



**SILENT
KNIGHT**

by Honeywell

IntelliKnight® Models SK-IP-2/SK-IP-2UD IP Fire Alarm Communicators

The IntelliKnight® IP Communicators and an Ethernet connection simply replace the telephone lines as the primary communications path to the central station. It connects to customer supplied network equipment with a gateway to the Internet. The communicators provide supervised telephone line voltage to both panel DACT ports. Upon network communication loss, telephone line voltage is dropped to the panel and panel reports communication loss trouble. The communicators monitor the connectivity to both the primary and secondary receiver at the central station. For more information about this panel and other Silent Knight products please call 800-328-0103.

Description

The new IntelliKnight® SK-IP-2 and SK-IP-2UD are IP communicators, UL listed for monitoring of Silent Knight fire alarm panels. (See compatibility table) The SK-IP-2 has two supervised inputs, and two additional outputs. The SK-IP-2UD version 6.0 adds a modem daughter board (2UD) that supports upload/download over the Internet or a customer's Intranet for IntelliKnight models 5820XL and 5808 FACP's. These IP Communicators are UL 864 listed for signaling under Other Transmission Technologies and comply with NFPA 72 requirements. Refer to the IP Communicator Series Installation Document PN 53109 for more information.

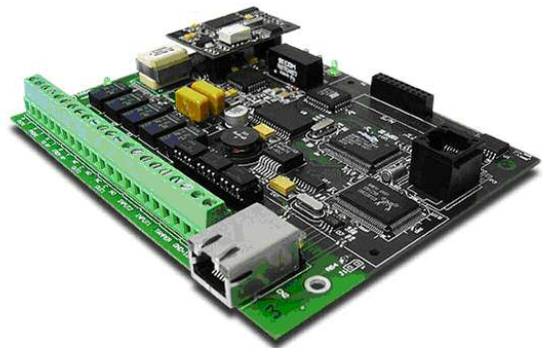
Both models connect to the primary and secondary communication ports of the panel's DACT, converting the analog signals into digital signals at the panel for transmission to a compatible Teldat VisorALARM PLUS IP receiver at a central station. The panel operates normally during an alarm, supervisory or trouble event and sends contact-ID formatted analog information out of the telephone ports to the IP Communicator. The IP Communicator reformats the data into highly encrypted Ethernet UDP packets for transmission to a compatible receiver at the central station. This new listing only requires an IP connection. No backup analog phone line is necessary.

Designed to work with compatible Contact ID DACT-equipped addressable panels from Silent Knight, the IP Communicators allow for faster and more economic digital alarm transmissions, improving response times and decreasing costs found with traditional analog systems. They offer value-added features such as supervised line functionality, where a central station can detect any off-line alarm panels within seconds. On the central station side, a compatible VisorALARM® Plus IP receiver from the Teldat Corporation allows seamless integration into existing conventional central station architectures.

The benefit of an IP Communicator is that it is always on, increasing the security and supervision of the central station connection from once every 24 hours for a supervisory test signal to once every 30 - 90 seconds.

The SK-IP-2UD allows a programmer to upload and download data between the user's PC and either the IntelliKnight 5808 or 5820XL addressable FACP. The panel and PC can be anywhere on the world wide web or within a corporate intranet.

The user's computer runs a program called UDPORT.exe to capture the modem signals from or the newer PS-TOOLS panel programming software. In UDPORT.exe the user enters the main IP address of the



IP Communicator

VisorALARM receiver, the UDP port to use, username, and password. Instead of using the PC's modem, this process communicates between the SK-IP-2UD's modem at the panel and the panel's own modem. While speed is still limited to the baud rate of the panel's modem, panel communications are now 100% digital over IP from the remote program PC all the way to the remote panel installation. This eliminates any dropouts in modem communications caused by noise or other factors. If an alarm should occur during upload or download, the panel is able to interrupt modem communications immediately and transmit the alarm to the central station.

Each SK-IP-2UD is registered in the VisorALARM Receiver with a unique serial number. A subscriber number must be entered into the subscriber number database field for each SK-IP-2UD. This same number is entered into the subscriber telephone number field (panel to call) in PK-PLUS or PS-TOOLS as if calling the panel on a telephone. If these numbers match, and the master username and password are correct, full duplex communication is permitted to the panel.

NOTE: UL 864 Ninth Edition prohibits downloading to a panel without entering a local panel password. Uploading is permitted at any time without entering a password.

IntelliKnight Model SK-IP-2/2UD IP Fire Alarm Communicator

Features

- Listed to UL Standard 864.
- Eliminates the cost of two dedicated phone lines. Only the customer's shared IP equipment is required.
- Can use newer low-cost, non-analog, digital telephone services such as cable or fiber optics.
- Increases connection supervision to the central station from the once-a-day test signal to once every 30 - 90 seconds.
- Requires no change to the existing panel configuration. The IP Communicator connects directly to the primary and secondary analog panel telephone ports.
- Fast alarm transmission (less than 10 second transmission time).
- Works over any type of customer-provided Ethernet 10/100 Base network connection (LAN or WAN), DSL modem or cable modem.
- Data transmits over standard contact-ID protocol but is secured with the industry's highest level of encryption (AES 512 bit).
- Supports both dynamic (DHCP) or Public and Private Static IP addressing.
- Supports dual-destination IP receiver address for high redundancy configurations: all signals are sent to a secondary address should the primary become unavailable.
- User programmable UDP ports for flexibility and compatibility with firewalls and other network security components.
- Supports an optional third maintenance receiver installed at the end user's facility that permits local alarm monitoring. Alarms are received simultaneously at both the central station and the customer's facility. A filter can be applied to annunciate specific alarm types such as trouble-only events.
- Supports upload/download using existing, familiar programming tools.
- Two supervised inputs and two outputs
- RJ45X Ethernet Termination

Easy to Program

There are three ways to configure the IP Communicator:

1. Console terminal using the HyperTerminal™ software program found on all Microsoft® operating systems.
2. Local or remote Telnet session via Ethernet connection.
3. Windows-based configuration software (shipped with IP Communicator or downloaded from www.silentknight.com)

The IP Communicator can be pre-programmed. The programmer enters all central-station information and an auto-registration password. This is saved to the unit's flash

memory. When the IP Communicator is installed at the site and connected to the Internet/Intranet, it registers itself with the central station receiver. This eliminates the need for a PC at the remote site for programming. The IP receiver at the monitoring station will automatically configure other parameters during registration.

For most installations, the only required parameters are:

- Selection of either DHCP or Static IP
- Destination primary and secondary receiver IP addresses
- Account identification number (CID)
- Port number
- Installation password

All of these parameters are assigned by the central station. See "Installation Requirements" for full details.

Compatibility

The IP Communicator is compatible with the following Silent Knight panels:

SK-IP-2 - non upload /download	
• 5820XL	• SK5208
• 5808	• 5104B
• 5700	• 5600
SK-IP-2UD - with Upload/Download	
• 5820XL	• 5808

VisorALARM PLUS® IP Receiver

The FireWatch™ IP Communicator reports to the VisorALARM-PLUS IP receiver (manufactured by the Teldat Corporation). Each IP receiver can manage up to 3,000 IP Communicator accounts and is compatible with existing central station alarm monitoring software.

The VisorALARM IP receiver is based on high-availability router technology and uses a high-performance embedded operating system for higher reliability and efficiency. All IP receiver configuration and operating data is backed up to a smart card. This allows for an immediate equipment replacement within 60 seconds with almost no downtime and no information loss. The Primary and Secondary receiver configurations provide maximum level of redundancy and both can be backed up by additional "clustered" receivers for the highest reliability available in the industry. Both receivers communicate in real-time over the network to keep information synchronized and up-to-date. Each VisorALARM Plus Receiver can handle up to 20 concurrent TCP/IP connections from Upload/Download Users.

IntelliKnight Model SK-IP-2/2UD IP Fire Alarm Communicator

Installation Requirements

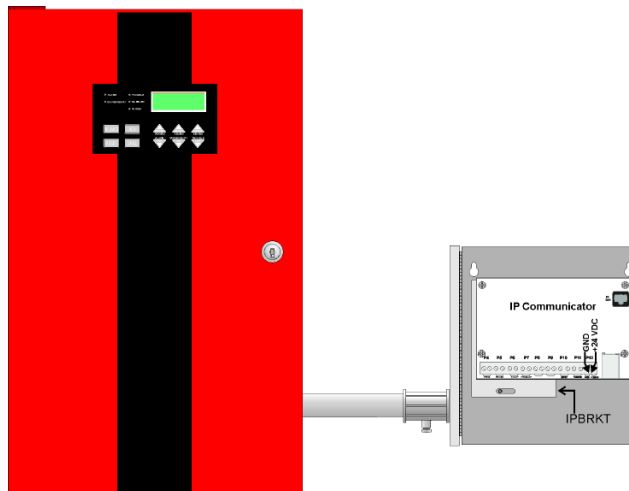
The following are required for proper installation of the IP Communicator:

- 24 VDC non-resettable, filtered, regulated power:
 - SK-IP-2UD : 155 mA in alarm; standby 98 mA.
 - SK-IP-2: 136 mA in alarm; 93 mA standby.
- Ethernet network connection (ITE-listed router/gateway).
- Although not required to meet NFPA, a small UPS is recommended to provide backup power for customer-provided router/switch (the HP3-300ULX can provide 12 VDC backup power for small 12 volt routers drawing 500 mA or less for over 24 hours).
- Dynamic or static IP address (dynamic addressing requires DHCP server present on the local network. NOTE: DSL and cable modems typically use dynamic addressing as supplied by network providers).
- UDP port for IP communication with the monitoring station (default port: 80 may be changed by central station).
- Destination IP addresses of the IP receivers where the communicator will be sending alarms and other events (If installed on a private Intranet, the gateway address of the public router will be required to allow IP card to access the Internet and the public router at the central station).
- Panel account ID number (CID).
- Installer password (provided by the monitoring station managing the IP receiver).
- Separate username and password supplied by central station for upload/download operation. (Note: this is different than installation password).

Mounting Methods

1. The IP Communicator is included with the SK-IP-2/2UD and can be mounted inside the small IPENC enclosure. (IPENC is included with both the SK-IP-2 and SK-IP-2UD). This will be connected to the fire alarm panel with a short piece of conduit no greater than 6 in. (15cm) in length.
2. When more power is required, the IP Communicator can be mounted inside the HP300ULX power supply (sold separately). When mounting inside the common enclosure the IPBRKT (sold separately) is used. The power supply should be connected to the fire alarm panel with a short piece of conduit no greater than 6 in. (15cm) in length.

NOTE: Refer to the IP Communicator Series Installation Document PN 53109 for additional installation information.



Mounting in IPENC enclosure

Specifications

Electrical

- 24 VDC non-resettable, filtered, regulated power:
- SK-IP-2UD : 155 mA in alarm; standby 98 mA.
 - SK-IP: 136 mA in alarm; 93 mA standby.

Physical

- Dimensions: 7.10" W x 8.44" H x 3.12"D
(19.30cm x 21.44cm x 7.92cm)
- Weight: 3.55lbs (1.61 Kg)

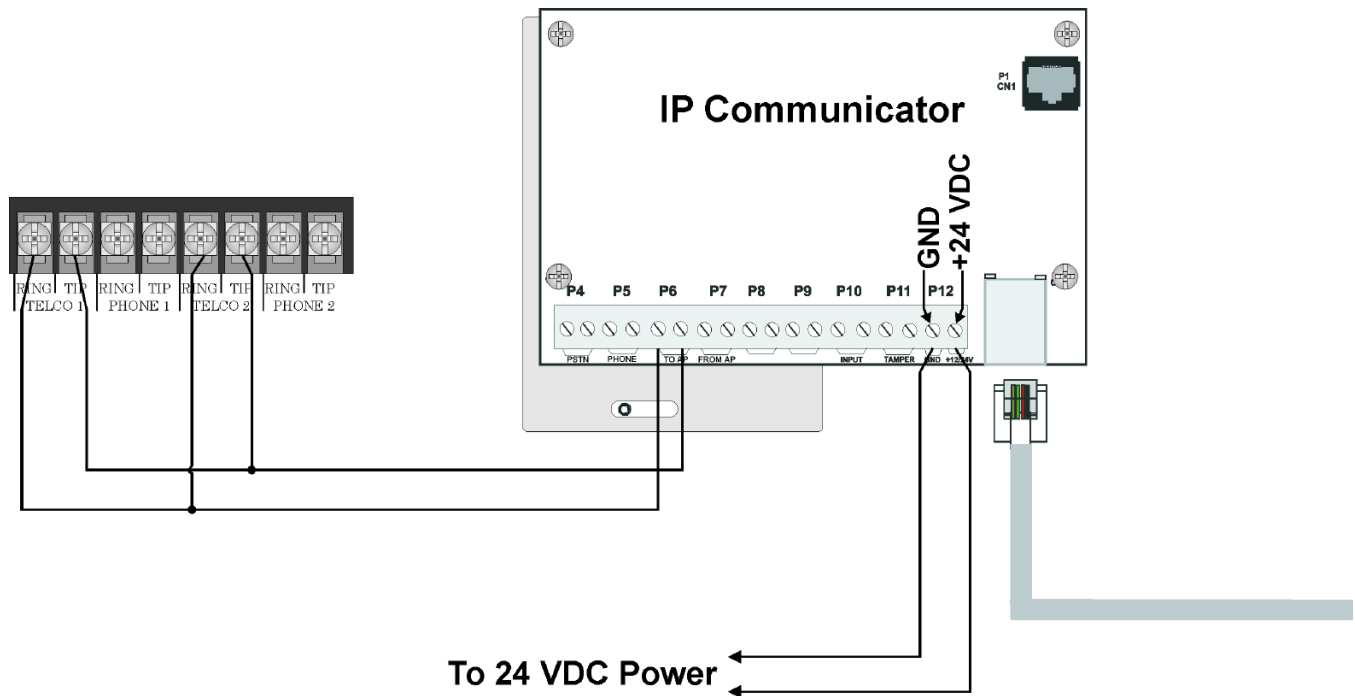
Environmental

- Operating Temperature: 32° - 120° F (0° - 49°C)
Humidity: 10% – 93% non-condensing

Approvals

- UL: S2424
CSFM: 7300-0075:223.

IntelliKnight Model SK-IP-2/2UD IP Fire Alarm Communicator



Mounting to FACP

Ordering Information

- SK-IP-2: Kit including IPDACT-2 and IPENC
- SK-IP-2UD: Kit including IPDACT-2UD and IPENC
- IPDACT-2: IP Communicator. Includes configuration software, manuals, and prepared 30" telephone cable for connection to panel's DACT telco ports.
- IPDACT-2UD: IP Communicator with upload/download capability (2UD modem daughter board). Includes configuration software, manuals, and prepared 30" telephone cable for connection to panel's DACT telco ports.
- 2UD: Optional modem daughter board for upgrading an IPDACT-2 to an IPDACT-2UD.
- IPBRKT: Mounting bracket kit consisting of screws and battery shield with standoffs required for mounting in common enclosure.
- IPENC: External mounting enclosure consisting of mounting bracket IPBRKT, and screws.

- IPSPILT: Y adaptor option to allow connection of both panel dialer outputs to one cable input to IPDACT-2UD.
- ALMSC-119: Required serial programming cable.(sold separately)
- HP300ULX: Honeywell Power Products UL 1481-listed auxiliary power supply. Enclosure must be "close-nipple" to a panel no further than 6" (15cm) via conduit. Requires IPBRKT purchased separately.

Enclosure must be "close-nipple" to a panel no further than 6 in. (15 cm) via conduit.(Red; order IPENC-B for black.)



This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Silent Knight 12 Clintonville Road, Northford, CT 06472 Phone: (203) 484-7161, Fax: (203) 484-7118. www.silentknight.com.