

## 1 | Overview

The B443 provides IP communication over the GSM (GPRS/EDGE/UMTS/HSPA+) digital cellular network by directly connecting the module to the control panel. The control panel can be configured to use B443 for alarm reporting, remote access and personal notification messaging.

The B443 module requires a SIM card with active cellular service to communicate. Bosch Cellular service and SIM cards are available in some countries. Consult your Bosch representative for details.

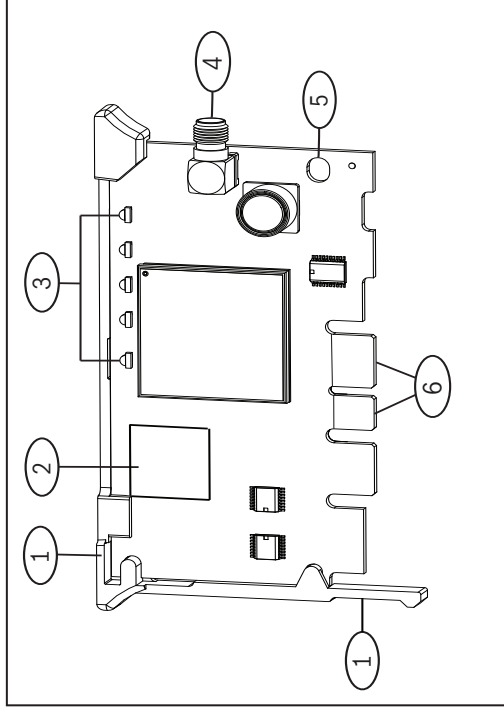


Figure 1.1: Board overview

### Callout – Description

- 1 – Module handle and support leg
- 2 – SIM card holder
- 3 – LEDs
- 4 – Threaded female SMA antenna connector
- 5 – Plug-in module retention clip opening
- 6 – PCB metal contacts

## 2 | Installation and removal

If installing the communicator into a B450 module, refer to the *Conetix Plug-in Communicator Interface (B450) Installation and Operation Guide* for more information.



### CAUTION!

Remove power to the control panel prior to installing or removing the module.

### 2.1 | Insert the SIM card

Inserting the SIM card:

1. Break away the SIM card from the plastic die-cut card.
2. Insert the SIM card into the SIM card holder on the module by sliding it into the card holder, verifying that the gold contact side of the SIM card is against the module. Refer to Figure 2.1.

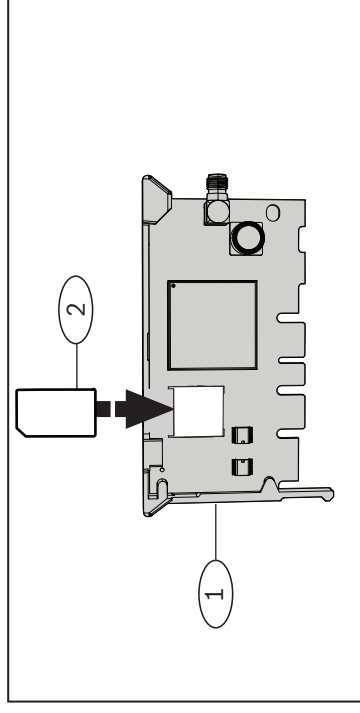


Figure 2.1: Inserting the SIM card

### Callout – Description

- 1 – Module
- 2 – SIM card

## 2.2 | Install the antenna

Installing the antenna:

1. Place the magnetic antenna on top of the enclosure, or vertically on another metal surface.
2. Route the antenna cable through a knockout.
3. Connect the antenna cable to the module.
4. Secure the antenna cable to the inside of the enclosure.

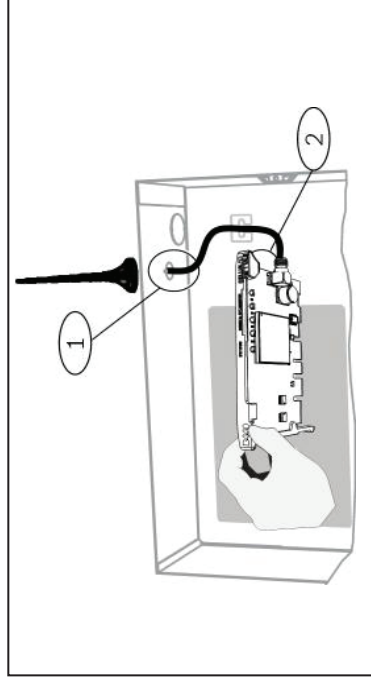


Figure 2.2: Installing the antenna

### Callout – Description

- 1 – Antenna routed through any knockout
- 2 – Antenna cable connected to the module

## 2.3 | Install the module

The control panel communicates with and provides power to the module through the plug-in connection. Proper installation results in the necessary electrical and mechanical connection.

Installing the module:

1. With the module facing the control panel as shown in Figure 2.3, insert the support leg into the support hole labeled X.
2. Align the PCB metal contacts with the on-board connector.
3. Push the module into place. The retention clip snaps closed and secures the module in place.

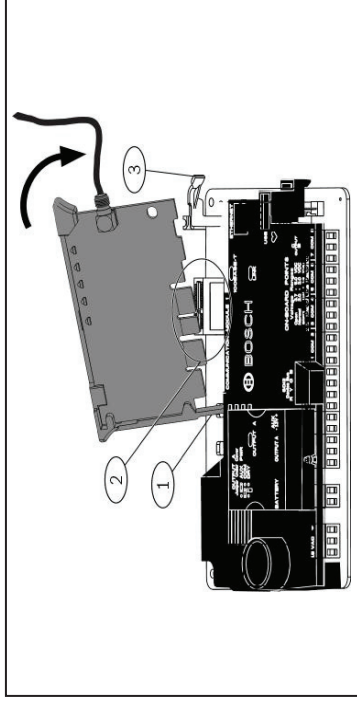


Figure 2.3: Installing the module

### Callout – Description

- 1 – Support leg
- 2 – PCB metal contacts
- 3 – Plug-in module retention clip

## 2.4 | Module removal

To remove an installed module, hold the plug-in module retention clip open with one hand while grasping the top corners of the module support handle with your other hand. Pull the module out.

## 3 | Diagnostic LED descriptions

At power up, all module LEDs activate for several seconds, indicating proper insertion. The Signal LEDs then turn off until the module registers on the cellular network. Registering a new module might take up to 3 minutes.

Check the LED display to ensure a good signal strength level, and adjust the antenna location as required. The signal strength LEDs momentarily turn off to indicate the module has measured and updated the signal strength status. Refer to Table 3.1.

Flash pattern	Function
Red 	Indicates an unacceptable signal strength level.
Yellow 	Indicates a marginal signal strength level.
Green (1 light) 	Indicates a good signal strength level.
Green (2 lights) 	Indicates a very good signal strength level.

Table 3.1: Signal strength LEDs description

Flash pattern	Function
Flashes once every 1 sec (blue) 	Normal State. Indicates normal operation.
On Steady (blue) 	Communication Error State. Indicates the module is unable to communicate on the cellular network.
Off 	LED Trouble State. Module is not powered, or some other trouble condition prohibits the module from controlling the STATUS LED. (Check for proper installation.)

Table 3.2: STATUS LED descriptions

## 4 | Configuration

The programming of B443 Plug-in Communicators is be done through the compatible control panel or the B450 Plug-in Communicator Interface. Refer to your control panel guide, remote programming software help or the B450 IOG for parameter descriptions, options and defaults. For Bosch Cellular account status and management, use RPS or the online service portal (go to <http://www.conetix.com/Cellular.aspx> and click on the **Cellular Portal Login** link).

Configure network alarm communication routes and settings in the control panel. Cellular carrier specific settings such as Access Point Name and SIM card security can also be programmed through control panel or Conetix Plug-in Communicator Interface (B450).

## 5 | Certifications

Region	Agency	Certification	
US	FCC	FCC, Part 15 Class B Radiated/Conducted Emissions	
	UL	UL 365 - Police Station Connected Burglar Alarm Units and Systems	
		UL 636 - Holdup Alarm Units and Systems	
	UL	UL 864 - Standard for Control Units and Accessories for Fire Alarm Systems	
		UL 985 - Household Fire Warning System Units	
		UL 1023 - Household Burglar-Alarm System Units	
	UL	UL 1076 - Proprietary Burglar Alarm Units and Systems	
		UL 1610 - Central-Station Burglar-Alarm Units	
	Canada	CSFM	California State Fire Marshall
		ULC	ULC C1023 - Household Burglar Alarm System Units
ULC C1076 - Proprietary Burglar Alarm Units and Systems			
ULC S303 - Local Burglar Alarm Units and System			
ULC S304 - Central and Monitoring Station Burglar Alarm Units			
ULC S545 - Residential Fire Warning System Control Units			
ULC S559 - Fire Signal Receiving Centres and Systems			
IC	ICES-003		
North America	Rogers	Certified	
	PTCRB	Certified	
Europe	CE	Hereby, Bosch, declares that this plug-in communicator is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.	

## 6 | Specifications

Dimensions	50 mm x 93.5 mm x 15.25 mm (2 in x 3.68 in x 0.60 in)
Voltage (operating)	12 V nominal
Standby current	60 mA
Maximum current	150 mA
Operating temperature	0°C to +49°C (+32°F to +120°F)
Relative humidity	Up to 93% non-condensing
Cellular compatibility	4 Bands GPRS/EDGE: 850/900/1800/1900 MHz  5 Bands UMTS/ HSPA: 800/850/900/ AWS1700/1900/2100 MHz
SIM card	3V/1.8V SIM (compliant with GSM 11.12 recommendation)
Included antenna	– Magnetic base omni-directional antenna – 2.5 m (8.2 ft) cable with SMA connector
Environmental	Indoor usage only
Compatibility	Control panels B9512G/B9512G-E B8512G/B8512G-E B6512 B5512/B5512E B4512/B4512E B3512/B3512E  The B443 is compatible with most Bosch control panels when used with a B450 Conettix Plug-in Communicator Interface. Refer to the <i>Conettix Plug-in Communicator Interface (B450) Installation and Operation Guide</i> for complete control panel compatibility listings.



[www.boschsecurity.com](http://www.boschsecurity.com)

**de** Eine textbasierte Installationsanleitung und weitere Dokumentationen zu B443 finden Sie unter [www.boschsecurity.com](http://www.boschsecurity.com)

**es** Para consultar la guía de instalación de B443 en texto y otra documentación, vaya a: [www.boschsecurity.com](http://www.boschsecurity.com)

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**pl** Przewodnik po instalacji urządzenia B443 i inne dokumenty dostępne są w witrynie: [www.boschsecurity.pl](http://www.boschsecurity.pl)

**pt** Para obter o guia de instalação baseado em texto e outra documentação do B443, consulte: [www.boschsecurity.com](http://www.boschsecurity.com)

**sv** För B443 textbaserad installationsguide och annan dokumentation, gå till: [www.boschsecurity.com](http://www.boschsecurity.com)

**zh-CHS** 有关基于B443 文本的安装指南和其他文档，请转到：[www.boschsecurity.com](http://www.boschsecurity.com)

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## Conettix Plug-in HSPA+ Cellular Communicator B443



**BOSCH**

en Installation Guide

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