The Conettix Ethernet Communication Modules are four-wire powered SDI, SDI2, and Option bus devices that provide 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.

**System overview**

The modules (B426/B426-M) are built for a wide variety of secure commercial and industrial applications. Flexible end-to-end path supervision, AES encryption, and anti-substitution features make the modules desirable for high security and fire monitoring applications. Use the modules as stand-alone paths or with another communication technology.

- 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
Functions

Conettix IP communication
The module 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

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

IP network support
The modules support DHCP, UPnP, and Auto IP addressing by default, but can also be configured for Static IP networks. The 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 module 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 module web configuration. Auto IP enables a direct PC connection without changing any PC network settings.

For customized network settings, the modules support a full web configuration menu. The following control panels support RPS programming:
- B8512/B8512G-E
- B8512G/B8512G-E

Certifications and approvals
The modules have NIST FIPS-197 AES Certification (IP Communications).

Notice
The B426-M has received certifications only as noted. If not noted, the certification applies to the B426 only.

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### Regulatory compliance/quality marks

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

### Installation/configuration notes

**Mounting considerations**
Mount the module into the enclosure’s 3-hole mounting pattern using the supplied mounting screws and mounting bracket.

**Wiring considerations**
The module 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.

### Compatibility

**Control panels - B426**
- 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
- AMAX 2100/3000/4000
- Solution 2000/3000

* The B426-M is recommended for AMAX and Solution Series control panels.

**Control panels - B426-M**
- AMAX 2100/3000/4000 v2.00+
- Solution 2000/3000

**Applications**
- A-Link Plus
- RPS/RPS Lite
- PC9000 (Supported on D9412GV2/D7412GV2/D7212GV2 v7.06 and higher, and D9412GV3/D7412GV3/D7212GV3 v8.05 and v8.13 and higher only)

### 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)

#### Power requirements
- Current (maximum): 100 mA max
- Current (standby): 80 mA
- Voltage: 12 VDC nominal

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

#### 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
B426-M Ethernet communication module, mobile

Supports Ethernet communication for remote programming and mobile apps on AMAX and Solution Series control panels

Order number B426-M