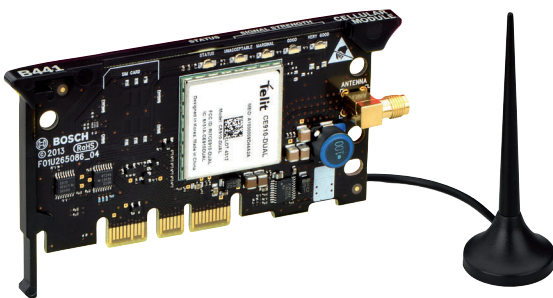# B441 Conettix Plug-in Cellular Communicator

www.boschsecurity.com

BOSCH
Invented for life

- ▶ Secure Conettix IP communication from compatible Bosch panels to Bosch receivers using Verizon CDMA
- ▶ Remote programming and monitoring of compatible Bosch panels
- ▶ Personal SMS message and e-mail notification options
- ▶ Configured directly from Bosch Remote Programming Software (RPS) eliminating the need for separate configuration
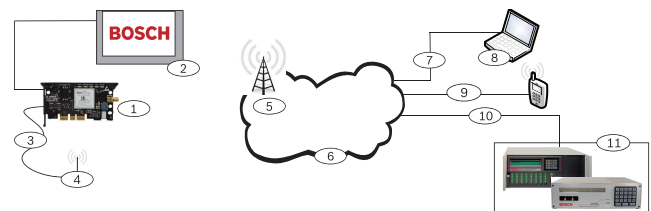- ▶ Simple LED status information and advanced keypad diagnostics available

The B441 enables secure two way IP communication over the Verizon CDMA cellular network. Typical applications are:

- Alarm reporting to a central station
- Remote panel programming through Remote Programming Software
- Remote monitoring and control through a mobile application
- Personal notification using SMS

The B441 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 B441 desirable as a primary or backup communication path for commercial security applications.

Developed for the military, CDMA technology offers long service life with resistance to hacking and jamming.

Note: Cellular capability requires an appropriate data plan from Bosch.

System overview

Callout — Description	Callout — Description
1 — B441 Conettix Plug-in Cellular Communicator	7 — Remote PC's network connection
2 — Compatible control panel	8 — Remote PC running RPS
3 — Antenna cable	9 — Personal SMS notification
4 — Magnetic base antenna	10 — Ethernet connection

5 — Base station on wireless carrier's network	11 — Central montoring station
6 — IP network cloud	

Functions

Conettix IP communication via Cellular
In addition to the security provided by the network operator, the B441 uses our Conettix IP protocol that supports:
- Flexible polling intervals
- Resistance to Denial of Service attacks
- Anti-replay/anti-substitution keys

Easy Installation, troubleshooting, and maintenance
- No networking expertise required at field site (no firewall or router settings)
- No PC or special tools required for installation and troubleshooting
- Manage service plans and settings through RPS
- Diagnostic LEDs for on-site troubleshooting

LED	Function
Blue (heartbeat)	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 B441 supports secure RPS programming of compatible Bosch control panels.

Personal notification and control
The B441 supports the Bosch Remote Security Control mobile application and can be configured for SMS personal notification reports to mobile phones or e-mail addresses.

Certifications and approvals

Agency	
FCC	FCC, Part 15 Class B Radiated/Conducted Emissions
Verizon	Open Development Certified
UL	UL 365 - Police Station Connected Burglar Alarm Units and Systems
	UL 636 - Holdup Alarm Units and Systems
	UL 864 - Control Units and Accessories for Fire Alarm 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

Region	Certification	
USA	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
	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
	UL	UL 985 - Household Fire Warning System Units
	CSFM	see our website
	FCC	Part 15 Class B
	FDNY-CoA	6173
	FDNY-CoA	6174
	FDNY-CoA	6196

Installation/configuration notes

Mounting Considerations
The B441 plugs into any compatible control panel, available in a variety of enclosures.

Wiring Considerations
The B441 connects to any compatible control panel without tools or physical wiring for power. The antenna is attached to the module via the threaded SMA screw-on connector.

Cellular Service Considerations
The B441 is shipped pre-activated for Bosch Cellular service on the Verizon cellular network. A valid service contract is required prior to ordering. Contact Bosch Pre-sales for contract assistance.

Parts included

Quantity	Component
1	B441 Conettix Plug-in Cellular Communicator
1	Antenna
1	Literature pack

Technical specifications

Electrical

Current (operating)	Standby: 35 mA Alarm: 150 mA
Voltage (operating)	12 VDC nominal
Radio	Verizon CDMA dual band radio 850 MHz and 1900 MHz

Environmental

Environment	Environmental Class III - Indoor
Relative humidity	Up to 93% at +32°C (+90°F) non-condensing
Operating temperature	0°C to +49°C (+32°F to +120°F)

Mechanical

Board Dimensions t	2 in x 3.68 in x 0.60 in (50 mm x 93.5 mm x 15.25 mm)
Antenna (included)	Magnetic base omni-directional 8.2 ft (2.5 m) cable with SMA connector

Compatibilities

Control panels	B9512G/B9512G-E, B8512G/B8512G-E B5512/B5512E/B4512/B4512E/B3512/B3512E control panel with firmware v2.03 or higher (direct insertion) The B441 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	CDMA2000 1xRTT

Cellular technology compatibility

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

*Check for availability in your region.

B441 Conettix Plug-in Cellular Communicator
Multi-function CDMA cellular communicator for secure two-way IP communication on the Verizon Wireless network.
Order number **B441**

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