


Nextiva

S4200 Wireless Video Encoder/Transmitter with On-Board Analytics

At A Glance



Wireless video encoder/transmitter in a single compact, weatherproof enclosure

Camera tampering detection and optional on-board analytics for rapid event detection and reduced bandwidth, server, and storage requirements

Resolves “hidden node” and quality of service problems typical of conventional Wi-Fi 802.11 products

Ethernet port and two serial ports with optional connection to a second analog camera

Ideal for outdoor, wireless point-to-multipoint applications, such as critical infrastructure and city surveillance deployments

Why Verint? The industry’s only wireless solutions with integrated radios, encoders, and antennae in compact, NEMA-rated enclosures for reduced deployment costs and reliable operation

The Nextiva® S4200 combines video encoding and wireless transmission in a single device.

When paired with the Nextiva S4300 Access Point, the S4200 provides a powerful outdoor point-to-multipoint wireless solution. The device features Verint’s industry-leading video encoding technology for 4CIF/30fps video quality and optimal bandwidth utilization.

High Performance and Reliability

Available on-board analytics allow for high-quality image analysis and reduce storage, server, and network transport requirements. Dual streaming reduces storage requirements as well, allowing video to be viewed at high resolution, but recorded at lower frame rates. Automatic camera tampering detection determines when a camera is out of focus, increasing video availability and improving effectiveness.

The S4200 uses the 2.4 GHz or 5 GHz license-free wireless band or the 4.9 GHz US public safety band. A built-in multi-band antenna allows users to switch wireless frequencies just by reconfiguring the software.

The Verint® SPCF/SDCF polling protocol resolves “hidden node” and quality of service issues characteristic of conventional Wi-Fi 802.11 products. 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

SSL-based authentication helps secure configuration access, and AES encryption with rotating 128-bit key enables a high level of security during wireless video transmission.

Auto-sensing serial ports connect the S4200 to motorized domes, PTZ cameras, and other asynchronous serial devices, while an Ethernet port simplifies configuration and maintenance and allows the S4200 to be connected to an IP camera, chemical sensor, infrared wall, or other Ethernet device.

The S4200 is part of the Nextiva portfolio of intelligent wireless edge devices. Leading the industry in innovation and value, Nextiva wireless solutions integrate radios, encoders, and antennae in compact, NEMA-rated enclosures for lower deployment costs and reliable operation.

Technical Specifications

NETWORK	
RF Interface	Nextiva SPCF/SDCF 802.11a/802.11g PHY with proprietary MAC protocol 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: 13 dBm 4.9 GHz: 20 dBm 5.x GHz: 23 dBm
Range (RF Line of Sight)	2.40-2.4835 GHz (8.5 dBi): up to 2.1 miles (3.4 km) 4.940-4.990 GHz (12 dBi): up to 2.4 miles (3.9 km) 4.940-4.990 GHz (18 dBi): up to 8.2 miles (13.2 km) 5.725-5.825 GHz (12 dBi): up to 2.1 miles (3.4 km) 5.725-5.825 GHz (19 dBi): up to 6.2 miles (10.0 km)
Data Rate (Max Burst Rate) Channels	6, 9, 12, 18, 24, 36, 48, and 54 Mbps 2.4 GHz: 11, 3 non-interfering 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
Antenna Connector Ethernet Connector	SMA female Weatherproof 10/100Base-T (RJ-45)
VIDEO	
Input Dual Stream	1 or 2 composite, 1 Vpp into 75 ohms (NTSC/PAL) 4CIF/15fps and CIF/30fps programmable 4CIF/30fps and 4CIF/15fps programmable (analytics model)
Compression	Proprietary MPEG-4-based (480 TV lines resolution) MPEG-4 ISO 14496-2 Simple Profile (480 TV lines resolution) , MJPEG
Frame Rate	1-30fps programmable (up to 60 fields per second)
OPTIONAL ALARM AND AUDIO	
Alarm	Input: 2 dry contacts (1 mA max.) Output: 1 relay contact (up to 48V at 100 mA)
Bi-Directional Audio	Input: 0 dBm into 600 ohms — Output: -8 dBm into 600 ohms
SERIAL PORT	
Interface Standard Operating Mode	RS-422/485 Transparent (supports any asynchronous PTZ serial protocol)
POWER	
Input Voltage Maximum Consumption	24V AC +/- 20% and 12V DC +/- 10% 20W (1.6 A at 12V DC), 25 VA at 24V AC
PHYSICAL	
Enclosure	NEMA 4X/IP 66 powder coat painted die-cast aluminum with wall-mount brackets
Size	8.75L x 3.5W x 5.5H in. (222L x 89W x 140H mm)
Weight	4.6 lbs (2.1 kg) including mounting brackets
Environmental Humidity	-22°F to 122°F (-30°C to 50°C) 100% at 122°F (50°C)
MANAGEMENT	
Configuration	Remote: via 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
Firmware Upgrade	Via the Ethernet port of the network
CERTIFICATIONS	
USA	RoHS compliant, UL certified FCC CFR47 Part 15 Subpart B, C, and E (15.247, 15.407, 15.107, 15.109) FCC Part 90 DSRC-C mask certification
Canada	UL60950-1, First Edition Industry Canada RSS-210, RSS-139, and ICES-003 CSA C22.2 NO. 60950-1, First Edition
OPTIONS	
	Standard model with 2.4/5.x GHz support With a second video input or audio and alarms With analytics support Public safety model with 2.4/4.9/5.x GHz support
WARRANTY	2-year limited warranty covering parts and labor*

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

* Warranty information applies to the Americas only. Consult your Verint representative for warranty details for other regions.

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