

Conettix D6600 Communications Receiver/Gateway

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Invented for life



- ▶ 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 3200 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

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

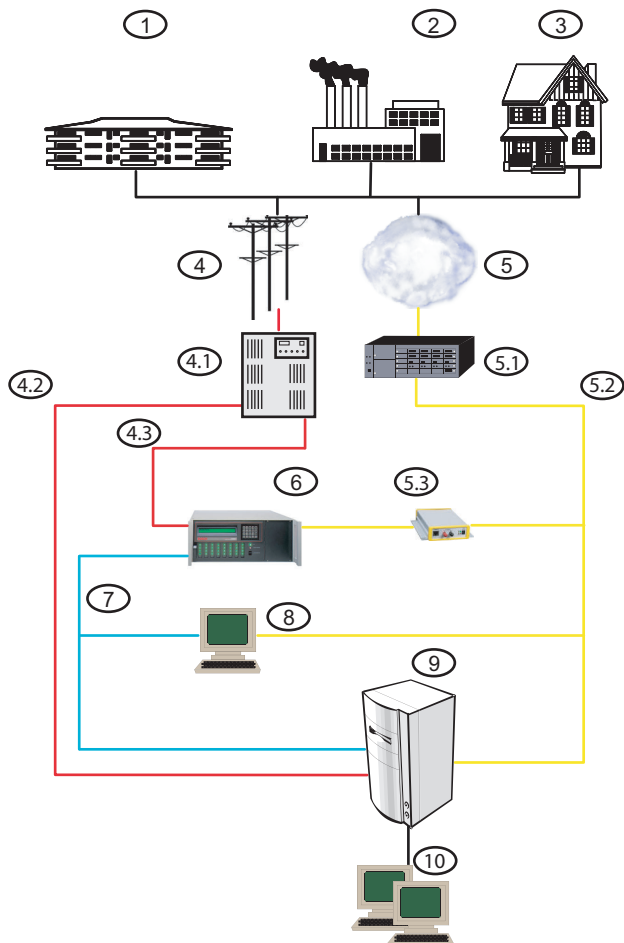
Conettix D6200 Programming/Administration Software is a PC-based application that allows users to view, change, upload, and download D6600 programming

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 works with the following operating systems and associated service packs:
Microsoft Windows 98, Windows 98 Second Edition, Windows Me, Windows NT, Windows 2000, and Windows XP.



1. Access Control
2. Commercial Monitoring
3. Residential Monitoring
4. PSTN
 - 4.1 Private Branch Exchange (PBX)
 - 4.2 Two-way Audio
 - 4.3 Analog Telephone Lines
5. LAN/WAN
 - 5.1 Firewall, Router, and Hub
 - 5.2 LAN
 - 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

• Acron Superfast	• ROBOFON
• Ademco Slow	• Scantronics Scancom
• Ademco Express	• SERIEE FSK/DTMF
• Ademco High Speed	• SESCOA Super Speed
• Ademco Contact ID	• SIA 8/20/300
• CFSK BELL/V.21	• SIA ADT
• FBI Superfast	• SIA V.21
• Franklin/SESCOA	• Silent Knight Fast
• ITI	• Silent Knight FSK
• Radionics BFSK	• Standard Pulse Formats
• Radionics Hex	• Sur-Gard DTMF
• Radionics Modem II	• Telim
• Radionics Modem IIe/IIIa ²	• Veritech FSK
• RB2000	• VONK

PSTN Communications

Function	Benefit
Dialed number identification service (DNIS) adjusts line card settings according to the telephone number dialed by the control panel.	Handles more field dialers with fewer line cards and allows you to create virtual lines.
Caller identification (Caller ID) alarm processing stores corresponding handshake formats. The processing automatically recalls the format when the same caller identification is processed.	Shortens the amount of time that calls are connected to the receiver. Decreases money spent on fixed hardware or monthly phone bills.
Uses the Conettix D6641 Telephone Line Card.	Digital signal processing technology in the cards allows the D6600 to recognize more communication formats and accurately decode information.

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

Australia	Austel	Approved
USA	ANSI	National Institute of Standards and Technology's Advanced Encryption Standard Certification (Certificate Number 82)
	NIST	National Institute of Standards and Technology AES Certification

Region	Certification	
Europe	CE	2004/108/EC; 2006/95/EC; 1999/5/EC; EN55022: 2006 +A1:2007, Class A; EN50130-4: 1995

Region	Certification	
		+A1:1998 +A22003; EN60950-1: 2006; EN61000-3-2:2000; EN61000-3-3:1995; TBR21: 1998
USA	UL	AMCX: Central Station Alarm Units (UL1610, UL1635), AMCX7: Central Station Alarm Units Certified for Canada (cULus), APaw: Police Station Alarm Units (UL365, UL464), APaw7: Police Station Alarm Units Certified for Canada (cULus), APOU: Proprietary Alarm Units (UL1076), APOU7: Proprietary Alarm Units Certified for Canada (cULus), UOJZ: Control Units, System (UL864, 9th edition)
	FM	
	CSFM	7165-1615:0242 7165 -- FIRE ALARM CONTROL UNIT (COMMERCIAL)
	CSFM	7165-1615:0238 7165 -- FIRE ALARM CONTROL UNIT (COMMERCIAL)
	CSFM	7300-1615:0179 7300 -- FIRE ALARM CONTROL UNIT ACCESSORIES/MISC. DEVICES
	CSFM	7300-1615:0168 7300 -- FIRE ALARM CONTROL UNIT ACCESSORIES/MISC. DEVICES
	FCC	ESVUSA-25328-AL-N
	ULC	AMCX7.S1871 - Central Station Alarm Units Certified for Canada
Canada	ULC	APOU7.S1871 Proprietary Alarm Units Certified for Canada
	IC	1249A-8925A
Hong Kong	HKFSD	
Brazil	ANATEL	0841-03-2045

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

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

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
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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
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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
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Environmental

Temperature (Operating):	0°C to 50°C (+32°F to +122°F)
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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**

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