

Customer Experience Management Platform

Turn Broadband Support from a Cost Center into a Growth Tool



The Challenge

Subscribers judge their provider on Wi-Fi experience, but they cannot tell where problems start. In recent household research, **68%** reported Wi-Fi problems in the past year, and **51%** would switch providers if issues aren't resolved quickly*. Without visibility into the home network and the access layer, every "my internet is slow" call starts with guesswork: long handling times, repeat contacts, and avoidable truck rolls. For a 10,000-subscriber operator, this represents roughly **\$410k** in annual cost exposure before any hardware replacements.

* Source: Ookla Speedtest Pulse

The Solution: One View of the Customer Experience

CEM is the intelligence and workflow layer on top of device management. It consolidates CPE health, Wi-Fi performance, and access-layer data into a single interface, scores every connection, identifies root causes, and recommends the next best action. Built on open Broadband Forum standards, it needs no proprietary agent on the device and works across multi-vendor fleets.

One Platform, Three Perspectives



First-line agents

A single health score and guided steps replace guesswork with fast, first-contact resolution.



Managers & second-line

Fleet-wide dashboards reveal patterns, track interventions, and surface upsell candidates.



Subscribers

Self-service status and fixes via the operator's app, plus a white-label Wi-Fi Experience mobile app under your brand.

Business Outcomes

83%

Fewer truck rolls through remote diagnostics and fewer avoidable device replacements.

~17%

Reduction in Wi-Fi-related churn by detecting and resolving issues faster.

~7%

Mesh-upsell conversion across the base, turning support data into new revenue.

Plus **higher first-contact resolution** and **lower cost-to-serve** from faster, guided diagnosis.

Differentiators

- ✔ **One view of the whole experience:** in-home Wi-Fi, CPE health, and accesslayer KPIs in a single interface.
- ✔ **Open standards, no proprietary agent:** Open Broadband Forum standards, no agent on the device, no fleet lock-in.
- ✔ **Integration with existing systems:** sits on top of UMP or Cloud ACS and feeds scores into ticketing systems.
- ✔ **Guided intelligence & predictive automation:** health scoring, root-cause analysis, guided fixes now; ML scoring, churnrisk prediction, and AI troubleshooting planned.
- ✔ **Agentic-AI ready:** experience data exposed via Model Context Protocol (MCP) for third-party agentic LLMs to diagnose and resolve common CPE issues.

Technology & Security

Standards	TR-069 (CWMP), TR-369/USP, and Bulk Data; TR-181 and TR-098 data models.
Foundation & deployment	AVSystem Hybrid CPE Management platform; on-premises (UMP) or SaaS (Cloud ACS).
Access coverage	FTTx, FWA, HFC, and xDSL.
Integration	REST and Kafka into ticketing systems and subscriber apps.
Architecture & security	Agentless, vendor-agnostic; ISO 27001-certified, TLS encryption, role-based access control.

About AVSystem

AVSystem is a global leader in telecommunications software, trusted by over 300 operators in 60+ countries to securely manage more than 50 million connected devices. We equip broadband providers with an end-to-end operations and assurance portfolio, covering zero-touch service activation,

carrier-grade IP address management, multi-vendor device lifecycle governance, network service assurance, and subscriber-facing Wi-Fi experience management. Whether serving Tier-1 telcos or agile regional ISPs, AVSystem delivers the automation and open-standards technology required to scale modern broadband networks.

[Learn more about CSP product portfolio](#)

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