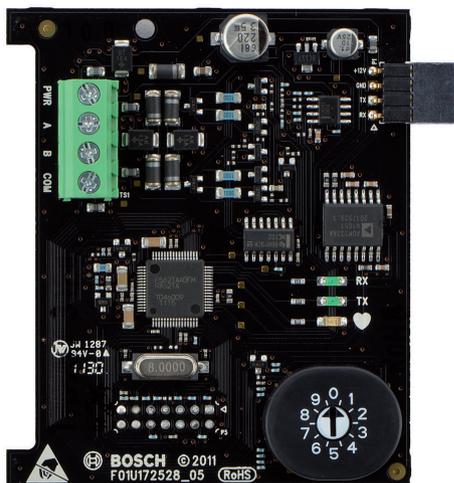


# B820 SDI2 Inovonics Interface Module

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Invented for life



- ▶ Provides connectivity to Inovonics EchoStream EN4200 Serial Receiver
- ▶ May be installed up to 1000 ft from the control panel, allowing for optimal wireless reception
- ▶ Capacity to store any combination of point and keyfob ID's for a total of 350 wireless devices (combined types) and up to 8 repeater ID's
- ▶ Mounts directly inside the EN4200 Receiver housing, no separate enclosure required
- ▶ UL and CSFM Listed

The B820 Inovonics Interface Module is a fully supervised, addressable SDI2 bus device that allows communication between Bosch control panels and an Inovonics EN4200 EchoStream Serial Receiver with EchoStream Wireless transmitters. Industrial, commercial, and institutional facilities are typical installations for the B820 module. Paired with an Inovonics EchoStream EN4200 Receiver, the B820 Inovonics Interface Module provides a wireless security solution when connected to the control panel's SDI2 bus. The B820 switch provides for simple, visual addressing.

## System overview

### Powered by Inovonics

The Inovonics EchoStream platform, powered by Inovonics wireless mesh network technology, ensures superior range, reliability, and scalability for commercial applications. Using a wide range of transmitters and repeaters, this proven technology provides flexibility and performance to meet the most stringent requirements. This exclusive protocol is available only on Inovonics EchoStream products.

The B820 is supervised and communicates back to the control panel all point status changes. The module's wireless expansion points operate the same as the hard-wired points on the control panel. Keyfob and wireless point programming, as well as diagnostic data is available at your fingertips directly via any control panel keypad, or through the use of Remote Programming Software (RPS).

## Functions

### Supervision monitoring

The software monitors and communicates status information over the data bus for the following:

- Operational power (Heartbeat)
- Transmit data (TX)
- Receive data (RX)

### Indicators

- Heartbeat LED: Blue LED blinks on and off when system is operational. A steady On or Off LED indicates a system error of operation.
- TX (transmit) LED: Green steady On LED indicates data transmission to the receiver.
- RX (receive) LED: Green steady On LED indicates the data receiving from the receiver. The RX LED flashes 3 quick flashes when the module learns a wireless device is present.

## Certifications and approvals

USA	
UL 365	Police Station Connected Burglar Alarm Units and Systems
UL 609	Local Burglar Alarm Units and Systems
UL 636	Holdup Alarm Units and Systems
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
CSFM	California Office of The State Fire Marshall
FCC	Part 15 Class B

Region	Certification
USA	UL 20130109-S5579; UL 864 - Control Units and Accessories for Fire Alarm Systems; UL 636 - Holdup Alarm Units and Systems; UL 1076 - Proprietary Burglar Alarm Units and Systems; UL 1610 - Central Station Burglar Alarm Units; UL 365 - Police Station Connected Burglar Alarm Units and Systems; UL 609 - Local Burglar Alarm Units and Systems; UL985 - Residential Fire Warning System Control Units; UL 1023 - Household Burglar-Alarm System Units; ULC/ORD C1076 - Proprietary Burglar Alarm Units and Systems; ULC-S304-06 - Signal Receiving Centre and Premise Burglar Alarm Control Units; ULC-S303-M91 - Local Burglar alarm Units and Systems; ULC-ORD C1023 - Household Burglar-Alarm System Units
	CSFM 7167-1615:0243 7167 -- CONTROL UNIT (HOUSEHOLD)

## Installation/configuration notes

### Compatibility information

#### Control panels:

- B5512 (Up to one module)
- B4512 (Up to one module)
- B3512 (Up to one module)
- All versions of the D9412GV4 (SDI2 bus)
- All versions of the D7412GV4 (SDI2 bus)
- All versions of the D7212GV4 (SDI2 bus)

#### Receivers:

Inovonics EchoStream EN4200 Serial Receiver

#### Repeater:

Inovonics EchoStream EN5040-T High-Power Repeater

#### Transmitter:

All Inovonics EchoStream transmitters

## Mounting considerations

Mount the B820 Interface Module inside the Inovonics EchoStream Serial Receiver by using the supplied Velcro strips contained inside the B820 packaging. Refer to the *EN4200 EchoStream Serial Receiver Installation Instructions* and the *SDI2 Inovonics Interface Module B820 Installation Guide* for mounting and wiring instructions.

## Wiring considerations

The B820 connects to a control panel using the PWR, A, B, COM terminals on the control panel using the screw terminal strip. Use 12 AWG to 22 AWG (1.5 mm to 0.6 mm) wires from the module to the control panel.

The B820 connects to the EN4200 via the serial data port.

## Parts included

Quantity	Component
1	B820 Inovonics Interface Module
1	Hardware pack including Velcro adhesive
1	Literature pack

## Technical specifications

### Properties

Board dimensions:	3.2 in x 2.8 in x 0.60 in (82.5 mm x 70.0 mm x 15.0 mm)
Terminal wire size:	12 AWG to 22 AWG (2 mm to 0.65 mm) Unshielded wire only
SDI2 wiring Max distance/Wire size:	600 ft (183 m)/.65 mm (22 AWG) 1000 ft (305 m)/ 2 mm (18 AWG) Unshielded wire only

### Power requirements

Current:	110 mA total for B820 module and the EN4200 receiver
Operating voltage:	12 VDC nominal

### Environmental considerations

Operating temperature:	+32° to +122° F (0° to +50°C)
Storage temperature	-4° to 140° F (-20° to +60° C)
Relative humidity:	5% to 93% at +32° (+90°F) non-condensing
Use:	Intended for indoor use.

### Trademarks

Inovonics is a trademark of Inovonics Wireless Corporation.

## Ordering information

### B820 SDI2 Inovonics Interface Module

Provides communication between a control panel and an Inovonics EN4200 EchoStream Serial Receiver.

Order number **B820**

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### Accessories

#### SDI2 Inovonics Interface and Receiver Kit

Kit containing B820 and EN4200 for use on SDI2 bus panels.

Order number **ENKIT-SDI2**

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