

DATASHEET

Unwired Edge WiFi.

Feature List 2024/10/31

Compliant passenger Wi-Fi with captive portal and bandwidth management.

Unwired Edge WiFi provides stable, fast, and feature-rich public WiFi, designed for seamless integration into various vehicle and stationary environments with rapid deployment.

It enables network-side configuration without user interaction, is hardware-agnostic in terms of routers and access points, and offers a comprehensive captive portal that also functions offline. The system supports real-time passenger information, onboard entertainment, and robust bandwidth management, ensuring reliable and legally compliant internet access for passengers. With cloud-based management, it scales flexibly from small, embedded installations in vehicles to complex setups on high-speed trains.

WiFi Portal (Captive Portal)

- General features of the Captive & Content Portal
 - Multiple deployment options
 - Cloud-based captive portal (hotspot) via VPN/bonding for small devices
 - Onboard captive portal (hotspot) for larger devices
 - Redirection via HTTP or according to RFC 8908
 - Full HTTPS support
 - Over-the-air (OTA) software and security updates
 - Fully responsive design for desktop and mobile use
 - Automatic synchronization across devices and fleets
 - Assignment for entire fleets or individual devices
 - WiFi login with optional SMS authentication
 - GDPR-compliant banner marketing and email collection at login
- Content and application features
 - Multi-page support with widgets
 - Text
 - Structured text
 - Media (audio, video, documents)
 - Real-time content feeds (e.g., news) from external sources
 - Applications
 - Real-time passenger information with next stops, connections, and delays
 - Moving map with real-time vehicle location
 - Emergency call widget
 - Customer support widget
 - Multi-language support
 - Location-based content (e.g., per station)
- Portal Content Management
 - Full-featured content management system to

create everything from simple captive portals to extensive passenger information and entertainment portals

- Fully web-based, no programming or HTML knowledge required
- Unlimited captive or content portals per tenant and fleet
- Individual content feeds from external sources (itinerary, multimedia, and news content)
- Automatic differential sync of content onto devices and fleets (no FTP or SFTP needed)
- Templates for content pages and widgets
- Easy, graphical assignment of captive portals and pages to fleets and devices
- **Statistics and Monitoring**
 - Real-time statistics based on Matomo
 - Monthly reports on WiFi usage
 - OpenMetrics API for detailed metrics and alerts
 - Logs and alerts for content feeds

WiFi & Networking

- 4G and 5G cellular networks with multi-modem support, APN, and multi-SIM card management
- Cross-border cellular network operation (roaming)
- Satellite uplink via Starlink
- Support for stationary WiFi uplinks
- WAN bonding for concurrent use of all uplinks
- Quality of Service (QoS) and Least Cost Routing (LCR)
- Session-based policies (bandwidth, data volume, session duration)
- WiFi roaming (seamless across access points, trains, and stations)
- Vendor-agnostic support for Unwired Cloud WiFi and other WiFi providers
- Child protection filter (DNS-based)
- Cloud-based internet access (Unwired routes public WiFi traffic by country)
- Full separation of WiFi user networks and other

onboard networks

- Option to use WiFi routers as multi-role gateways for other onboard applications

Cloud-based Management

- Centralized management of WiFi routers and access points
- Vendor-agnostic
- Zero-configuration device deployment
- Device inventory based on tenants and groups
- Automation of deployment and configuration
- Asynchronous configuration rollout
- Web- and API-based configuration
- Configuration for individual devices and entire fleets
- Graphical network configuration
- Real-time telemetry (e.g., cellular signal)
- OpenMetrics API for monitoring and alerts
- Over-the-air software updates (OTA)

Security and Compliance

- Unwired acts as an internet service provider in selected regions and assumes responsibility for operating the WiFi service according to local telecommunication law
- GDPR-compliant WiFi service
- ISO 9001 quality management system compliant
- ISO 27001 IT security management system compliant
- User and role-based access model
- Single Sign-On (OAUTH)
- Automatic software and security updates
- Audit trail for compliance
- 10+ years of software support for cloud and device firmware
- Continuous updates to support new browser and

