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Connection Protection Detection

OMNIA IoT CONNECT – Brief Technical Spec

OMNIA IoT CONNECT is a private global mobile-connectivity solution for mission-critical Internet of Things operations. It connects edge devices across more than 180 countries directly to OMNIA gateways, clouds, data centres and office locations without using the public internet.

Area	Technical specification
Platform role	Secure IoT connectivity solution for distributed enterprise environments. Available as a standalone offering or as part of the wider OMNIA platform.
Private connectivity	Links IoT devices directly to business infrastructure through private connectivity, bypassing the public internet entirely.
Edge SIM architecture	Built around Edge SIM technology, enabling each device to connect securely and privately to the relevant cloud, data centre or business site.
Global coverage	Supports seamless connectivity in more than 180 countries and across more than 600 mobile networks.
Traffic routing	Dynamic routing sends data to multiple backend destinations as required, supporting multi-site and multi-application operations.
Security	Keeps IoT traffic off the public internet, reducing attack surface and the risk of cyberattacks and data breaches. Supports secure device onboarding and segmentation in IoT ecosystems.
Performance	Direct private connections improve data integrity, transmission speed, reliability and consistency for critical operations.

Area	Technical specification
Centralised management	A centralised web portal provides real-time monitoring, management and control across the IoT estate, with end-to-end visibility and performance monitoring.
Provisioning and scale	Automated provisioning activates large-scale deployments rapidly. Devices can be added, removed and managed as requirements change, supporting expansion in device volumes and geographies.
Compliance	Designed to support strong data-protection and privacy requirements.
OMNIA integration	Integrates seamlessly with the wider OMNIA technology stack

Deployment and Operations

OMNIA IoT CONNECT combines private networking with the flexibility and geographic reach of mobile networks. Its streamlined deployment and scaling capabilities support global roll-out programmes without excessive operational complexity, while centralised management helps reduce operational overhead.

The platform is designed for organisations requiring stronger control over sensitive IoT communications than traditional mobile-internet or VPN-only models can provide.

Enterprise Fit

- Mission-critical IoT environments where secure, high-performance device communications are essential.
- Globally distributed device fleets and remote operational assets.
- Organisations expanding IoT initiatives internationally.
- Deployments requiring secure IoT connectivity to clouds, data centres and offices without reliance on the public internet.

