# **B444-A Plug-in cell module, AMEC LTE**

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- ➤ Secure Conettix IP communication to Bosch receivers using the AT&T cellular network, including support for Rogers and Ice wireless services in Canada.
- ► Remote programming and monitoring of compatible Bosch panels
- ► E-mail notification options
- ➤ Direct configuration from Bosch Remote Programming Software (RPS) eliminates the need for separate set-up
- ► Simple LED status information and advanced keypad diagnostics available with easy two-step plug-in installation, troubleshooting, and maintenance

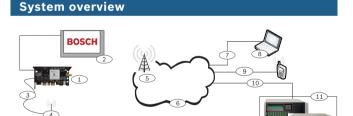
The cellular communicator enables secure two-way IP communication over the AT&T cellular network by plugging into a compatible Bosch control panel or communicator interface.

- · Alarm reporting to a central station
- Remote control panel programming through RPS with supported control panels
- Remote monitoring and control through a mobile application with supported control panels
- · Personal notifications for compatible control panels



## Notice

Cellular capability requires an Installer Services account and appropriate data plan.



| Callout — Description                                   | Callout — Description              |
|---|------------------------------------|
| 1 — Cellular communicator                               | 7 — Remote PC's network connection |
| 2 — Compatible control panel/<br>communicator interface | 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
- 128-bit to 256-bit AES encryption with Cypher Block Chaining
- · Anti-replay/anti-substitution keys

## Easy installation, troubleshooting, and maintenance

- No networking expertise required at field site (no firewall or router settings)
- Signal strength and diagnostics available through keypad and Remote Programing Software (RPS)
- · Diagnostic LEDs for on-site troubleshooting

## SMA antenna connections

Each module uses a two-port antenna connection and uses two SMA antennas to maximize cellular communications.

| 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.

## **Remote Connect Programming Service support**

Remote Connect Programming Service enables a secure control panel connection to RPS using Bosch Cloud services. The service allows a secure TLS connection to a control panel without specific port and router settings and without a static IP or DNS.

## Personal notification and control

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

## **Certifications and approvals**

| Region | Certification |   |
|--------|---------------|---|
| USA    | UL            | CP-01-2010 Control Panel Standard -<br>Features for False Alarm Reduction |

| Region | Regulato | ory compliance/quality marks   |
|--------|----------|--|
| USA    | UL       | UL 864 - Standard for Control Units and<br>Accessories for Fire Alarm Systems    |
|        | UL       | UL 1076 - Proprietary Burglar Alarm<br>Units and Systems                         |
|        | UL       | UL 1610 - Central Station Burglar Alarm<br>Units                                 |
|        | UL       | UL 365 - Police Station Connected Burglar Alarm Units                            |
|        | UL       | UL 609 - Standard for Local Burglar<br>Alarm Units and Systems                   |
|        | UL       | UL 636 - Holdup Alarm Units and Systems  |
|        | UL       | UL 985 - Household Fire Warning System Units                                     |
|        | UL       | UL 1023 - Household Burglar Alarm System Units                                   |
|        | UL       | UL 1635 - Standard for Digital Alarm<br>Communicator System Units                |
|        | FCC      | Part 15 Class B  |
| Canada | ULC      | Underwriters Laboratories of Canada<br>S1871-20121210                            |
|        | ULC      | ULC-ORD C1023 - Household Burglar<br>Alarm System Units                          |
|        | ULC      | ULC-ORD C1076 - Proprietary Burglar<br>Alarm Units and Systems                   |
|        | ULC      | CAN/ULC S303 - Local Burglar Alarm<br>Units and Systems                          |
|        | ULC      | CAN/ULC S304 - Standard for Signal Receiving Center and Premise Burglar<br>Alarm |
|        | ULC      | CAN/ULC S545 - Residential Fire Warning System Control Units                     |
|        | ULC      | CAN/ULC S559 - Fire Signal Receiving<br>Centres and Systems                      |
|        | IC       | ICES-003 - Information Technology<br>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, the B450 is wired to the control panel data bus. The cellular module has a screw on SMA antenna connection.

## **Compatibilities**

| Devices  | B9512G/B9512G-E, B8512G/B8512G-E  |
|----------|---|
|          | B6512/B5512/B4512/B3512, B5512E/<br>B4512E/B3512E control panel with firmware<br>v3.09 or higher (direct insertion)   |
|          | The module is compatible with most Bosch control panels when used with a B450 Conettix Plug-in Communicator Interface with firmware v3.09 or higher. Refer to the B450 datasheet for complete control panel compatibility listings. |
|          | B465 Conettix Universal Dual Path<br>Communicator with firmware v2.09 or higher.  |
|          | B40-P, B40-MB25, B40-MB50 auxiliary indoor/outdoor antennas   |
| Cellular | 4G LTE - Cat 1 with 3G fallback   |

## **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 module |
| 2        | Antennas        |
| 1        | Literature pack |

## **Technical specifications**

## **Electrical**

| Current<br>(operating) | Standby: 35 mA<br>Alarm: 100 mA  |
|------------------------|--|
| Voltage (operating)    | 12 VDC nominal   |
| Radio                  | North America LTE CAT 1, Bands 2, 4, 5, 12<br>North America UMTS / HSPA+, Bands 2, 5 |

#### **Environmental**

| Environment            | Environmental Class III - Indoor  |
|------------------------|---|
| Relative humidity      | 5 - 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)   |
| Antennas<br>(included) | <ul> <li>Magnetic base omni-directional</li> <li>3.3 ft (1.0 m) cable with SMA connector</li> </ul> |
| SIM card               | • AT&T  |

## **Ordering information**

## B444-A Plug-in cell module, AMEC LTE

This communication module provides secure two-way IP communication on North American wireless networks.

Order number B444-A

#### **Accessories**

## B40-MB25 Outdoor multiband antenna, cell, 25ft

Provides wide bandwidth and low angle radiation pattern for indoor/outdoor applications. Supports 2G/3G/4G data communication, Domestic (US) LTE 700 band, Global LTE 2600 band, Domestic (US) Cellular, Global GSM, and WiMAX 2300/2500/2600 bands. Includes a 25 ft (7.6 m) cable, and a mounting bracket.

Order number B40-MB25

## B40-MB50 Outdoor multiband antenna, cell, 50ft

Provides wide bandwidth and low angle radiation pattern for indoor/outdoor applications. Supports 2G/3G/4G data communication, Domestic (US) LTE 700 band, Global LTE 2600 band, Domestic (US) Cellular, Global GSM, and WiMAX 2300/2500/2600 bands. Includes a 50 ft (15.2 m) cable, and a mounting bracket.

Order number B40-MB50

## B40-P Outdoor puck antenna, cell, 6.5ft

Omnidirectional, low profile antenna for metallic indoor/outdoor surface mounting. Supports LTE, and 2G/3G/4G data communication. Operates over 698-960 MHz and 1710-2170 MHz bands. Order number **B40-P** 

## Represented by:

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