Conettix D6600 Communications Receiver/Gateway

www.boschsecurity.com

The Conettix D6600 Communications Receiver/Gateway with Conettix IP hardware components works in the following configurations:

- Telephone line communications over the public switched telephone network (PSTN).
- Internet or intranet communications over a LAN or WAN using standard user datagram protocol and internet protocol (UDP/IP).
- Simultaneous PSTN and LAN or WAN communications.

The Conettix network environment reduces signal-reporting time, improves security, and provides instant notification when a site experiences communication problems. A D6600 with Conettix IP hardware is compatible with most manufacturer’s fire and security system control panels.

System overview

PSTN communications configuration
This configuration uses existing telephone lines. A control panel's signal transmits over a PSTN analog telephone line to the D6600. The D6600 translates the signal to a common data format and sends the signal through Ethernet LAN, WAN, or RS-232 to a central station automation system.

Internet or intranet communications configuration
This configuration requires Conettix IP hardware components, uses existing Internet or intranet structures, and avoids additional telephone service costs. This configuration permits the Conettix D6200 Programming/Administration Software to connect to the D6600 remotely. A control panel's signal transmits over the LAN or WAN to the D6600. The D6600 translates the signal to a common data format and sends the signal through Ethernet LAN, WAN, or RS-232 to a central station automation system. The central automation system sends information to operator workstations.

Conettix D6200 Programming/Administration Software
Conettix D6200 Programming/Administration Software is a PC-based application that allows users to view, change, upload, and download D6600 programming.

- 32 lines for public switched telephone network (PSTN) communications with Two Way audio, Caller ID, ANI and DNIS support
- Award winning VOIP compensation feature reduces signal errors caused by digitally distorted Contact ID signals
- Up to 3,200 network accounts for IPv6 and IPv4 network communications
- Supports NIST-FIPS197 certified 128 to 256 bit AES encryption
- Designed with electrically isolated, hot-swappable line cards and front panel access to CPU card
parameters through a network connection or RS-232 serial port. Through the Conettix D6200 Programming/Administration Software users can edit CPU and line card parameters; view the status of all accounts in the databases; add, edit, and delete accounts; and configure network operations.

Notice
Conettix D6200 Programming/Administration Software is compatible with the following operating systems: Microsoft Windows XP, Windows 7, Windows 8.

5.3 Conettix D6680 Ethernet Network Adapter
6. Conettix D6600 Communications Receiver/Gateway
7. RS-232
8. Conettix D6200 Programming/Administration Software
9. Automation System
10. Central Station Operators

**Functions**

**Communication formats**

<table>
<thead>
<tr>
<th>Format</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acron Superfast</td>
<td>ROBOFON</td>
</tr>
<tr>
<td>Ademco Slow</td>
<td>Scantronics Scancom</td>
</tr>
<tr>
<td>Ademco Express</td>
<td>SERIEE FSK/DTMF</td>
</tr>
<tr>
<td>Ademco High Speed</td>
<td>Sescoa Super Speed</td>
</tr>
<tr>
<td>Ademco Contact ID</td>
<td>SIA 8/20/300</td>
</tr>
<tr>
<td>CFSK BELL/V.21</td>
<td>SIA ADT</td>
</tr>
<tr>
<td>FBI Superfast</td>
<td>SIA V.21</td>
</tr>
<tr>
<td>Franklin/Sescoa</td>
<td>Silent Knight Fast</td>
</tr>
<tr>
<td>ITI</td>
<td>Silent Knight FSK</td>
</tr>
<tr>
<td>Radionics BFSK</td>
<td>Standard Pulse Formats</td>
</tr>
<tr>
<td>Radionics Hex</td>
<td>Sur-Gard DTMF</td>
</tr>
<tr>
<td>Radionics Modem II</td>
<td>Telim</td>
</tr>
<tr>
<td>Radionics Modem IIe/Illa 2</td>
<td>Veritech FSK</td>
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<tr>
<td>RB2000</td>
<td>VONK</td>
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</table>

**PSTN communications**

<table>
<thead>
<tr>
<th>Function</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dialed number identification service (DNIS)</td>
<td>Handles more field dialers with fewer line cards and allows you to</td>
</tr>
<tr>
<td></td>
<td>create virtual lines.</td>
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<td></td>
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<tr>
<td>Caller identification (Caller ID) alarm</td>
<td>Shortens the amount of time that calls are connected to the receiver.</td>
</tr>
<tr>
<td>processing stores corresponding handshake</td>
<td>Decreases money spent on fixed hardware or monthly phone bills.</td>
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<tr>
<td>formats. The processing automatically recalls</td>
<td></td>
</tr>
<tr>
<td>the format when the same caller identification is processed.</td>
<td></td>
</tr>
<tr>
<td>Uses the Conettix D6641 Telephone Line Card.</td>
<td>Digital signal processing technology in the cards allows the D6600 to recognize more communication formats and accurately decode information.</td>
</tr>
</tbody>
</table>
Additional PSTN communications advantages

- Automatic number identification (ANI) system identifies incoming telephone numbers.
- Each line card has four telephone lines.
- Receives signals on up to 32 telephone lines simultaneously.
- Independent, configurable communication format settings for each telephone line.
- Visual front panel light emitting diode (LED) indicators for on-line and line-fault status conditions.

Two-way audio

- Able to transfer calls to another line or extension.
- Activated by account numbers and by events.

LAN or WAN gateway communications

- Requires Conettix IP hardware components.
- Two-way communications with a control panel.
- Supervised network automation computer links.
- Supports up to 3200 network accounts.
- Ethernet configuration available.
- Supports 128-bit AES Rijndael encryption.

Supervision and programming with network communications

The protected premises sends supervision messages to the D6600 at a programmed rate. Users can program the supervision rate to be 5 seconds to 1275 seconds. The D6600 acknowledges the supervision message, providing end-to-end security. If authentication and encryption algorithms detect potentially damaging activity, they alert the central station operator.

The data network's communication link is continuously supervised. Even when monitoring thousands of control panels, the system consumes only a small amount of bandwidth.

Front panel access

The D6600 enclosure design provides convenient access to the CPU card or the hot-swappable telephone line cards. A hot-swappable card can be removed and replaced without affecting system performance.

Flash technology

Using the Conettix D6200 Programming/Administration Software, flash technology in the D6600 allows for software upgrades without additional hardware or firmware changes.

Certifications and approvals

<table>
<thead>
<tr>
<th>Region</th>
<th>Certification</th>
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<tbody>
<tr>
<td>Australia</td>
<td>Austel Approved</td>
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<td>USA</td>
<td>ANSI</td>
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<td></td>
<td>NIST</td>
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<th>Region</th>
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<tr>
<td>Europe</td>
<td>CE EMC, LVD, R&amp;TTE</td>
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<tr>
<td>USA</td>
<td>UL 1076 - Proprietary Burglar Alarm Units and Systems</td>
</tr>
<tr>
<td></td>
<td>UL 1610 - Central Station Burglar Alarm Units</td>
</tr>
<tr>
<td></td>
<td>UL 365 - Police Station Connected Burglar Alarm Units</td>
</tr>
<tr>
<td></td>
<td>UL 864 - Standard for Control Units and Accessories for Fire Alarm Systems</td>
</tr>
<tr>
<td></td>
<td>FM CSFM California State Fire Marshal (see our website)</td>
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<tr>
<td>Canada</td>
<td>ULC CAN/ULC S303 - Local Burglar Alarm Units and Systems</td>
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<td></td>
<td>ULC CAN/ULC S304-06, Second Edition, dated July 2006 – For Signal Receiving Centre and</td>
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<tr>
<td></td>
<td>ULC CAN/ULC S559 - Fire Signal Receiving Centres and Systems</td>
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<tr>
<td></td>
<td>ULC ULC-ORD C1076 - Proprietary Burglar Alarm Units and Systems</td>
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<td></td>
<td>IC 1249A-8925A</td>
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<tr>
<td>Hong Kong</td>
<td>HKFSD</td>
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<tr>
<td>Brazil</td>
<td>ANATEL 0841-03-2045</td>
</tr>
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Installation/configuration notes

The D6600 and monitoring centers

The D6600 has extended edges so that installers can mount it easily into a rack cabinet. Mount up to eight D6600 units into a standard 48.3 cm (19 in.) rack cabinet to conserve floor space. Each D6600 connects 32 telephone lines. Eight D6600 units can connect a total of 256 telephone lines, process 600,000 digital accounts, and process 28,800 supervised Internet or intranet accounts.

Notice

Rack cabinets are sold separately by a variety of manufacturers.

Incorporating Conettix IP function into the D6600

With the correct Conettix IP hardware components, the D6600 can supervise the network communications link. The Conettix IP hardware components include:

- Conettix D6201 Series IP Security Keys
- Conettix D6672 COM 1 Expansion Kit
- Conettix D6680 Ethernet Network Adapter
Network communications and control panels
For network communications, it is necessary to use one of the following modules with the appropriate control panel: Conettix C900V2 Dialer Capture Ethernet Module or Conettix DX4020 Ethernet Network Interface Module. Review the control panel specifications for the recommended network interface or dialer capture modules.

Parts included

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Component</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Conettix D6600 Communications Receiver/Gateway</td>
</tr>
<tr>
<td>1</td>
<td>Conettix D6610 CPU Card</td>
</tr>
<tr>
<td>1</td>
<td>Conettix D6615 CPU Terminator Card</td>
</tr>
<tr>
<td>1</td>
<td>Conettix D6641 Telephone Line Card (Expanded Memory)</td>
</tr>
<tr>
<td>1</td>
<td>Conettix D6645 Telephone Line Terminator Card</td>
</tr>
<tr>
<td>1</td>
<td>Conettix D6200CD CD-ROM (Includes the Conettix D6200 Programming/Administration Software)</td>
</tr>
<tr>
<td>1</td>
<td>P6601 Battery Cable</td>
</tr>
<tr>
<td>1</td>
<td>P6602 Input and Output Cable</td>
</tr>
</tbody>
</table>

Technical specifications

Electrical

Power requirements

- AC nominal operating range: 120 V or 230 V
- AC maximum operating range: 100 VAC to 120 VAC, 220 VAC to 230 VAC, 50 Hz or 60 Hz, 2.5 A maximum
- Standby power: Uninterruptible power supply (UPS) containing a sealed lead-acid battery, 12 V, 7 Ah to 18 Ah

Current requirements

- One line card installed: Battery: 800 mA, UPS AC Standby: 350 mA
- For each additional line card or terminal card pair: Battery: 210 mA, UPS AC Standby: 35 mA
- One network communications card installed: Battery: 10 mA, UPS AC Standby: 10 mA

Mechanical

Automation outputs

- Automation outputs: SIA mode, 6500 mode

Enclosure

Rack Mount dimensions (4U): 18 cm x 48.3 cm x 49.5 cm (7.0 in. x 19.0 in. x 19.5 in.)

Standalone dimensions: 18 cm x 45 cm x 49.5 cm (7.0 in. x 17.75 in. x 19.5 in.)

Weight: 8.7 kg (19 lb)

Telephone

- Telephone: RJ11C modular jacks, with 26 AWG or larger wire diameter

Ringer equivalence number (REN)

- REN: 0.4 B
- Industry Canada (IC) REN: 0.2

Display

- Screen dimensions: 1.8 cm x 15.2 cm (0.7 in. x 6.0 in.) dot matrix LCD, 5 x 7 dots per character. Shows two separate lines, 40 characters per line.
- Indicators: LED display section indicates receiver status and power.

Inputs and outputs

- For automation computer connection: One RS-232 interface port COM3
- For external serial printer, PC, modem, or network connection: One RS-232 interface port COM4
- For parallel printer connection: One parallel printer port
- Number of programmable inputs: Two (wire harness included)
- Number of programmable outputs: Two (wire harness included)
- Optional input: For optional network communications expansion: One RS-232 interface port COM1

Environmental

- Temperature (operating): 0°C to 50°C (+32°F to +122°F)

Trademarks

All hardware and software product names used in this document are likely to be registered trademarks and must be treated accordingly.

Ordering information

Conettix D6600 Communications Receiver/Gateway
Supports communications through PSTN and/or LAN/WAN. Supports 32 telephone lines, 3200 network accounts, two-way audio, caller ID, ANI, and DNIS.
Order number D6600
### Accessories

**3200 Account Conettix IP Security Key (LPT)**  
Designed for parallel ports. Allows each Conettix Communications Receiver/Gateway to support a maximum of 3200 IP accounts.  
Order number **D6201**

**3200 Account Conettix IP Security Key (USB)**  
Allows each Conettix Communications Receiver/Gateway to support a maximum of 3200 IP accounts. Designed for USB ports.  
Order number **D6201-USB**

**500 Account Conettix IP Security Key (USB)**  
Allows each Conettix Communications Receiver/Gateway to support 500 IP accounts. Designed for USB ports.  
Order number **D6201-500-USB**

**Conettix D6610 CPU Line Card**  
CPU card for Conettix D6600 Communications Receiver/Gateway.  
Order number **D6610**

**Conettix D6615 CPU Terminator Card**  
Provides a shielded interface between the Conettix D6610 CPU Line Card and external connections to automation database computers and printers.  
Order number **D6615**

**Conettix D6641 Telephone Line Card**  
Answers and decodes signals from up to four telephone lines using advanced digital signal processing technology.  
Order number **D6641**

**Conettix D6645 Telephone Line Terminator Card**  
Provides isolation and transient suppression to the Conettix D6641 Telephone Line Card.  
Order number **D6645**

**Conettix D6672 Com 1 Expansion Kit**  
Creates a third serial port on the Conettix D6600 Communications Receiver/Gateway. Provides a DB9 male connector and transient protection.  
Order number **D6672**

**P6601 Battery Cable**  
Connects a 12 VDC power source to the Conettix D6600 Communications Receiver/Gateway.  
Order number **P6601**

**P6602 Input and Output Cable**  
Supports use of input and output lines for Conettix receivers.  
Order number **P6602**

**P6603 Acknowledgement Button**  
Spare acknowledgement button for Conettix D6600 Communications Receiver/Gateway.  
Order number **P6603**

### Conettix ITS-D6686-UL Ethernet Network Adapter

Order number **ITS-D6686-UL**

### Conettix ITS-D6686-INTL Ethernet Network Adapter

Provides a 10/100 Base T network interface connection for IP account monitoring and central station automation with Conettix D6600 Communications Receiver/Gateway. Supports IPv6/IPv4 dual stack and up to 256-bit AES encryption.  
Order number **ITS-D6686-INTL**

### Software Options

**Conettix D6200CD CD-ROM**  
Provides software for programming and operating Conettix receivers. Includes PDF documentation for hardware and software relating to the Conettix Communications Receiver/Gateway.  
Order number **D6200CD**