-Healing

**⚡ Operational Mechanism Comparison**

**✗ Conventional Single-Hop Proxy**  
Single hop easily dropped by firewalls; platform probes trace directly back to broadband IP, causing mass account bans.

**✓ PCR-W Dual-Decoupled Proxy Chain**  
Dual-hop isolation; Relay route failover without dropping egress session; real source IP physically shielded.

**BREAKTHROUGH 02 / PHYSICAL CONCEALMENT**

### End-to-End Re-Encapsulation & Zero Source IP Exposure

Local traffic is routed into dedicated sub-routers and re-encapsulated between Relay and Landing nodes. Target platforms and intermediate inspection links **can only probe the Relay entry, never tracing back to local broadband**.

- Broadband Signature Severed
- High-Grade Encryption
- Zero External Listening Ports

**BREAKTHROUGH 03 / HARDWARE SANDBOX**

### Up to 40 Isolated DHCP / NAT / Authentic MAC Instances

Single hardware houses up to 40 isolated virtual sub-routers. Each maintains its own DHCP pool, NAT translation engine, and authentic brand MAC pool, eliminating local LAN cross-talk at the hardware level.

- 40 Dedicated Subnets
- Authentic Hardware MACs
- Hardware-Level Isolation

**[Key Architectural Advantage]** Conventional single-layer proxies collapse under inspection and leak real source IPs. PCR-W's dual-chaining physically severs the reverse tracing chain, safeguarding large-scale phone farm operations.

# Securing High-Compliance, Restricted & Anti-Tracking Operations

## Scenario 1: Restricted Cross-Border Networks & Branch Offices

High-Penetration Routing · Low Latency · 24/7 Stability



### Traditional Bottlenecks

Multinational branches face heavy network restrictions, high packet loss across trans-oceanic backbones, and frequent protocol drops, crippling cloud team collaboration.

### The PCR-W Solution

- **High-Penetration Relay Routing:** Uses obfuscated encrypted protocols to bypass local network packet drops, ensuring 99.9% uptime for cloud sync.
- **Landing Direct Cloud Access:** Connects endpoints to local target country egress nodes for seamless access to overseas SaaS platforms.
- **Central Multi-Group Management:** Provisions 10/40 isolated subnets on one appliance, binding departments to dedicated egress with unified LAN control.

**Core Value:** Overcome restrictive network boundaries and provide phone farm matrices with a dedicated, highly stable connection fabric.

## Scenario 2: High-Security Operations & Anti-Tracking Egress

Zero Source IP Leak · Hardware Sandbox · Kill-Switch

### Traditional Bottlenecks

In high-security financial, research, or multi-account operations, single-layer proxies risk exposing the source IP via DNS side-channel sniffing or reverse socket probing.

### The PCR-W Solution

- **Dual-Hop Isolation:** Relay severs source egress footprints while Landing delivers authentic clean IPs. End-to-end multi-hop data flow blocks reverse detection.
- **Hardware-Level Kill-Switch:** Real-time monitoring of IP, DNS, and WebRTC states instantly cuts internet access on drops, never exposing local broadband.
- **Authentic MAC Regeneration:** Library of millions of authentic router MACs refreshes hardware identity in bulk, eradicating LAN correlation risks.



**Business Value:** Defeat reverse network reconnaissance and furnish high-security operations with a financial-grade privacy sandbox.

# Multi-Protocol Proxy Support & Multi-Dimensional Anti-Leak System

01 · DEVICE TRAFFIC

Phone Farm Multi-Device

Concurrent outbound requests

02 · ENCRYPTION

PCR-W Hardware Packaging

Strips cleartext handshake signs

03 · PROXY FORWARDING

Standard Encrypted Proxy

Blends with daily web access

04 · STABLE DELIVERY

Reaches Foreign Relay Node

Smooth egress via Landing IP

VMess / VLESS

Recommended

Strong encryption with low-latency handshakes; dynamically disguises packet signatures to defend against middle-layer inspection.

Traffic Disguise

Anti-Fingerprinting

Shadowsocks

Standard

Lightweight symmetric stream ciphers with minimal CPU overhead, highly resistant to packet loss, ideal for multi-device concurrency.

Low CPU Overhead

Loss-Resistant Concurrency

HTTPS Proxy

Stealth

Wraps proxy payloads into standard TLS web data (Port 443), appearing identical to standard public internet browsing traffic.

Standard 443 Port

Web Traffic Mimicry

SOCKS5 / HTTP

General

Industry-standard protocols seamlessly compatible with global commercial residential, datacenter, and mobile rotating proxies.

Commercial IPs

Auto Health-Check

Hardware Safeguard · Sub-Second Polling

Disconnect Mechanism Comparison

✗ Conventional Router Proxy Drop

Silently falls back to local WAN; real IP exposed immediately, causing account bans.

✓ PCR-W Hardware Kill-Switch

Instant hardware outbound lockout; strictly 0 fallback to WAN, accounts 100% safe.

01 / IP Dropout Kill-Switch

DEFENSE 01

Continuous sub-second health polling. If any hop fails, **hardware instantaneously cuts outbound packets**, strictly preventing real IP fallback.

Sub-Second Sensing

Hardware Cutoff

Zero WAN Fallback

02 / Encrypted DNS Proxy

DEFENSE 02

All queries route via encrypted proxy channels to remote secure DNS, **eliminating ISP hijacking, DNS query auditing, and geo-inconsistency leaks**.

Encrypted Remote DNS

Zero DNS Hijacking

No Local Log Traces

03 / WebRTC STUN Shield

DEFENSE 03

Deeply rewrites WebRTC STUN interactions, **blocking platforms from probing real internal LAN IPs**; only clean Landing exit IPs are visible.

STUN Deep Rewriting

Zero Internal LAN Probe

Clean Target Footprint

Million-Scale Brand MAC Fingerprint Pool

Built-in router MAC library following OUI conventions. Update MACs across 10 or 40 sub-routers in one batch to refresh their router-side network identities.

OUI Conventions

Built-in MAC Library

Batch MAC Update

Distinct Sub-Routers

Hardware Virtual Routing & Subnet Isolation

Up to 40 virtual sub-routers per device. Each retains independent DHCP (192.168.x.1/24), kernel Conntrack table, and ARP cache, preventing crosstalk.

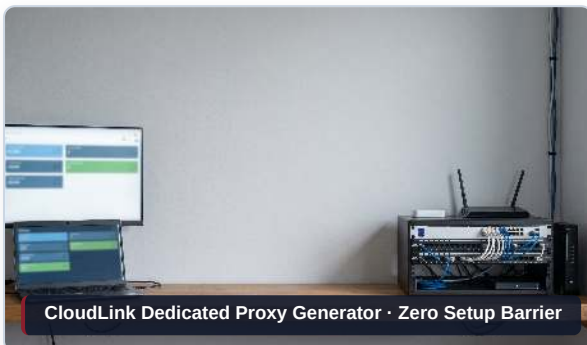
40 Dedicated Subnets

Independent Conntrack

Isolated ARP Cache

## CloudLink: 1-Click Convert VPS into Dedicated Proxy

No Scripts Required · 1-Click Setup



CloudLink Dedicated Proxy Generator · Zero Setup Barrier

### Turn Any Cloud VPS into Proxy Nodes

No tedious Linux scripts or certificate configurations. Enter server IP and password into the setup tool to turn AWS, Alibaba Cloud, or private servers into dedicated PCR-W proxy nodes instantly.

### Flexible Relay & Landing Assignment

Assign bound servers freely as Relay acceleration hops or final Landing exit IPs. Deploy 100% private server nodes, or combine private servers with clean residential IPs.

### 1-Click Instant Node Replacement

If a server experiences latency or platform restrictions, switch to a new node in seconds via the backend without rebooting hardware or disconnecting mobile devices.

## Internal Port Mapping & Centralized LAN Management

GbE Direct Access · 0 Proxy Bandwidth Used

 LAN MANAGEMENT STATION  
Admin PC (Gigabit LAN Direct)

 1000M GbE Cable

 PCR-W Gigabit Switch · Port  
**Forwarding Engine**  
Line-speed hardware switching, 1-way mapping (Scrcpy / ADB / RDP)

 0 Proxy Traffic · \$0 Fee

 **Phone 01**  
192.168.1.10  
Wi-Fi 01 · Dedicated MAC

**Phone 02**  
192.168.2.10  
Wi-Fi 02 · Dedicated MAC

...  
Up to 40  
Isolated  
Subnets

 **Phone 40**  
192.168.40.10  
Wi-Fi 40 · Dedicated MAC

 **Strict subnet isolation: Phones cannot scan each other; 0 device correlation risks.**

### Direct LAN Access, 0 Proxy Bandwidth Cost

Admin PC connects directly via Gigabit LAN. Screen mirroring, batch APK installs, and file transfers run over local hardware at wire speed, burning zero external proxy traffic.

### Isolated Subnets Prevent Device Correlation

Traditional routers lump devices into one subnet, allowing apps to scan local IPs and MACs. PCR-W isolates every phone on its own SSID and MAC, eliminating correlation risks.

### NATIVE SUPPORT FOR LEADING ADMIN PROTOCOLS

Scrcpy Mirroring

Android ADB 5555

Windows RDP 3389

VNC Desktop

### 1-Click Batch Proxy Import

Batch import Relay and Landing proxy pairs for all sub-routers via simple TXT files, automatically paired and deployed in seconds.

TXT File Batch Import

Auto Relay+Landing Pairing

### Batch 10/40 Wi-Fi SSIDs

Customize or rule-generate 10 or 40 independent Wi-Fi names (SSID) and passwords, with 1-click option to hide broadcast signals.

Independent SSIDs

1-Click Hide Wi-Fi Broadcast

### Millions of Brand MACs

Built-in database of millions of IEEE-standard brand MAC addresses. 1-click batch reset hardware fingerprints across all sub-routers.

IEEE 802 Standard OUI

Batch Reset Hardware MAC

# Precise Scale Fit: Two Models for Dedicated Deployment



### Hardware Interface Architecture & Electrical Standards

- 1 × Gigabit WAN Port:** High-bandwidth uplink ensuring reliable multi-device concurrent throughput.
- 1 × Gigabit LAN Port:** Direct admin PC management or farm switch uplink for internal port mapping.
- Dual External Antenna Mounts:** Bundled with 2 high-gain 5GHz omni antennas; supports rack feeder lines.
- Regulated Industrial DC Input:** Standard 12V DC input with built-in quiet cooling fan for continuous 24/7 reliability.

| Key Technical Parameters      | PCR-W10                                                                    | PCR-W40                        | Selection Guide & Engineering Scope                                                                           |
|-------------------------------|----------------------------------------------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------|
| Sub-Routers & Broadcast SSIDs | 10 Isolated Subnets                                                        | 40 Isolated Subnets            | W10 for boutique branches/stations; W40 for scaled phone farm operations.                                     |
| Dual-Chaining Pairs           | 10 Pairs (Relay+Landing)                                                   | 40 Pairs (Relay+Landing)       | Each SSID binds 1 dedicated Relay+Landing pair; acceleration decoupled from egress.                           |
| Dedicated DHCP & NAT          | 10 Independent Engines                                                     | 40 Independent Engines         | Each sub-router maintains dedicated DHCP pool and NAT routing for zero LAN correlation.                       |
| Supported Protocols           | VMess · VLESS · Shadowsocks · HTTPS · SOCKS5 · HTTP                        |                                | Supports major encrypted proxy protocols; fully compatible with commercial proxies and private cloud servers. |
| CloudLink Cloud-to-Proxy      | Supported (Up to 10 Nodes)                                                 | Supported (Up to 40 Nodes)     | One-click transform proprietary cloud VPS into dedicated Relay/Landing nodes.                                 |
| Leak Defense Protection       | Hardware Kill-Switch + Triple IP / DNS / WebRTC Leak Defense               |                                | Instant cut-off on drops; never leaks local broadband IP; proxy DNS and WebRTC shielding.                     |
| Wireless Specifications       | 5 GHz Band, Up to 1300 Mbps, IEEE 802.11a/b/g/n/ac, Dual External Antennas |                                | Clean 5GHz high-speed transmission with batch channel staggering and TX power tuning.                         |
| Management & MAC Library      | Built-in ALOS Platform + Millions of Authentic Router MAC Library          |                                | Batch provisioning, one-click hot swap, internal port mapping (0 proxy data consumed).                        |
| Recommended Devices           | 10 Endpoints (1 WiFi = 1 Unit)                                             | 40 Endpoints (1 WiFi = 1 Unit) | Recommended 1 endpoint per dedicated SSID & proxy chain for optimal isolation.                                |



ALNETS TECHNOLOGY CO.,LTD

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