

# Nextiva

## S1100w

### Video Encoder and Multi-Band Wireless Transmitter

The Nextiva™ S1100w combines video encoding and wireless transmission in a single, compact device, enabling organisations to transmit images from virtually *anywhere* with high reliability, superior scalability, and lower operational costs.

The S1100w digitises video from analog cameras and transmits it over license-free, wireless bands. Auto-sensing serial ports connect the S1100w to motorised domes, PTZ cameras, and other asynchronous serial devices. SSL-based authentication and AES encryption with rotating 128-bit key enable a high level of security during wireless video transmission. And dual streaming allows video to be viewed at high resolution for superior clarity, yet recorded at lower frame rates to reduce data transport and storage requirements.

#### **Cost-Effective Deployment Virtually Anywhere**

When paired with the Nextiva S3100 wireless bridge, the S1100w provides a powerful point-to-multipoint wireless solution. With state-of-the-art wireless technology and a compact, weatherproof enclosure, the S1100w can be cost-effectively deployed wherever it is needed – from parking lots and perimeters to city-wide implementations and waterways. By eliminating the need to install separate encoders and wireless units, the S1100w decreases installation, equipment, and maintenance costs, speeds deployment, and reduces power and space requirements.

#### **Nextiva Wireless Solutions: Leading the Industry in Innovation and Value**

The S1100w is part of the Nextiva portfolio of intelligent wireless edge devices. These devices integrate radios, encoders, and antennae in small, NEMA-rated enclosures for secure, reliable operation in real-world video applications. Built on accepted industry standards, Nextiva intelligent edge devices are designed for high availability, easy interoperability, and superior performance.

#### **Key Features**

- Video encoding and wireless transmission over license-free bands (2.4 and 5 GHz)
- Dual-stream, MPEG-4 based video up to 2CIF, 30 FPS
- SSL-based authentication and AES encryption
- Compact, weatherproof enclosure for outdoor use
- Auto-sensing serial ports for device connectivity
- Automated configuration, health monitoring, and diagnostics with Nextiva



## Technical Specifications

|                                    |   |
|------------------------------------|---|
| <b>NETWORK</b>                     |   |
| RF Interface                       | Nextiva SPCF/SDCF   |
| Frequency                          | 802.11a/802.11g PHY with proprietary MAC protocol<br>2.40-2.4835 GHz (ISM)<br>5.250-5.350 GHz (U-NII-2)<br>5.470-5.725 GHz (DFS)<br>5.725-5.825 GHz (U-NII-3/ISM)   |
| Modulation                         | OFDM  |
| Max. Output Power                  | 2.40-2.4835 GHz: 19 dBm<br>5.x GHz: 17 dBm  |
| System Gain                        | 2.40-2.4835 GHz with 8.5 dBi gain antenna: 125 dB<br>2.40-2.4835 GHz with 16 dBi gain antenna: 139 dB<br>5.250-5.350 GHz with 13 dBi gain antenna: 130 dB<br>5.250-5.350 GHz with 18 dBi gain antenna: 134 dB<br>5.725-5.825 GHz with 13 dBi gain antenna: 131 dB<br>5.725-5.825 GHz with 18 dBi gain antenna: 140 dB           |
| Range (RF Line of Sight)           | 2.40-2.4835 GHz (8.5 dBi): up to 3.4 miles (5.4 km)<br>2.40-2.4835 GHz (16 dBi): up to 9.4 miles (15.2 km)<br>5.250-5.350 GHz (13 dBi): up to 2.8 miles (4.5 km)<br>5.250-5.350 GHz (18 dBi): up to 4.3 miles (7 km)<br>5.725-5.825 GHz (13 dBi): up to 2.8 miles (4.5 km)<br>5.725-5.825 GHz (18 dBi): up to 6.2 miles (10 km) |
| Data Rate (Max Burst Rate) Channel | 6, 9, 12, 18, 24, 36, 48, and 54 Mbps<br>2.4 GHz: 11<br>5.3 GHz: 4<br>5.4 GHz: 11, non-interfering (DFS)<br>5.8 GHz: 5, non-interfering   |
| Encryption Protocols               | 128-bit AES with auto key rotation<br>RTP/IP, UDP/IP, TCP/IP, or multicast IP DNS and DHCP client   |
| <b>VIDEO</b>                       |   |
| Input                              | 1 composite, 1 Vpp into 75 ohms (NTSC/PAL)  |
| Compression                        | Proprietary MPEG-4-based (480 lines resolution) MPEG ISO 14496-2 Simple Profile (480 lines resolution)  |
| Frame Rate                         | 1-30 FPS programmable (up to 60 fields per second)  |
| <b>ALARM AND AUDIO</b>             |   |
| Alarm                              | Input: 2 dry contacts (1 mA max.)<br>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   |
| <b>SERIAL PORT</b>                 |   |
| Electrical Levels                  | Autolevel sensing RS-232 or RS-422/485  |
| Operating Mode                     | Transparent (supports any asynchronous PTZ serial protocol)   |
| <b>POWER</b>                       |   |
| Input Voltage                      | 24V AC +/- 10% (optional 12V DC +/- 10%)  |
| Consumption                        | 12W (1.0 A at 12V DC) 28 VA at 24V AC   |
| <b>PHYSICAL</b>                    |   |
| Enclosure                          | NEMA 4X/IP 66 powder coat painted die-cast aluminum with wall-mount brackets  |
| Size                               | 230L x 100W x 96H mm (9.0L x 3.9W x 3.8H in.)   |
| Weight                             | 1.2 kg (2.6 lbs)  |
| Environment                        | -30°C to 50°C (-22°F to 122°F)  |
| Humidity                           | Humidity 100% at 50°C (122°F)   |
| <b>MANAGEMENT</b>                  |   |
| Configuration                      | Remote: via Verint Nextiva, nDVR™, Loronix Video Manager™, SConfigurator, or Telnet<br>Local: via the serial port using any ASCII terminal  |
| Firmware Upgrade                   | Flash memory for upgrade of video codec and application firmware over the network   |
| <b>CERTIFICATIONS</b>              |   |
| USA                                | RoHS compliant<br>FCC CFR47 part 15 (15.247, subparts B and E)  |
| Canada                             | Industry Canada RSS-210, RSS-139, and ICES-003  |
| <b>WARRANTY</b>                    | 2-year limited warranty, covering parts and labor   |

Note: All transmitters come with 9-pin cables for video, data, and power and wall-mount and pole-mount brackets. Cab 8p cable for audio sold separately.

## Verint. Powering Actionable Intelligence.®

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Since 1994, Verint has been committed to developing innovative solutions that help global organisations achieve their most important objectives. Today, organisations in over 50 countries use Verint solutions to enhance security, boost operational efficiency, and fuel profitability.

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November 2006

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