

B426 Ethernet Communication Module

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- ▶ 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 or RPS with compatible Bosch control panels

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

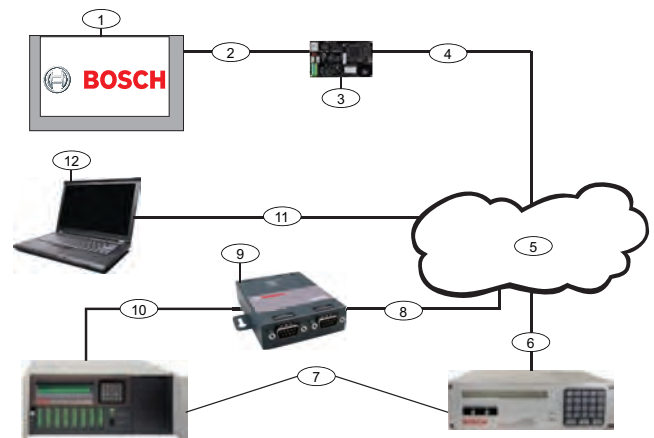
Typical applications include:

- Reporting and path supervision to a Conettix Communications Receiver/Gateway.
- Remote administration and control with Remote Programming Software (RPS) or our Remote Security Control application for handheld devices.
- 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	
US	UL 365 - Police Station Connected Burglar Alarm Units and Systems	
	UL 609 - Local Burglar Alarm Units and Systems	
	UL 864 - Control Units and Accessories for Fire Alarm Systems (Including NFPA 72)	
	UL 985 - Household Fire Warning System Units	
	UL 1023 - Household Burglar Alarm System Units	
	UL 1076 - Proprietary Burglar Alarm Units and Systems	
	UL 1610 - Central Station Burglar Alarm Units	
	FCC Part 15 Class B, NIST FIPS-197 AES Certification (IP Communications)	
Canada	CAN/ULC S303 - Local Burglar Alarm Units and Systems	
	CAN/ULC S304 - Signal Receiving Centre and Premise Alarm Control Units	
	ULC-ORD C1023 - Household Burglar Alarm System Units	
	ULC-ORD C1076 - Proprietary Burglar Alarm Units and Systems	
	ICES-003 - Digital Apparatus	
EU	EN 50130-4, EN 61000-6-3, EN 60950	
Region	Certification	
USA	CSFM	7167-1615:0247 7167 -- CONTROL UNIT (HOUSEHOLD)
	CSFM	7300-1615:0232 7300 -- FIRE ALARM CONTROL UNIT ACCESSORIES/MISC. DEVICES
	FDNY-CoA	#6174 UL 864 9th Edition

Installation/configuration notes

Compatible control panels

AMAX 2000/2100/3000/4000
 B Series
 GV4 Series
 GV3 Series
 GV2 Series
 G Series Version 6.3 or higher
 D9412/D7412/D7212

D9112

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 D9412, D7412, D7212, G Series, GV2 Series and GV3 Series (version 8.05 only).
- IS2000. Supported on G Series, GV2 Series and GV3 Series (version 8.05 only).
- Remote Security Control. Supported on GV4 Series, B Series, and Solution 2000/3000 control panels.

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.

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)	90 mA
Voltage (operating)	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)

Browser support

Microsoft Internet Explorer 6 or higher
Mozilla Firefox 3 or higher

Ordering information**B426 Ethernet Communication Module**

Supports two-way communications over Ethernet networks for compatible control panels.

Order number **B426**

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