HomeNet Communications

Unattended Surveillance using Satellite and Wireless High Speed Data Networks

The HNC900 is an advanced rural and remote surveillance technology product that provides a cost effective method for unattended surveillance operations. The product uses the Iridium Satellite and Wireless LAN communication networks to deliver daily activity logs, captured motion video and imagery to an operations centre. When configured for Event Based recording, triggering events can be notified through SMS or through Email with imagery/video attachments eliminating the need for continuous monitoring. The unit supports Time Lapse recording and can provide periodic imagery updates over the communications network eliminating the need for continuous site visits. The product has a wide range of applications in unattended surveillance operations where notifications and video verification are required only on event activity or at periodic intervals.

When the unit is powered from a battery source the product can operate in a very low power (**Sleep**) mode. The unit will exit Sleep and enter its Normal mode of operation within 1 second of alarm activation. In Normal mode the unit will capture, record and transmit the imagery/video associated with a triggering event to the operations centre. The unit may be accessed over a dial-in connection when operating in an intermediate (**Standby)** power mode. Full configuration control of the unit is available over the dial-in connection controlling the bandwidth requirements for imagery/video transmission, activation and deactivation of alarm sensors, recipients of system alarms, activity logs, SMS and Email messages with imagery/video verification attachments, and the ability to FTP motion media recording from the unit to the operations centre. In standby mode, dialling into the satellite modem activates the WLAN enabling broadband access to the unit over short distances. This extends battery life and is an ideal solution for accessing the device to remove recorded media or to view live video without compromising a surveillance operation.

The product will interface to any relay activated alarm sensor and is supported with wired Passive Infra Red and magnetic sensors.

Features

- From 1 to 4 CCTV inputs supporting PAL/NTSC with PTZ support
- From 1 to 4 external alarm inputs plus external tamper
- Live and pre-recorded video accessible from Satellite and WLAN networks
- Removable 4GB Compact Flash memory storage card
- Email and SMS notifications on event triggering or at periodic intervals
- Email with image/video verification of triggering event or at periodic intervals
- Low power consumption with Satellite connectivity makes it ideal for unattended surveillance
- Display resolutions 176X144 (QCIF), 352X288 (CIF), 640X480 (VGA), 704X576 (D1)

Hardware

Electrical

- Input Volts: 7.5 to 15 volts Battery or Mains adapter
- Power consumption: 7 Watts Normal (exc. cameras and PT)
  1 Watt Standby, 0.15Watt Sleep

Mechanical

- Unit weatherproof dimensions 360 X 290 X 165 mm
- Compact Flash Type 1/2 memory card

Alarm Monitoring

- **External**
  - Trigger level: Relay N/O, N/C.
  - Transistor open collector: 10mA max
  - Alarm duration: 1 second min
- **System**
  - Battery level
  - Continuous external sensor alarm
  - Memory card full
  - Tampering

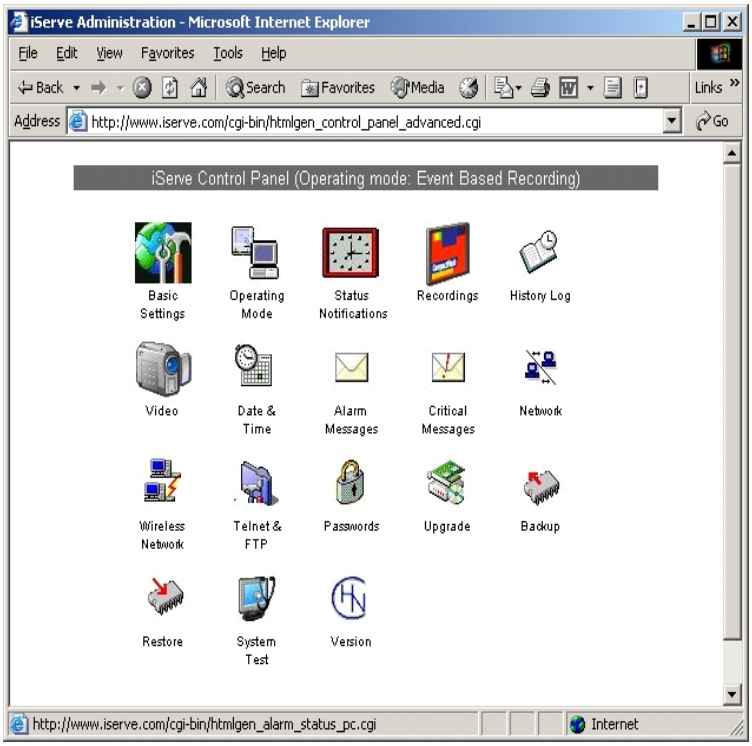
Communications

WLAN

- WLAN 802.11

Satellite

- Iridium



Software Applications

- HTTP server
- FTP server
- Real Time Media Streaming server
- Video Motion Detection
- SMTP email with imagery/video attachments
- SMS
- Web based configuration

Imagery/Video Interface

- Camera PAL/NTSC CCTV, 75Ω, 1Vpp
- JPEG imagery encoding
- MPEG4 video encoding
- Display resolutions - QCIF, CIF, VGA, D1

File Format

- MP4/JPEG file format for storage and playback

Terminal Software

- MPEG4 media streaming player

Recording

- Pre Event Video 1 to 10 seconds
- Post Event video 1 second to 10 minutes
- Time Lapse Recording

Management

- Configure alarm sensors for Off/NO/NC
- Notification interval: - Every event to once per day
- Alarm message text on event activation
- Alarm video or image on event activation
- Critical alerts for system alarms
- **Specify** which cameras will record from sensors
  - Video format, quality and frame rate
  - Alarm filtering – AND/OR, Number/Time
  - Recording length
  - On/Off monitoring time
  - Recipients of text and email sensor activations
  - Recipients of video/imagery verification