B443 Conettix Plug-in HSPA+ Cellular Communicator

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- ► Remote programming and monitoring of compatible Bosch control panels
- ► Configured directly from Bosch Remote Programming Software eliminating the need for separate configuration

The B443 provides 3G/4G IP communication over a GPRS/EDGE/UMTS/HSPA+ cellular network by plugging into any compatible Bosch control panel or B450 Conettix Plug-in Communicator Interface. Typical applications are:

- · Alarm reporting to a central station
- Remote control panel programming through Remote Programming Software with supported control panels
- Remote monitoring and control through a mobile application with supported control panels
- Personal notification using SMS for compatible control panels

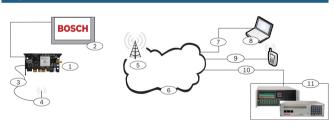
The B443 is built for a wide variety of secure commercial and industrial applications. Flexible end-to-end path supervision, 128-bit to 256-bit AES encryption, and anti-substitution features make B443 desirable for high security and fire monitoring applications.



Notice

Cellular capability requires an appropriate SIM card and data plan.

System overview



Callout — Description	Callout — Description
1 — B443 Conettix Plug-in Cellular Communicator	7 — Remote PC's network connection
2 — Compatible control panel	8 — Remote PC running Remote Programming Software
3 — Antenna cable	9 — Personal SMS notification
4 — Magnetic base antenna	10 — Ethernet connection
5 — Base station on wireless carrier's network	11 — Central monitoring station
6 — IP network cloud	

Functions

IP communication via Cellular

The B443 uses Conettix IP protocol, SIA DC-09 UDP, and CVS-IP on supported control panels that supports:

- · Flexible polling intervals
- · Resistance to Denial of Service attacks
- · Anti-replay/anti-substitution keys using Conettix

Easy Installation, troubleshooting, and maintenance

- No networking expertise required at field site (no firewall or router settings)
- No computer or special tools required for installation and troubleshooting
- · Diagnostic LEDs for on-site troubleshooting

LED	Function
Blue (STATUS)	System status Indicator
Red	Unacceptable signal strength
Yellow	Marginal signal strength
1 Green	Good signal strength
2 Green	Very good signal strength

Remote programming of Bosch control panels

The B443 supports secure remote programming of compatible Bosch control panels.

Personal notification and control

On supported control panels, the B443 supports the Bosch Remote Security Control mobile application and can be configured for SMS personal notification reports to mobile phones.

Certifications and approvals

Region	Certification	
USA	Verizon	Open Development Certified
Canada	Rogers	Certified
Europe	CE	EN50130-4, EN61000-6-3, EN60950
North America	PTCRB	Certified

Region	Certification	
Europe	CE	2014/30/EU EMC Directive (EMC); 2014/35/EU Low-Voltage Directive (LVD); 1999/5/EC Radio equipment and Telecommunications Terminal Equip- ment (R&TTE); 2011/65/EU Restriction of the use of certain hazardous substan- ces in electrical and electronic equip- ment(RoHS)
USA	UL	UL 365 - Police Station Connected Burglar Alarm Units
	UL	UL 636 - Holdup Alarm Units and Systems
	UL	UL 864 - Standard for Control Units and Accessories for Fire Alarm Systems

Region	Certification	
	UL	UL 985 - Household Fire Warning System Units
	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
	CSFM	see our website
	FCC	Part 15 Class B
	FDNY- CoA	6173
	FDNY- CoA	6174
	FDNY- CoA	6196
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 S545 - Residential Fire Warning System Control Units
	ULC	CAN/ULC S559 - Fire Signal Receiving Centres and Systems
	ULC	ULC-ORD C1023 - Household Burglar Alarm System Units
	ULC	ULC-ORD C1076 - Proprietary Burglar Alarm Units and Systems
	IC	ICES-003 - Information Technology Equipment (ITE)

Installation/configuration notes

Mounting considerations

The module plugs into any compatible control panel, available in a variety of enclosures.

Wiring considerations

The module connects to any compatible control panel without tools or physical wiring for power. When used with the B450 Conettix Plug-in Communicator Interface, the B450 is wired to the control panel data bus. The cellular module has a screw on SMA antenna connection.

Cellular service considerations

The module is shipped pre-activated for Bosch Cellular service on the Verizon cellular network. A valid service contract is required prior to ordering. GPRS/EDGE/UMTS/HSPA+ required.

Compatibilities

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Control panels	B9512G/B9512G-E, B8512G/B8512G-E B6512 B6512/B5512/B4512/B3512, B5512E/ B4512E/B3512E control panel with firmware v2.03 or higher (direct insertion) The B443 is compatible with most Bosch control panels when used with a B450 Conettix Plug-in Communicator Interface. Refer to the B450 datasheet for complete control panel compatibility listings.
Cellular	4 Bands GPRS: 850/900/1800/1900 MHz 5 Bands: UMTS/HSPA: 800/850/900/ AWS1700/1900/2100 MHz

Cellular technology compatibility

Device	Cellular networks			
	2G (CDMA)	3G (CDMA)	GPRS (GSM)	HSPA+ (GSM)
B440 *	Х	X		
B441*	Х			
B442*			Х	
B443*			Х	Х

^{*}Check for availability in your region.

Parts included

Quantity	Component
1	B443 Conettix Plug-in Cellular Communicator
1	Antenna
1	Literature pack

Technical specifications

Electrical

Current	Standby: 35 mA
(operating)	Alarm: 150 mA
Voltage (operating)	12 VDC nominal

Environmental

Environment	Environmental Class III - Indoor
Relative humidity	5 – 93% at +32°C (+90°F) non-condensing
Operating temperature	-10°C to +55°C (+14°F to +131°F)

Mechanical

Board Dimensions	50~mmx93.5~mmx15.25~mm (2 in x 3.68 in x 0.60 in)
Antenna (included)	Magnetic base omni-directional2.5 m (8.2 ft) cable with SMA connector
SIM card	3V/1.8V SIM (compliant with GSM 11.12 recommendation)

Ordering information

B443 Conettix Plug-in HSPA+ Cellular Communicator

Multi-function 3G/4G cellular communicator providing IP communication over a GPRS/EDGE/UMTS/HSPA+ cellular network

Order number **B443**

Accessories

ATT SIM Card

Contains one AT&T (US) wireless network SIM card for the B443 Conettix Plug-in HSPA+ Cellular Communicator.

Order number SIM-HSPA-ATT

T-Mobile SIM Card

Contains one T-Mobile (US) wireless network SIM card compatible with the B443 Conettix Plug-in HSPA+ Cellular Communicator.

Order number ITS-SIM-TMO

B443 Plug-in HSPA+ Communicator with AT&T SIM

This kit contains one B443 communicator and one AT&T SIM card.

Order number B443-ATT

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