

IP500® organization

The IP500 ® Alliance is an open and international association. It has been formed by OEMs and system manufacturers to establish a standardized and reliable open meshed wireless sensor and actuator network - mainly for large commercial and enterprise building and process automation applications.

The IP500 membership is driven by industry leaders from across the entire spectrum of leading product and system solution for Access Control, Fire & Smoke Detection, Escape route systems, Intrusion Detection, Lighting & Climate Control, Messaging & Localization and many other solutions.

KEY FEATURES

- 5 times higher data rate (IP500 / CNX500)
- multiple times longer battery life time of end-nodes
- most robust and secure mesh connectivity in commercial buildings
- scalable range and mesh topology / size of network
- support safety / security and mobile & comfort applications

The founding members:

ABI-Sicherheitssysteme, Belimo, Bosch Security Systems, JOB Detectomat, Dorma, Gunnebo, Hekatron, Honeywell, LINK, Siemens Building Technologies Division, SimonsVoss, STG-BEIKIRCH, Tyco, UTC Fire & Security, WAGO, Xtralis.

For further information or to become a member please contact us today.



IP500® Alliance

an open, secure and vendor-neutral
wireless platform for
commercial and industrial buildings

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IP500®

an open, secure and vendor-neutral
wireless platform

Applications

- access control, locks
- fire & smoke detection
- escape route systems
- intrusion detection
- lighting & climate control
and more...

About the IP500® Alliance

The IP500® Alliance is an international industry initiative launched by leading manufacturers, users, and operators. It has set itself the target of jointly defining, developing, and providing a secure and vendor-neutral wireless communication platform for smart buildings. The new IP500® platform will thereby fulfill all of the technical requirements for secure, interoperable, and cross-disciplinary networking of smart devices for use in all areas of building automation.

With this approach the Alliance is setting out in new directions. Unlike other industry associations that operate internationally and are already specialized in standardizing wireless communication protocols in building automation, the focus at the IP500® Alliance has for several years been on close collaboration with all Alliance members on a joint solution. By using central, generally used and accepted industry norms and standards such as IEEE 802.15.4, IPv6, 6LowPAN, BACnet, AES128, and IPsec, it guarantees maximum interoperability for vendor-neutral and cross-disciplinary interaction between different products required for comprehensive building automation. Manufacturers, users, and operators benefit in equal measure from this inter-disciplinary, joint approach.

Helmut Adamski, IP500® CEO:

„The IP500® standard solution will allow OEMs to enable business opportunities in real project, where interoperate of various smart devices is key. Until today, OEMs are struggling with their own proprietary low power network solution on one side, and on the other currently available standard solutions are not providing the right performance.“

Due to the IP based connectivity approach and the second source strategy of the IP500 Alliance, OEMs will have more freedom and opportunities their business approach.“

Contact us and become a member today.

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IP500® Protocol Stack / Overview

Module Application		Application Layer
BACnet		Presentation Layer
UDP		Transport Layer
ICMP	Routing	Network Layer
IPv6		
6LowPAN		Link Layer
Forwarding		
802.15.4 MAC		
802.15.4 PHY		Physical Layer



Technology

As an open, non-proprietary, high-performance, and secure building automation platform the IP500® standard does indeed set new standards. It is the only wireless technology standard to ensure maximum interoperability by using and supporting the main industry norms and by clearly specifying all interfaces.

It uses and supports IEEE 802.15.4-2006, 6LoWPAN, IPv6, BACnet, and AES128.

Furthermore, the IP500® standard is the first and only *wireless-based solution* that will fulfill all of the *EN* and *VdS specifications* for products and electronic devices in safety and security relevant applications such as fire protection, break-in protection, or access control.

Mesh Network Technology

