

# Nextiva

## S4200

### Video Encoder and Wireless Transmitter with On-Board Analytics

The Nextiva™ S4200 combines video encoding and wireless transmission in a single, compact device, enabling organizations to transmit images from virtually anywhere with high reliability, superior scalability, and lower operational costs.

The S4200 digitizes video from analog cameras and transmits it over the 2.4 GHz or 5 GHz license-free wireless band or the 4.9 GHz US public safety band. When paired with the Nextiva S4300 access point, the S4200 provides a powerful point-to-multipoint wireless solution.

#### Performance, Manageability, Reliability

Available on-board analytics, including camera tampering detection, allow for high-quality image analysis and reduce network transport, storage, and server requirements.

Auto-sensing serial ports connect the S4200 to motorized domes, PTZ cameras, and other asynchronous serial devices. AES encryption with rotating 128-bit key enables a high level of security during wireless video transmission, and dual streaming allows video to be viewed at high resolution, but recorded at lower frame rates.

Two wireless modes of operation are supported:

- Nextiva proprietary SPCF/SDCF protocol (optimized for video surveillance data)
- The standard 802.11a/g protocol and WPA2 personal and enterprise security standards, which allow interoperability with most commercial and mesh access points

#### Cost-Effective Deployment Virtually Anywhere

By eliminating the need to install separate encoders and wireless units, the S4200 reduces installation, equipment, and maintenance costs. The device supports two analog cameras, and a built-in tri-band antenna gives users the flexibility to switch wireless frequencies by reconfiguring the software, instead of replacing the antenna.

The S4200 is part of the Nextiva portfolio of intelligent wireless edge devices, which lead the industry in innovation and value.

#### Key Features

- Video encoding and wireless transmission in a single device
- Uses 2.4 GHz or 5 GHz license-free band or 4.9 GHz US public safety band
- Dual-stream, MPEG-4 video up to 4CIF/30 fps
- On-board analytics, including camera tampering detection
- Compact, weatherproof enclosure for outdoor use
- Automated configuration, health monitoring, and diagnostics with Nextiva



## Technical Specifications

<b>NETWORK</b>	
RF Interface	Nextiva SPCF/SDCF 802.11a/802.11g PHY with proprietary MAC protocol mode Or 802.11a/802.11g with WPA2 standard compliant mode
Frequency	2.40-2.4835 GHz (ISM) 4.940-4.990 GHz (Public safety band) 5.250-5.350 GHz (U-NII-2) Not available in US & Canada 5.470-5.725 GHz (DFS) Not available in US & Canada 5.725-5.825 GHz (U-NII-3/ISM)
Modulation	OFDM
Maximum Output Power	2.4 GHz: 23 dBm 4.9 GHz: 21 dBm 5.x GHz: 20 dBm
Range (RF Line of Sight)	2.40-2.4835 GHz (8.5 dBi): up to 3.9 miles (6.3 km) 4.940-4.990 GHz (11.5 dBi): up to 2.1 miles (3.4 km) 4.940-4.990 GHz (18 dBi): up to 9.2 miles (14.8 km) 5.725-5.825 GHz (11 dBi): up to 1.6 miles (2.64 km) 5.725-5.825 GHz (18 dBi): up to 7.0 miles (11.3 km)
Data Rate (Max Burst Rate) Channels	6, 9, 12, 18, 24, 36, 48, and 54 Mbps 2.4 GHz: 11 4.9 GHz: 2, 4, or 10 depending on user-configurable channel width, non-interfering 5.3 GHz: 4, non-interfering 5.4 GHz: 11, non-interfering (DFS) 5.8 GHz: 5, non-interfering
Encryption Protocols	128-bit AES with auto-key rotation, WPA2, WEP RTP/IP, UDP/IP, TCP/IP, or multicast IP DNS and DHCP client
<b>VIDEO</b>	
Input/Output Compression	1 or 2 composite, 1 Vpp into 75 ohms (NTSC/PAL) Proprietary MPEG-4-based (480 lines resolution) MPEG-4 ISO 14496-2 Simple Profile (480 lines resolution), MJPEG
Frame Rate	1-30 fps programmable (up to 60 fields per second)
<b>OPTIONAL ALARM AND AUDIO</b>	
Alarm Bi-Directional Audio	Input: 2 dry contacts (1 mA max.) Output: 1 relay contact (up to 48V at 100 mA) Input: 0 dBm into 600 ohms Output: -8 dBm into 600 ohms
<b>SERIAL PORT</b>	
Interface Standard Operating Mode	RS-422/485 Transparent (supports any asynchronous PTZ serial protocol)
<b>POWER</b>	
Input Voltage Consumption	24V AC +/- 20% (optional 12V DC +/- 10%) 19.2W (1.6 A at 12V DC), 25 VA at 24V AC
<b>PHYSICAL</b>	
Enclosure Size Weight Environmental Humidity	NEMA 4X/IP 66 powder coat painted die-cast aluminum with wall-mount brackets 8.75L x 3.5W x 5.5H in. (222L x 89W x 140H mm) 4.6 lbs (2.1 kg) including mounting brackets -22°F to 122°F (-30°C to 50°C) 100% at 122°F (50°C)
<b>MANAGEMENT</b>	
Configuration Firmware Upgrade	Remote: via Verint Nextiva, SConfigurator, Internet Explorer 5.0 or 6.0, or Telnet Local: via the Ethernet port using SConfigurator or via Internet Explorer 5.0 or 6.0 Via the Ethernet port of the network
<b>CERTIFICATIONS</b>	
USA Canada	RoHS compliant FCC CFR47 Part 15 Subpart B, C, and E (15.247, 15.407, 15.107, 15.109) FCC Part 90 DSRC-C mask certification Industry Canada RSS-210, RSS-139, and ICES-003
<b>OPTIONS</b>	A second video input or audio and alarms Standard model with 2.4/5.x GHz support Public safety model with 2.4/4.9/5.x GHz support
<b>WARRANTY</b>	2-year limited warranty, covering parts and labor

## Verint. Powering Actionable Intelligence.®

Verint® Systems Inc. is a leading global provider of analytic software-based solutions for enterprise optimization and security. Verint solutions help organizations make sense of the vast voice, video, and data available to them, transforming this information into *actionable intelligence*™ for better decisions and highly effective performance.

Since 1994, Verint has been committed to developing innovative solutions that help global organizations achieve their most important objectives. Today, organizations in over 100 countries use Verint solutions to enhance security, boost operational efficiency, and fuel profitability.

[videosales@verint.com](mailto:videosales@verint.com)  
1-866-NEXTIVA  
[www.verint.com/videosolutions](http://www.verint.com/videosolutions)  
330 South Service Road  
Melville, NY 11747 USA

September 2007  
VINED030907U

Unauthorized use, duplication, or modification of this document in whole or in part without the written consent of Verint Systems Inc. is strictly prohibited.

By providing this document, Verint Systems Inc. is not making any representations regarding the correctness or completeness of its contents and reserves the right to alter this document at any time without notice.

All marks referenced herein with the ® or TM symbol are registered trademarks or trademarks of Verint Systems Inc. or its subsidiaries. All rights reserved. All other marks are trademarks of their respective owners.

© 2007 Verint Systems Inc. All rights reserved worldwide.

Note: All transmitters come with one cable for video, data, and power, as well as wall-mount and pole-mount brackets.