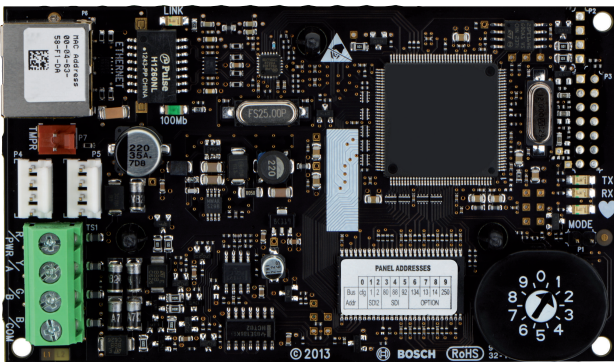


# B426 Ethernet Communication Module

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Invented for life



- ▶ Full two-way IP event reporting with remote control panel programming support
- ▶ 10/100 Base-T Ethernet communication for IPv6 and IPv4 networks
- ▶ NIST-FIPS197 Certified for 128-bit to 256-bit AES Encrypted Line Security
- ▶ Plug and Play installation, including UPnP service to enable remote programming behind firewalls
- ▶ Advanced configuration by browser, RPS, or A-Link

The B426 Conettix Ethernet Communication Module is a four-wire powered SDI, SDI2, and Option bus device that provides two-way communication with compatible control panels over IPv4 or IPv6 Ethernet networks.

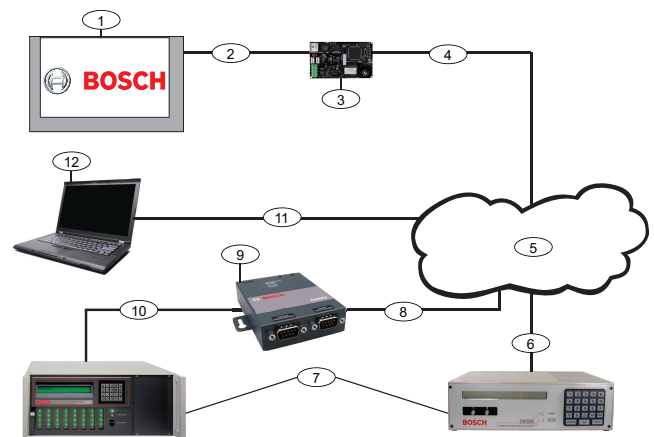
Typical applications include:

- Reporting and path supervision to a Conettix Communications Receiver/Gateway.
- Remote administration and control with Remote Programming Software or A-Link.
- Connection to building automation and integration applications.

The B426 is built for a wide variety of secure commercial and industrial applications. Flexible end-to-end path supervision, AES encryption, and anti-substitution features make B426 desirable for high security and fire monitoring applications. It is capable as a stand-alone path or it can be used in conjunction with another communication technology. For Fire Monitoring applications, the B426 meets UL864 and NFPA72 standards for Single Communication Technology with approved Bosch control panels.

## System overview

Use the B426 for bi-directional communication over an Ethernet network.



B426 system connections overview

Callout — Description	Callout — Description
1 — Compatible Bosch control panel	7 — Conettix D6100i Communications Receiver/Gateway and/or Conettix D6600 Communications Receiver/Gateway (Conettix D6600 Communications Receiver/Gateway requires 8, 9, and 10)

2 — Data bus connection between the control panel and the module	8 — Ethernet network connection to the Ethernet adapter (D6680/ITS-D6682/ITS-D6686) (ITS-D6682 shown) Ethernet Network Adapter
3 — B426	9 — Conettix Ethernet Network Adapter (ITS-D6682 shown)
4 — Ethernet connection between module and Ethernet network	10 — Connection from ITS-D6682 to the COM4 Port on the Conettix D6600 Communications Receiver/Gateway
5 — Ethernet network, Local Area Network (LAN), Metropolitan Area Network (MAN), Wide Area Network (WAN), or Internet	11 — Ethernet network connection between the host computer Ethernet network interface card (NIC) and the Ethernet network
6 — Ethernet network connection to the D6100i Communications Receiver (D6100i/D6100IPv6)	12 — Host PC running Remote Programming Software, Automation, or the Conettix D6200 Programming/Administration Software

## Functions

### Conettix IP communication

The B426 uses Conettix IP protocol which supports:

- Full event code reporting and administration
- Flexible supervision intervals
- Resistance to Denial of Service attacks
- 128, 192 or 256-bit AES encryption
- Anti-replay and anti-substitution

### Switch addressing

Use the address switch to easily assign a bus address or setup for web configuration.

### IP network support

Supports DHCP, UPnP, and Auto IP addressing by default, but can also be configured for Static IP networks. The B426 Conettix Ethernet Communication Module is compatible with IPv6 or IPv4 networks. With compatible control panels, it supports reporting to receivers with Domain Name System (DNS) hostnames for automatic disaster recovery.

### Easy configuration

For most installations, the default B426 settings allow installation with no computer required. An address switch allows easy bus address selection. Universal Plug and Play (UPnP) supports automatic UDP port mapping for remote programming systems when behind a firewall, as well as HTTP port mapping for B426 web configuration. Auto IP enables a direct PC connection without changing any PC network settings. For customized network settings, the B426 supports a full web configuration menu. B Series and GV4 Series control panels support keypad and RPS programming of B426 settings.

### LEDs

Three LEDs provide status and troubleshooting information about the module and its connection.

LED	Description
Heartbeat	Indicates the system status of the B426 and its connection to the panel.
RX	Indicates when an inbound packet is received on the bus.
TX	Indicates when an outbound packet is transmitted on the bus.

## Certifications and approvals

Region	Certification
USA	NIST FIPS-197 AES Certification (IP Communications)

Region	Certification
Europe	CE EMC, RoHS
	EN50131 EN-ST-000127 B426
Belgium	INCERT B-509-0065 B426
USA	UL UL 1023 - Household Burglar Alarm System Units
	UL UL 1076 - Proprietary Burglar Alarm Units and Systems
	UL UL 1610 - Central Station Burglar Alarm Units
	UL UL 365 - Police Station Connected Burglar Alarm Units
	UL UL 609 - Standard for Local Burglar Alarm Units and Systems
	UL UL 639 - Standard for Intrusion Detection Units
	UL UL 864 - Standard for Control Units and Accessories for Fire Alarm Systems
	UL UL 985 - Household Fire Warning System Units
	CSFM see our website
	FCC Part 15 Class B
	FDNY-CoA 6174
	FDNY-CoA 6196
Australia	CTICK C-Tick
Canada	ULC CAN/ULC S303 - Local Burglar Alarm Units and Systems
	ULC CAN/ULC S304 - Standard for Signal Receiving Center and Premise Burglar Alarm
	ULC CAN/ULC S559 - Fire Signal Receiving Centres and Systems

Region	Certification	
	ULC	ULC-ORD C1023 - Household Burglar Alarm System Units
	IC	ICES-003 - Information Technology Equipment (ITE)

### Installation/configuration notes

#### Compatible control panels

AMAX 2000/2100/3000/4000  
 B9512G/B9512G-E  
 B8512G/B8512G-E  
 B6512  
 B5512/B5512E  
 B4512/B4512E  
 B3512/B3512E  
 D9412GV4/D7412GV4/D7212GV4  
 D9412GV3/D7412GV3/D7212GV3  
 D9412GV2/D7412GV2/D7212GV2 Version 7.06 or higher  
 DS7220 Version 2.10 or higher  
 DS7240 Version 2.10 or higher  
 DS7400XiV4 Version 4.10 or higher  
 Easy Series V3+  
 FPD-7024  
 Solution 2000/3000

#### Compatible applications

- A-Link Plus. Supported on all compatible control panels.
- RPS/RPS Lite. Supported on all compatible control panels.
- PC9000. Supported on D9412GV2/D7412GV2/D7212GV2 v7.06 and higher, and D9412GV3/D7412GV3/D7212GV3 (version 8.05 and v8.13 and higher only).
- IS2000. Supported on D9412GV2/D7412GV2/D7212GV2 v7.06 and higher, and D9412GV3/D7412GV3/D7212GV3 (version 8.05 and v8.13 and higher only).
- Remote Security Control. Supported on GV4, B9512G/B8512G, B9512G-E/B8512G-E, B6512/B5512/B4512/B3512, B5512E/B4512E/B3512E, and Solution 2000/3000.
- Remote Connect service. Supported on all compatible control panels that also support Remote Connect service.

#### Mounting considerations

Mount the B426 into the enclosure's 3-hole mounting pattern using the supplied mounting screws and mounting bracket.

#### Wiring considerations

The B426 connects to a control panel using a data bus connection and to an Ethernet network using a standard Category 5 or above Ethernet cable with an RJ-45 plug.

#### Browser support

Microsoft Internet Explorer (Microsoft Windows 7 and higher)

Mozilla Firefox

### Parts included

Quantity	Component
1	B426 Conettix Ethernet Communication Module
1	Hardware pack
1	Interconnect cable wiring
1	Quick Start Guide (hardcopy)
1	Literature (mini-CD)

### Technical specifications

#### Environmental considerations

Relative humidity	Up to 93% non-condensing
Temperature (operating)	0° - +49°C (+32° - +120°F)

#### Properties

Board dimensions	59.5 mm x 108 mm x 16 mm (2.19 in x 4.25 in x 0.629 in)
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#### Power requirements

Current (maximum)	100 mA max
Voltage	12 VDC nominal

#### Connectors

LAN/WAN	RJ-45 modular port (Ethernet)
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#### Cabling

Ethernet cable	Category 5 or better unshielded twisted pair
Ethernet cable length	100 m (328 ft) max length

#### Wiring

Data bus wire gauge	18 AWG or 22 AWG
Data bus wire length	Maximum distance - Wire size : 150 m (500 ft) - 0.65 mm (22 AWG) 300 m (1000 ft) - 1.02 mm (18 AWG)

### Ordering information

#### B426 Ethernet Communication Module

Supports two-way communications over Ethernet networks for compatible control panels  
 Order number **B426**

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