

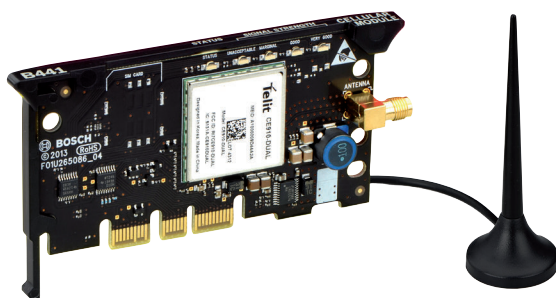
B441 Plug-in cellular module, VZW CDMA

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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
- ▶ Direct configuration from Bosch Remote Programming Software (RPS) eliminating the need for separate configuration
- ▶ Simple LED status information and advanced keypad diagnostics available

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

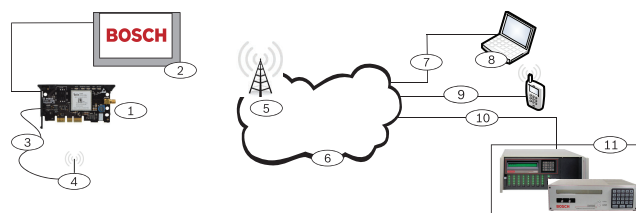
- Alarm reporting to a central station
- Remote control panel programming through Remote Programming Software
- Remote monitoring and control through a mobile application
- Personal notification using SMS

The cellular communicator 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 cellular communicator especially suited for use 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 — 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 monitoring station |
| 6 — IP network cloud | |

Functions

Conettix IP communication via Cellular

In addition to the security provided by the network operator, the cellular communicator 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
- Service plans and settings managed 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 cellular communicator supports secure RPS programming of compatible Bosch control panels.

Personal notification and control

The cellular communicator 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

| Region | Certification | |
|--------|---------------|--|
| USA | Verizon | Open Development Certified |
| | UL | CP-01-2010 Control Panel Standard - Features for False Alarm Reduction |

| Region | Regulatory compliance/quality marks | |
|--------|-------------------------------------|---|
| USA | UL | UL 365 - Police Station Connected Burglar Alarm Units |
| | UL | UL 636 - Holdup Alarm Units and Systems |
| | UL | UL 1023 - Household Burglar Alarm System Units |
| | UL | UL 1076 - Proprietary Burglar Alarm Units and Systems |

| Region | Regulatory compliance/quality marks | |
|--------|-------------------------------------|--|
| | UL | UL 1610 - Central Station Burglar Alarm Units |
| | CSFM | California State Fire Marshal |
| | FCC | Part 15 Class B |
| | FDNY-CoA | 6173 |
| | FDNY-CoA | 6286 D7412GV4 D9412GV4 NYC COA 6286 2018-2021 |
| | FDNY-CoA | 6196 |
| | FDNY-CoA | 6307 B465_NYC_CoA_6307 |
| Canada | ULC | Underwriters Laboratories of Canada S1871-20121210 |

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, 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.

Compatibilities

| | |
|----------------|--|
| Control panels | B9512G/B9512G-E, B8512G/B8512G-E B6512/B5512/B4512/B3512, B5512E/ B4512E/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) | 4G (LTE) |
| B440/ B440-C* | X | X | | | |
| B441/ B441-C* | X | | | | |

| Device | Cellular networks | | | | |
|--------|-------------------|--------------|---------------|----------------|-------------|
| | 2G (CDMA) | 3G (CDMA) | GPRS (GSM) | HSPA+ (GSM) | 4G (LTE) |
| B442* | | | X | | |
| B443* | | | X | X | |
| B444* | | | | | X |

*Check for availability in your region.

Commercial Fire and Burglary applications

Approved for Commercial Fire/Burglary applications as sole, primary, or secondary communications path when the system is installed to the NFPA-72 specification

Parts included

| Quantity | Component |
|----------|-----------------------|
| 1 | 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 | 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 |

Ordering information

B441 Plug-in cellular module, VZW CDMA

The B441 family of communication modules provides secure two-way IP communication on the Verizon Wireless network.
Order number **B441**

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