Series 3000

Networked Video MicroServer for Commercial Surveillance Applications

Driven by increasing safety and security requirements, the demand for video monitoring and surveillance is increasing at an unprecedented rate. However, hardwired and CCTV solutions are by their very nature inflexible and expensive, in many cases incapable of meeting the needs of the emerging video market. Ctek's Series 3000 family of Networked Video MicroServers addresses both the cost and flexibility issues head-on, offering affordable video connections using an Internet Protocol (IP) transport mechanism.

We refer to the Series 3000 as a MicroServer because its Internet capabilities are completely dedicated to one purpose; interfacing high quality surveillance cameras to clients using IP access. These characteristics give the Series 3000 an administrative and maintenance profile that is analogous to an embedded system, as opposed to a heavy weight web server.

With the Series 3000 solution it is now economically feasible to implement video monitoring systems in a wide range of environments from parking lots, campus environments, and unattended remote office spaces to entrance and access points for commercial buildings. Because the Series 3000 products are network addressable servers, they can offer video in an always-on configuration, or as an on-demand feature.

Series 3000 allows companies to efficiently add a variety of video applications to existing communications platforms. Using sophisticated compression algorithms, video can now be transmitted over 33.6kbps modem technology, ISDN, Ethernet or even cellular connections. Because the video is transported over IP (Internet Protocol), any Windows based PC, or Windows CE PDA can be used as a viewing station, providing ubiquitous remote monitoring. Video now becomes economically and technically feasible because the systems can be implemented as drop-in enhancements to existing security systems, using dial-up, leased line, or cellular connections.

Series 3000 offers significant opportunities in security applications. For example, video surveillance can easily be added to card access systems or to standard alarm panels. In a more sophisticated example, motion detection can alert remote monitoring stations, allowing video supervision of minimal-use entry points. This approach minimizes network traffic while maximizing video surveillance capabilities.

Optional application development software available with the Series 3000 allows system integrators, value added resellers, and network managers to take the technology a step further. For example, video monitoring can be added to an existing alarm network or incorporated into new "roadside" applications. Furthermore, Ctek can provide custom video application development, or support for your internal development program.

Key Features – Series 3000

Network Addressable Internet Protocol Transport Supports:

- ✓ **33.6 Dial up or dedicated**
- ✓ **ISDN**
- ✓ **Ethernet**
- ✓ **CDMA and 1XRTT**
- ✓ **GSM and GPRS**

Windows and PDA viewing application
Wide variety of power options
Rugged industrial packaging
Available in all weather NEMA enclosure
Video input – NTSC, PAL, or SECAM
5 Year Limited Warranty

Application Examples:

- On demand replacement for hardwired CCTV cameras
- Video monitoring of card access points
- Remote video surveillance from alarm panel monitor
- Roadside callbox camera
- Monitoring traffic congestion points
- Branch office remote monitoring
- "Lights-out" computer facilities
- Temporary monitoring for public events
- Periodic police checks of "trouble spots"

Video Performance

The video performance of any image compression and transmission system is subject to variation based upon image

Series 3000

Networked Video MicroServer for Commercial Surveillance Applications

content, motion, camera, noise in either the video or data signal, and desired image quality. Some video transmission systems, particularly those based upon the H.26x standards, degrade the image quality to maintain an arbitrary frame rate. Having the picture break up with movement is not acceptable, especially for security and surveillance, and traffic monitoring.
In contrast to many competing products, Series 3000 consistently maintains a high quality image during extreme amounts of motion by automatically adjusting the frame rate. This feature insures that you always have access to the best image quality available, supporting real time and archival applications. The following estimates are based upon 320x240 transmitted pixels from a fixed camera with moderate motion:

Transport	Image	FPS (Max)
V.34 (33.6Kbs)	Grayscale	7.5
	24 bit color	5.0
ISDN BRI	Grayscale	12.0
	24 bit color	9.0
10baseT	Grayscale	12.0
	24 bit color	10.0
CDMA 1XRTT	Grayscale	7.5
	24 bit color	5.0

Video Inputs
Four (4) NTSC composite-video – Phono or BNC Connectors, SECAM or PAL options available

Trigger Inputs
Contact closure – NO or NC

Frame Rate
See table above

Network Communication Interfaces:
V.34 Modem; 2-wire PSTN - RJ-11
V.34 Modem; 2-wire leased or dedicated - RJ-11
Ethernet 10-Base-T - RJ-45
CDMA 1XRTT – internal modem
GSM/GPRS – internal modem

Serial Port (future)
RS-485/RS-232 for camera control or remote data stream

Antenna (wireless models)
SMA – direct mount or coax

Power
12VDC. *Wall transformer included.*

Environmental
Operating temperature range: -20C to 70C. Humidity: 90% non-condensing.

Approvals
FCC Part 68 & Part 15, Class A. Optional: International approvals available.

Protocol
SVX - SmartView Multimedia transmission protocol over TCP/IP or UDP/IP, or PPP.

Motion Image Compression
SmartView by Benchmark Labs
Maximum Resolution: 320x240 pixel (NTSC)

Indicators

Modem	**Pwr**	**Rdy**	**AA**	**OH**	**CD**
10BaseT	**Pwr**	**Rdy**	**Collision**	**Link**	**Tx**
Wireless	**Pwr**	**Rdy**	**Radio**	**Call**	**Nwrk**

Designed and manufactured in the USA by:
Ctek Inc.
350 South Center Street - Suite 500
Reno, Nevada 89501
Phone: (775) 284.3700, ext 1814
Fax: (775) 562.2610
Email – sales@ctekproducts.com
www.ctekproducts.com

Backed by a 5 year limited warranty

Authorized Representative
Comprehensive Communications Systems Corp.
222 North Hicks Place
Palatine, IL 60067
Voice: 847-934-0580 FAX: 847-991-3328
www.ccscnet.com

3099-D1E030303