Conettix Product Guide

BOSCH
Invented for life

Alarm Over IP Solutions **You Can Trust**

As one of the pioneers of alarm over IP technology, Bosch has a wealth of experience with both intrusion and fire alarm IP communication deployed world wide. Bosch employs a unique method where every message is authenticated, and each account is controlled individually. This means the system can ignore messages from IP devices that it is not programmed to accept. The result is that the system is sufficient and secure, as it is highly immune to denial of service attacks and allows central stations to easily eliminate run away accounts. Bosch offers both integrated IP and cellular modules for Bosch panels and full-data add-on modules for other panels.

Why is Conettix IP Better?

A Better Business Decision

- No third party servers mean no extra monthly fees, signal delays, or failure points.
- Eliminates costly phone service and improves emergency response times.
- More efficient remote programming and diagnostics saves service time and costs.
- Enables mobile applications for customer satisfaction and retention.

Peace of Mind

- Efficient, low overhead UDP/IP messaging is proven by third parties to prevent cyber attacks.
- Built-in authentication and anti-replay measures ensure notification when signals or equipment are tampered with.
- 128 to 256-bit AES encryption with CBC is included in every Conettix product for high security applications.

Modern Network Devices

Bosch Conettix IP alarm products offer a higher level of convenience and performance with features you'd expect in a modern Internet appliance:

IPv6 Ready

Built-in IPv4 and IPv6 Internet protocol support ensures your central station or premises network will not be obsolete as internet service providers transition to IPv6 addressing.

Universal Plug and Play (UPnP)

Allows the system to self-configure with networks to provide simple installation and compatibility for remote programming and control over IP.

Domain Name Service (DNS) Reporting

Domain Name Service (DNS) Reporting using a receiver's DNS host name gives the flexibility to quickly re-route IP signals to another location or provider without re-programming any panels.

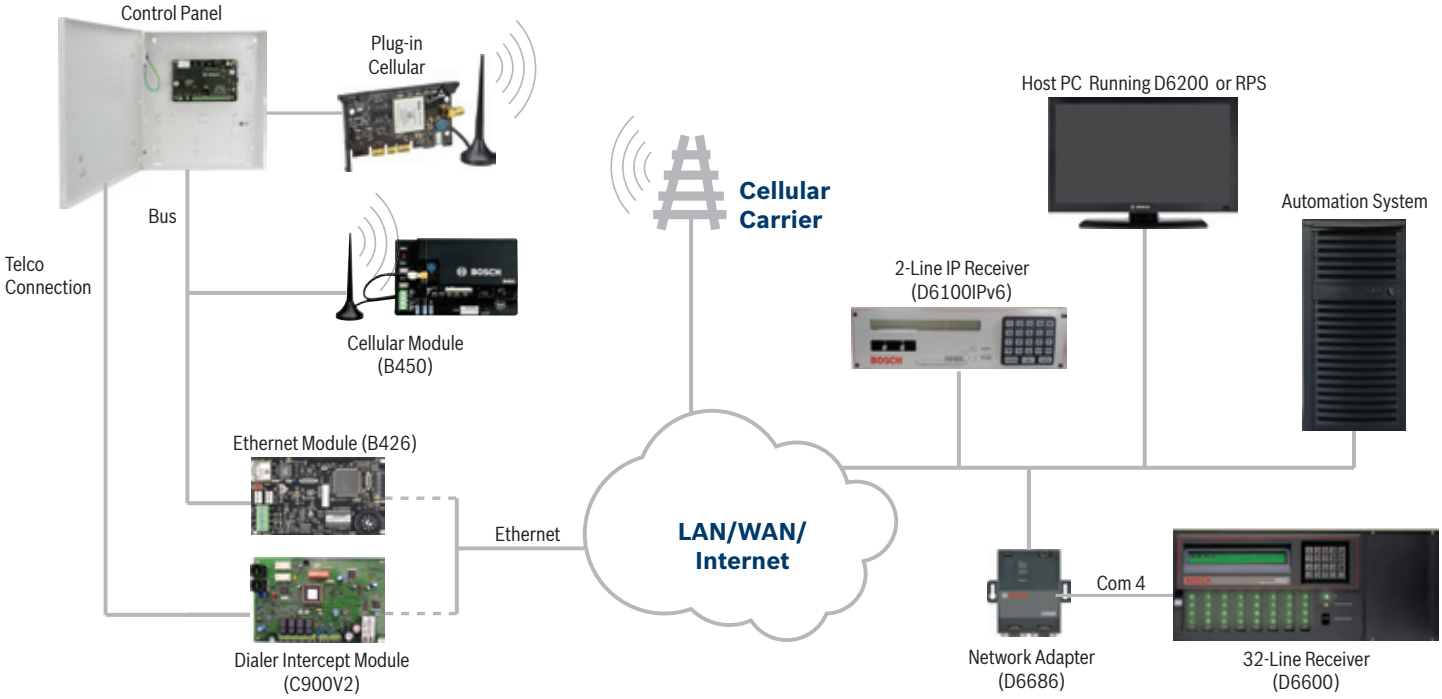
Mobile Applications

Delight IP and cellular customers with secure, any-time access to manage their facility, along with personal text or email notification of important events.

AutoIP
Automatically provides an IP address for local service allowing the installer to connect a laptop directly to the system, without changing settings, using a router or accessing the customer's network.

Higher Level of Data Security
Internet security experts agree that the method Bosch uses for data encryption is more secure. Using CBC (Cipher Block Chaining) to meet NIST requirements and FIPS 197, Conettix IP technology is virtually impossible to break, replay or substitute. Plus, encryption is included on all Bosch IP products at no extra cost.

Conettix IP System



Digital Cellular Services

Bosch's digital cellular communicators provide many features and benefits for the commercial alarm system installer:

- **Flexible Service Plans**
  Bosch offers service plans that have been customized to fit the applications of our dealers. Whether the installation calls for simple back-up, primary commercial communication, high security or primary fire, Bosch has a customized service plan to fit.
- **Instant Compatibility**
  Bosch cellular communicators use Conettix IP communication, so it is instantly compatible with Bosch D6600 and D6100IPv6 receivers configured for IP.
- **Easy Cellular Remote Programming**
  When using the Bosch cellular service, each system has a static IP address and VPN service allowing for remote programming, service and maintenance over the cellular network. Connecting to the system is fast and simple because it does not interrupt the customer's telephone service and does not require access to the customer's Ethernet network.
- **Reliable Cellular Fire Communication**
  Bosch cellular modules can be used as the primary communicator for fire systems because they meet the supervision requirements of NFPA. This means that some customers can actually eliminate the monthly cost of two dedicated phone lines.

Flexible Receiver Technology

Bosch's Central Station Receivers employ features and performance that make them some of the most flexible receivers in the industry:

- **Conettix IP**
  Bosch receivers support up to 3200 Conettix IP accounts. For a D6600, simply use the D6686 network adapter to add IPv4 and IPv6 account support, while the D6100IPv6 has IP support built-in.
- **Virtual receiver**
  The D6600 can be configured as a virtual receiver, which means that it can be programmed to mimic the output of other receivers when communicating to automation. This provides a simple modern replacement for aging receivers, increases the availability of valuable rack space and reduces costs.
- **DNIS**
  Dialed Number Identification Service adjusts line card settings according to the telephone number dialed by the control panel. This allows the receiver to handle more field dialers with fewer line cards and allows you to create virtual lines.
- **ANI system**
  Automatic Number Identification identifies incoming telephone numbers and sends the data to the automation system for quick processing and account identification.
- **Caller ID**
  Caller ID processing stores corresponding handshake formats and automatically recalls the format when the same caller identification is processed. This reduces costs by shortening the amount of time that calls are connected to the receiver.
- **Two Way Voice**
  Supports Personal Emergency Response.

The Most Reliable PSTN Communication

Bosch receivers support virtually every PSTN communication format making them compatible with most panels that are installed today. Plus, Bosch receivers offer the lowest cost per line in the industry.

VoIP Compensation Mode

Bosch receivers deploy advanced digital signal processing which includes Bosch's exclusive VoIP (voice over IP) compensation mode. This allows the receiver to interpret signals that would previously have been dismissed because they did not meet the formatting requirements of the communications protocol. This new processing performs additional analysis on alarm signals that allows the receiver to decode signals that have been modified by VoIP or digital phone networks. It operates with the Contact ID, 4-1 Express and 4-2 Express DTMF protocols. VoIP compensation mode allows central stations to resolve VoIP issues without requiring a site visit.

The D6100IPv6
This compact two line receiver offers an economical opportunity to add Bosch IP communication to your central station. It is also ideal for campus or enterprise customers who want to monitor their own systems.

Cental Station Recievers and Accessories

	Model Number	Description
	D6600 Communications Receiver/Gateway	Supports up to 8 PSTN (Public Switched Telephone Network) line cards for 32 lines along with up to 3200 IP accounts. Each line's settings are independently configurable. Features front panel LCD display for programming, status and event information. Caller ID, ANI and DNIS compatible. PC-based platform design for future expandability.
	D6100IPv6 Receiver/Gateway	Supports 2 PSTN lines and up to 3200 Conettix IP accounts on IPv6 and IPv4 networks. The D6100IPv6 is a compact, economical solution well-suited to applications, such as small central stations, gated communities, security offices, and campuses.
	D6201-USB Conettix IP Security Key	These keys are used with the USB port of the PC that is utilizing the D6200 software to program the D6600/D6100IPv6 Receiver. The D6201-500-USB adds 500 accounts per receiver, while the D6201-USB adds 3200 accounts per receiver.
	ITS-D6686-UL Network Adapter	Used to connect the D6600 Receiver to IPv4 and IPv6 networks to support Conettix IP accounts. The D6686 converts the Serial interface of the D6600 to an IP network interface for receiving IP signals and/or reporting over the network to automation.
	D6610 CPU Card	The CPU Card is the main processor for the D6600 Receiver. One D6610 is included with every D6600 Receiver. Features re-programmable FLASH memory for software upgrades, 20,000 event history buffer and direct interface to automation computers.
	D6615 CPU I/O Terminator Card	The Terminator Card is required to terminate the CPU Card and is included with every D6600 Receiver. It has 2 male DB-9 RS-232 Serial Ports, 1 DB-25 Parallel Port, 2 Programmable Inputs, 2 Programmable Outputs and I/O signal isolation and transient suppression.
	D6641 PSTN Line Card	Supports 4 PSTN lines and features front panel LED indicators for On-line and Line-fault status conditions. Supports over 70 communications formats including Modem II/IIIa², CID, BFSK, SIA, ITI, Silent Knight FSK, Modem4 and various pulse formats. This line card also supports our award winning VoIP compensation mode to reduce Contact ID signal errors caused by digital phone lines.
	D6645 PSTN Line Card Terminator	Provides isolation and transient protection of the incoming phone lines to the D6641 Line Cards. One is needed per D6641.
	D6672 COM 1 Expansion Package	Adds a Male DB-9 RS-232 Serial Port to the D6600 Receiver as COM 1 that can be used with an Ethernet Network Adapter such as D6686 for expansion or back-up of the Conettix IP system.
	D6200CD CD-ROM	Contains the D6200 software, the latest D6600 firmware, D6600 Receiver documentation and the D6202 Automation Simulator for testing purposes. This software can also be downloaded online.

Conettix IP Communicators

	Model Number	Description
	B Series	These control panels are modern Internet appliances with built-in Conettix IP and plug-in communicator support for secure multi-function IP communication. The B Series supports IPv6 and IPv4 network communication for multiple simultaneous communication functions such as reporting, mobile applications, programming and building automation.
	B426 Ethernet Communication Module	This versatile multi-bus module supports 10/100 Ethernet communication on IPv4 or IPv6 networks. It can be used to update existing Bosch control panel installations or for multi-function IP communication in a new system.
	Plug-in Cellular Communicators	Adds full cellular IP communication on to panels with a built-in communication slot or a B450. The B441 supports reporting, remote programming, mobile apps and personal notification using Verizon's CDMA network, and the B440 adds higher speed connectivity using the Verizon 3G EVDO network.
	B450 Plug-in Cellular Interface	Adds two-way Plug-in Cellular Communicator compatibility on the SDI2, SDI or Option bus. Can be used with G-Series v7.06+, GV Series and FPD7024 control panels or to add an extended range communicator on B Series panels. B450 is powered by the control panel and doesn't require a separate enclosure or supply.
	C900V2 Dialer Intercept Network Module	Captures alarm and event data from digital dialer based control panels and re-routes the signals via Conettix IP. It can be used on virtually any existing digital dialer based control panel.