

ITS-DX4020-G GPRS/GSM Communicator

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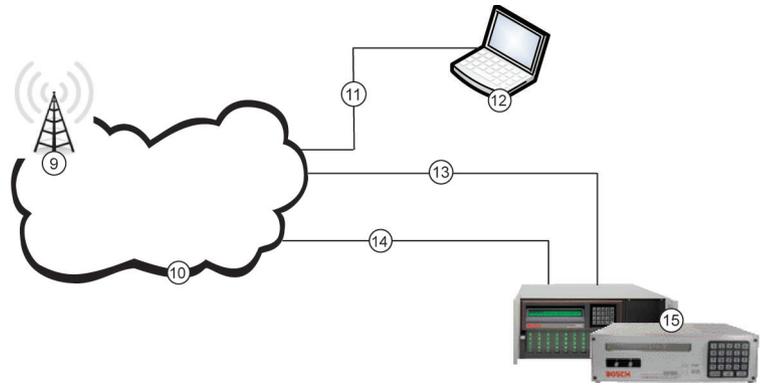
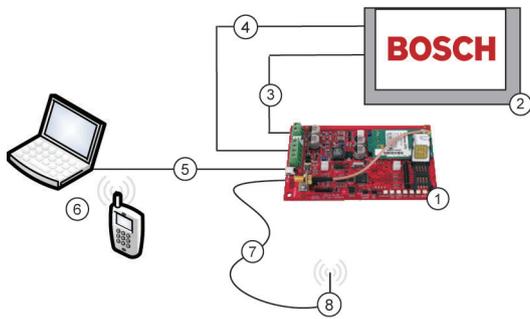
- ▶ Secure IP communication from compatible Bosch panels to Bosch receivers
- ▶ Remote programming of IP compatible Bosch panels
- ▶ GSM reporting from Contact ID control panels to any PSTN receiver
- ▶ Easy provisioning using SMS (text) or USB
- ▶ Easy installation, troubleshooting, and maintenance

The ITS-DX4020-G enables two-way IP or dialed communications over a commercial GPRS/GSM network. Typical functions are event reporting to a central monitoring station and remote access to Bosch control panels.

The ITS-DX4020-G is built for a wide variety of secure commercial and industrial applications. Flexible end-to-end path supervision, the 128 bit AES encryption and anti-substitution features make ITS-DX4020-G desirable for high security and fire monitoring applications. It is capable as a stand-alone wireless path for customers cancelling PSTN service or it can be used in conjunction with another communication technology. For Fire Monitoring applications, the ITS-DX4020-G meets UL864 and NFPA72 standards for Single Communication Technology by annunciating a path failure at the Central Station within 5 minutes. For installations using a PSTN receiver, the ITS-DX4020-G can be wired to the control panel's phone output and send Contact ID alarms over the GSM voice channel.

Note: GPRS capability requires an appropriate data plan from a cellular provider.

System overview



1. ITS-DX4020-G GPRS/GSM Communicator
2. Compatible Control Panel
3. Control Panel Dialer Connection (optional)
4. Control Panel Bus and Power Connection
5. USB Type A (host)-to-USB Mini B (device) Cable (not included)
6. Local PC or SMS-capable Cell Phone for Configuration
7. Antenna Cable
8. Magnetic Base Antenna
9. Base Station on Wireless Carrier's Network
10. Internet, WAN, Ethernet, or PSTN network
11. Remote PC's Network Connection
12. Remote PC Running Remote Programming Software (RPS)
13. Ethernet Connection
14. PSTN Connection
15. Conetrix D6600 or Conetrix D6100i Receiver

Easy installation, troubleshooting and maintenance

- No networking expertise required at field site (no firewall or router settings)
- Firmware upgradeable
- No PC or special tools required for installation and troubleshooting

| LED | Function |
|---------|-----------------------------|
| Status | System Status Indicator |
| Cell IP | Network Connection Status |
| Audio | Call Status |
| SS1-SS3 | GSM Signal Strength |
| Bus | Panel Bus Connection Status |

Functions

Conetrix IP communication via GPRS

In addition to the GPRS security provided by the network operator, the ITS-DX4020-G uses our Conetrix IP protocol that supports:

- Flexible polling intervals
- Resistance to Denial of Service attacks
- 128 bit AES encryption
- Anti-replay / anti-substitution keys

Contact ID Alarm dialing via GSM

The ITS-DX4020-G supplies a PSTN line connection with phone voltage to the panel. The PSTN over GSM connection can be used to send primary or backup events using Contact ID. The ITS-DX4020-G provides a dial tone, captures the dialed number, and establishes the GSM call to a PSTN receiver in the monitoring station.

Remote programming of Bosch panels

The ITS-DX4020-G supports secure RPS programming of compatible Bosch panels. It also supports incoming voice menu calls for Easy Series panels.

Easy provisioning via SMS (text) or USB

The ITS-DX4020-G can be provisioned over USB with on-screen menu. For installers without a PC, the ITS-DX4020-G also supports provisioning via SMS messaging.

Certifications and approvals

| | | |
|-----------|--------|---|
| | AT&T | Notice of Network Compatibility; August 9, 2010 |
| Australia | Austel | Approved |
| Norway | FGI | T-127/09, ATS4, grade 3 |



Notice

For declarations refer to the Bosch website.

| Region | Certification | |
|---------|---------------|---|
| Europe | CE | (LVD, EMC, R&TTE) |
| | EN50131 | EN-ST-000125 [ITS-DX4020-G] |
| Global | PTCRB | Request #19428 |
| Belgium | INCERT | B-509-0005 |
| USA | UL | AMCX: Central Station Alarm Units (ANSI/UL 1610), AOTX: Local Alarm Units (ANSI/UL 609, ANSI/UL 464), APAW: Police-station-connected Alarm Units (ANSI/UL 365, ANSI/UL 464), APOU: Proprietary Alarm Units (ANSI/UL 1076), NBSX: Household Burglar Alarm System Units (ANSI/UL 1641), UOJZ: Control Units, System (ANSI/UL 864) |
| | CSFM | see our website |

| Region | Certification | |
|--------|---------------|---------------------------------------|
| | FCC | CFR47 Parts 15.107 and 15.109 Class B |
| | FDNY-CoA | 6059 [D9412GV3 & D7412GV3] |
| | FDNY-CoA | 6174 |
| | FDNY-CoA | 6196 |
| Brazil | ANATEL | 2113-12-5164 |

Installation/configuration notes

Compatibility Information

| | |
|-----------------|--|
| Control Panels: | DS7200V2 Series ¹ (firmware version 2.10 or later) |
| | DS7400XiV4 ² (firmware version 4.10 or later) |
| | FPD-7024 Fire Alarm Control Panel |
| | Easy Series (firmware version 3.0 or later) |
| | GV2 Series ³ (firmware version 7.07 or later) |
| | GV3 Series ³ |
| Applications: | RPS v5.10 or higher |

¹ Refer to your control panel's documentation for programming instructions.

² Refer to the *DS7400XiV4 Reference Guide* (P/N: 4998154963) and *DS7400XiV4 Release Notes* (P/N: 4998154793) for programming instructions.

³ The GV2 Series consists of the D9412GV2, D7412GV2, and D7212GV2 control panels. The GV3 Series consists of the D9412GV3, D7412GV3, and D7212GV3 control panel. Refer to your control panel's documentation for programming instructions.



Notice

Use the DX4020 network programming instructions for programming the ITS-DX4020-G.

Connection Considerations

The ITS-DX4020-G uses a four-wire connection to the control panel bus with two data wires and two power wires that connect to the control panel. For GSM dialing, it connects using two wires to the control panel's PSTN output. For proper operation, the ITS-DX4020-G requires a metallic surface mounting location with a high quality signal from the desired wireless carrier.

Mounting Considerations

The ITS-DX4020-G mounts to the standard 3-hole patterns in supported control panel enclosures. With the D137 mounting bracket (not included), the ITS-DX4020-G can be mounted to other enclosures.

Wiring Considerations

If you are mounting the ITS-DX4020-G in a separate enclosure, a tamper switch is required in the enclosure. Separate power-limited wiring from non-power-limited wiring by 6.4 mm (0.25 in). The maximum wire resistance for control panel connections is 1.6 Ω. The maximum wire distance is 30.5 m (100 ft) for 22 AWG wire and 61 m (200 ft) for 18 AWG wiring.

Parts included

| Quantity | Component |
|----------|---|
| 1 | ITS-DX4020-G Communicator |
| 1 | Hardware pack (mounting hardware, magnetic base antenna, four-wire bus/power cable, and program jumper) |
| 2 | Literature - Quick Start Guide |
| 1 | Literature - CD |

Technical specifications

Electrical

| | |
|----------------------|--|
| Current (operating): | Standby: 65 mA Alarm: 200 mA |
| Voltage (operating): | 12 VDC |
| Ripple/Noise: | 200 mVpp maximum |
| PSTN FSX Port: | 17 V minimum supplied |
| Radio: | GSM quad band radio Europe: 900 MHz and 1800 MHz North America: 850 MHz and 1900 MHz |

Environmental

| | |
|--------------------------|---|
| Environment: | EN50131-1 Environmental Class II - Indoor |
| Relative Humidity: | 5% to 93% non-condensing |
| Temperature (operating): | -10°C to +55°C (+14°F to +131°F) |

Mechanical

| | |
|-------------|---|
| Dimensions: | 5.2 in. x 3.1 in. x 1 in. (133 mm x 80 mm x 23 mm) |
| Antenna: | Magnetic base omni-directional 2.5 m (8.2 ft) cable with SMA connector |
| SIM Card: | 3V/1.8V SIM (compliant with GSM 11.12 recommendation) |
| USB: | Connector: mini-B) |

Ordering information

ITS-DX4020-G GPRS/GSM Communicator

Digital cellular communicator used for two-way IP or dialed communications over GPRS/GSM networks.

Order number **ITS-DX4020-G**

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