B442 Plug-in cellular module, GPRS

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- ► Remote programming and monitoring of compatible Bosch control panels
- ► Personal SMS message and e-mail notification options with supported control panels

The B442 provides IP communication over a (GPRS) cellular network by plugging into a 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

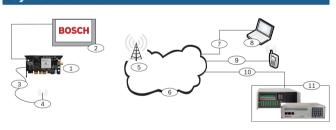
The B442 is built for a wide variety of secure commercial and industrial applications. Flexible end-to-end path supervision, 128-bit to 256-bit AES encryption, and anti-substitution features make B442 especially suited for use in high security and fire monitoring applications.



Notice

Cellular capability requires an appropriate SIM card and data plan.

System overview



| Callout — Description | Callout — Description |
|--|---|
| 1 — B442 | 7 — Remote PC's network connection |
| 2 — Compatible control panel | 8 — Remote PC running Remote Programming Software |
| 3 — Antenna cable | 9 — Personal SMS notification with supported control panels |
| 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

The B442 uses Conettix IP protocol, SIA DC-09 UDP, and CSV-IP on supported control panels that support:

- · 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 B442 supports secure, remote programming of compatible Bosch control panels.

Personal notification and control

On supported control panels, the B442 supports the Bosch Remote Security Control mobile application and can be configured for SMS personal notification reports to mobile phones.

Certifications and approvals

| Region | Regulatory compliance/quality marks | | |
|--------|-------------------------------------|---|--|
| Europe | CE | EMC, LVD, 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 | |
| | 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 | |
| | FCC | Part 15 Class B | |
| Canada | ULC | CAN/ULC S303 - Local Burglar Alarm Units and Systems | |

| Region | Regulate | ory compliance/quality marks |
|--------|----------|---|
| | ULC | CAN/ULC S304 - Standard for Signal Receiving Center and Premise Burglar Alarm |
| | ULC | CAN/ULC S545 - Residential Fire Warning System Control Units |
| | 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) |
| Brazil | ANATEL | 01338-14-01855 |

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 B6512/B5512/B4512/B3512, B5512E/ B4512E/B3512E control panel with firmware v2.03 or higher (direct insertion) The B442 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. |
|----------------|---|
| SIM card | 3V/1.8V SIM (compliant with GSM 11.12 recommendation) |
| Cellular | 4 Bands GPRS: 850/900/1800/1900 MHz |

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* | | | Χ | | |
| B443* | | | Χ | Х | |
| B444* | | | | | Χ |

^{*}Check for availability in your region.

Parts included

| Quant ity | Component |
|--------------|--|
| 1 | B442 Conettix Plug-in GPRS Cellular Communicator |
| 1 | Antenna |
| 1 | Literature pack |

Technical specifications

Electrical

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

Mechanical

| Board Dimensions | 50 mm x 93.5 mm x 15.25 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) |

Environmental

| Operating temperature | -10°C to +55°C (+14°F to +131°F) |
|-----------------------|---|
| Relative humidity | 5 - 93% at +32°C (+90°F) non-condensing |
| Environmental class | III |
| Usage | Indoor |
| US certification | Open Development Certified |
| CE certification | EN50130-4, EN61000-6-3, EN60950 |

Ordering information

B442 Plug-in cellular module, GPRS

Multi-function cellular communicator that provides IP communication over a (GPRS) cellular network Order number **B442**

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