

# PBC 124-C

Path Border Controller

TALK TO AN EXPERT



## Extend Layer 2 connectivity anywhere.

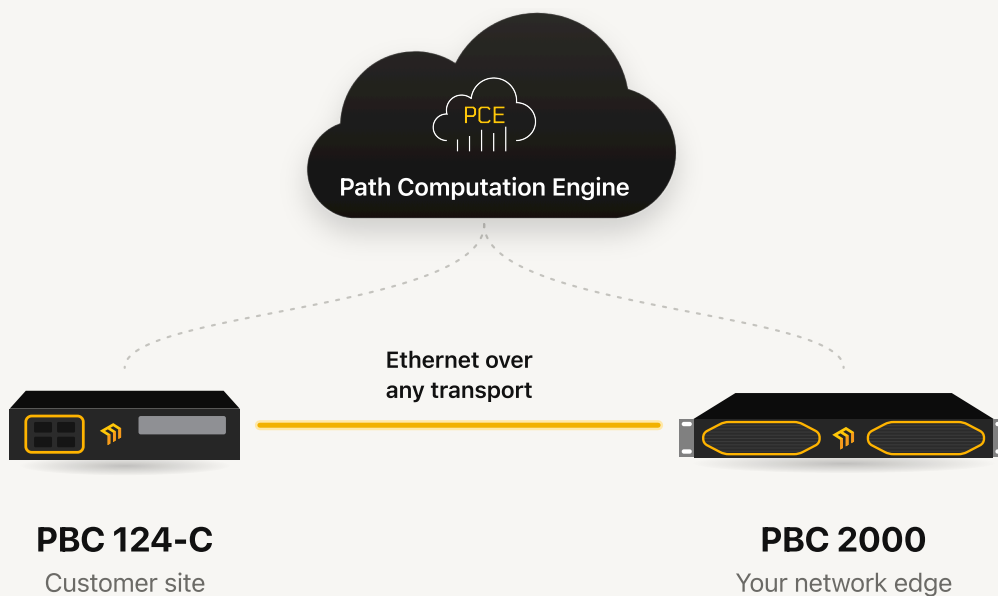
The PBC 124-C is a compact customer premises equipment (CPE) device that enables service providers, data center operators, and AI infrastructure operators to automatically extend Layer 2 services from their network directly to customer locations over any available transport.

Instead of building or procuring new fiber routes, operators can extend their private network reach to off-net sites and customers anywhere.

## Product Description

The PBC 124-C is the first device in the PBC 100 Series, a new line of compact CPE variants of the Path Border Controller. It brings the same core capability as the carrier-grade PBC 2000, including automated path provisioning, encryption, and cloud-based orchestration, in a smaller footprint and at a lower bandwidth tier, purpose-built for customer premises, single-tenant edge locations, and smaller points of presence.

### HOW IT WORKS



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## Features & Capabilities

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### Automated Provisioning

Encrypted private Ethernet paths activate in minutes with no manual, box-by-box provisioning or complex routing configuration required.

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### Transport Agnostic

Layer 2 Ethernet services extend over any available transport (dedicated fiber, DIA, satellite, or 5G) for faster time to service delivery and customer onboarding. Start with DIA, satellite, or 5G for instant private connectivity, switch to fiber when available, and retain the secondary path for automatic path failover.

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### Secure by Default

Every path is protected automatically with AES-256-GCM IPsec encryption, consistent with the rest of the PBC family.

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### Flexible Port Architecture

Four data ports, independently reconfigurable between WAN and LAN roles (two WAN / two LAN by default), plus one dedicated management port. Standard VLAN tagging (802.1Q) on the LAN side and Q-in-Q tagging on the WAN side keep every tenant isolated.

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### Cloud-Based Orchestration

Provisioned, monitored, and orchestrated from the cloud by the Path Computation Engine (PCE), with unified visibility across every site. A new PBC 124-C can be unboxed, connected, and passing traffic within minutes. Software updates are delivered as atomic, image-based upgrades with automatic rollback.

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### End-to-End Visibility

WAN telemetry, including jitter, packet loss, and latency, is visible end-to-end from the operator's core to the customer's site.

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## PBC 124-C Technical Specifications

| Category               | Specification                                                                                                                              |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| PERFORMANCE & SECURITY |                                                                                                                                            |
| Encryption             | AES-256-GCM IPsec                                                                                                                          |
| Throughput             | 2.4 Gbps                                                                                                                                   |
| PORTS & NETWORKING     |                                                                                                                                            |
| Data Ports             | 4x 2.5GbE RJ45, independently configurable as WAN or LAN (2 WAN / 2 LAN default)                                                           |
| Management Port        | 1x 1GbE RJ45 (dedicated)                                                                                                                   |
| VLAN Tagging           | 802.1Q (LAN side), Q-in-Q double tagging for tenant isolation (WAN side)                                                                   |
| Status Indicators      | Front-panel LEDs: power, cloud connectivity, WAN connectivity                                                                              |
| PHYSICAL & COMPLIANCE  |                                                                                                                                            |
| Chassis (H × W × D)    | 1.73 × 8.62 × 9.84 in (44 × 219 × 250 mm)                                                                                                  |
| Weight                 | 3.75 lbs (unit only); 4.63 lbs with power supply and cord                                                                                  |
| Power Supply           | External 60W PSU, +12VDC locking barrel jack, regional AC line cord                                                                        |
| Redundant Power Supply | No                                                                                                                                         |
| Operating Temperature  | 0°C to 40°C (32°F to 104°F), including external PSU                                                                                        |
| Storage Temperature    | -40°C to 70°C (-40°F to 158°F)                                                                                                             |
| Certifications         | EMC: FCC 47 CFR Part 15 Class B, ICES-003, CISPR 32/35, EN 55032/55035, EN 300 386.<br>Safety: IEC/UL/CSA 62368-1. Materials: RoHS, REACH. |
| Certified Regions      | United States, Canada, European Union, United Kingdom, Mexico, Brazil                                                                      |

### Subscription Licenses

The PBC 124-C hardware and cloud-based orchestration software are sold as a combined subscription, available in 1, 3, or 5-year terms.

Ready to see it in action?

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