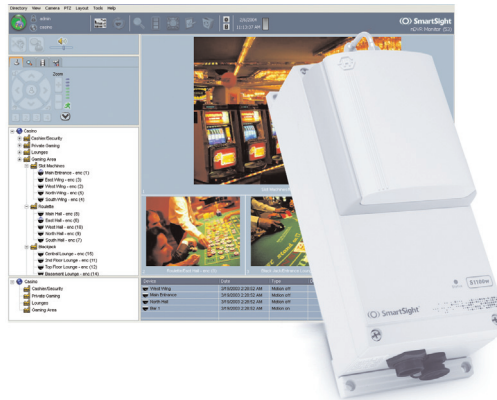


SmartSight S1100w

MULTIBAND WIRELESS VIDEO TRANSMITTER



Integrated Multiband Solution
License-Free 2.4/5.3-5.8 GHz U-NII Bands

PRODUCT OVERVIEW

The SmartSight® S1100w wireless video transmitter enables digital video transmission over multiple license-free wireless bands (2.4/5.3-5.8 GHz). It delivers high-quality MPEG-4-based video at 30 frames per second (fps).

The S1100w is specifically designed to allow deployment of cameras in hard-to-wire locations and to quickly extend the reach of wired CCTV systems. The S1100w leverages the SmartSight SPCF™ protocol, which resolves “hidden node,” quality of service, range, and security problems often present when using 802.11 wireless networking products. For compatibility with existing wireless infrastructure, the S1100w can also be configured for standard 802.11a operation.

When used with the S3100 wireless-to-Ethernet bridge/repeater, the S1100w can extend your analog CCTV system using the enterprise LAN/WAN, without adding costly cables.

Several S1100w transmitters and S3100 bridges can be used to create multiple video links covering a large geographical area, such as for citywide monitoring. Configuration and management are made easy with nDVR®, Loronix Video Manager™, or SConfigurator™ software. The S1100w is built on open standards to provide long-term investment protection.

KEY FEATURES

- ✓ Enables cost-effective wireless extension of traditional CCTV systems and migration of analog CCTV cameras to IP networks
- ✓ End-to-end secure wireless link using AES encryption
- ✓ Access control via SSL-based authentication for unit and wireless network configuration and control
- ✓ MPEG-4-based video encoding at 30 frames per second (fps) for high-quality video at low bandwidth
- ✓ Autosensing RS-232/422/485 serial port for transparent connectivity to motorized domes, PTZ cameras, and other asynchronous serial devices
- ✓ Simple connectivity to PIR detectors and other sensors/alerts
- ✓ All firmware upgradeable via the network (including the video codec)
- ✓ Optional bidirectional audio interface
- ✓ Video loss alarm
- ✓ Resolves “hidden node,” quality of service, and security problems often present when using conventional 802.11 wireless networking products
- ✓ Compatible with standard 802.11 access points
- ✓ Compatible with SmartSight S1500e series Ethernet video servers, nDVR, and Loronix Video Manager software
- ✓ User-friendly system management features using nDVR, Loronix Video Manager, or SConfigurator software

WIRELESS.
DISTRIBUTED.
NETWORKED.



SmartSight S1100w

MULTIBAND WIRELESS VIDEO TRANSMITTER

NETWORK

RF interface	SmartSight SPCF
Frequency	2.40-2.4835 GHz (ISM) 5.250-5.350 GHz (U-NII-2) 5.725-5.825 GHz (U-NII-3 / ISM)
Modulation	OFDM
Output power	17 dBm
System gain	2.40-2.4835 GHz with 8.5 dBi gain antenna: 118 dB 2.40-2.4835 GHz with 16 dBi gain antenna: 133 dB 5.250-5.350 GHz with 13 dBi gain antenna: 132 dB 5.725-5.825 GHz with 13 dBi gain antenna: 129 dB 5.725-5.825 GHz with 18 dBi gain antenna: 139 dB
Range (RF line of sight)	2.40-2.4835 GHz (8.5 dBi): up to 1.9 miles (3.1 km) 2.40-2.4835 GHz (16 dBi): up to 8.7 miles (14 km) 5.250-5.350 GHz (13 dBi): up to 4.4 miles (7.1 km) 5.725-5.825 GHz (13 dBi): up to 2.85 miles (4.6 km) 5.725-5.825 GHz (18 dBi): up to 7.15 miles (11.5 km)
Data rate (max.burst rate)	6, 9, 12, 18, 24, and 36 Mbps
Channel	2.4 GHz: 11, 3 non-interfering 5.3 GHz: 4, non-interfering 5.8 GHz: 5, non-interfering
Encryption	128-bit AES with auto key rotation
Protocols	RTP/IP, UDP/IP, TCP/IP, or multicast IP DNS and DHCP client, HTTP 1.1 (Web server)
Security	SSL-based authentication

VIDEO

Input	1 composite, 1 Vpp into 75 ohms (NTSC/PAL)
Compression	MPEG-4-based (480 lines resolution)
Frame rate	1-30 fps programmable (up to 60 fields per second)

ALARM AND AUDIO

Alarm	Input: 2 dry contacts (1 mA max.) Output: 1 relay contact (up to 48V at 100 mA)
Bidirectional audio	Input: 0 dBm into 600 ohms Output: -8 dBm into 600 ohms

SERIAL PORT

Electrical levels	Autolevel sensing RS-232 or RS-422/485
Operating mode	Transparent (supports any asynchronous PTZ serial protocol)

POWER

Input voltage	24V AC +/- 10% (optional 12V DC +/- 10%)
Consumption	12W (970 mA at 12V DC) 28 VA at 24V AC

PHYSICAL

Enclosure	NEMA 4X / IP 66 powder coat painted die-cast aluminum with wall-mount brackets
Size	9.0L x 3.9W x 3.8H in. (230L x 100W x 96H mm)
Weight	3.6 lbs (1.65 kg)
Environmental	-22°F to 122°F (-30°C to 50°C)

Humidity	100% at 122°F (50°C)
----------	----------------------

MANAGEMENT

Configuration *	Remote: via nDVR, Loronix Video Manager, SConfigurator, or Telnet Local: via the serial port using any ASCII terminal
Firmware upgrade	Flash memory for upgrade of video codec and application firmware over the network

CERTIFICATION AND REGULATION

Canada	Industry Canada RSS-210, RSS-139, and ICES-003
USA	FCC CFR47 part 15 (15.247, subparts B and E)

WARRANTY

	2-year limited warranty, covering parts and labor
--	---

ORDERING

Part number	S1100w-24VAC-24
Description	Multiband 24V AC wireless transmitter with 8.5 dBi gain, 2.40-2.4835 GHz antenna
Part number	S1100w-12VDC-24
Description	Multiband 12V DC wireless transmitter with 8.5 dBi gain, 2.40-2.4835 GHz antenna
Part number	S1100w-24VAC-5x
Description	Multiband 24V AC wireless transmitter with 13 dBi gain, 5.25-5.85 GHz antenna
Part number	S1100w-12VDC-5x
Description	Multiband 12V DC wireless transmitter with 13 dBi gain, 5.25-5.85 GHz antenna

Note: All transmitters come with 9-pin cables for video, data, and power; wall-mount and pole-mount brackets. Communicates with the S3100.

OPTIONAL ANTENNAS

Part number	ANT-WP16-24x/S
Description	16 dBi gain, 27° beamwidth, patch antenna with 3-foot (1-meter) SMA-N cable
Part number	ANT-WP18-5x/S
Description	18 dBi gain, 5.25-5.85 GHz band, 18° beamwidth, patch antenna with 3-foot (1-meter) SMA-N cable
Note:	Other antennas also available

OPTIONAL ACCESSORIES

Part number	JBOX
Description	Outdoor junction box with wall-mount and pole-mount brackets
Part number	PS12 <i>(note: not for outdoor use)</i>
Description	110V AC to 12V DC at 1A power supply
Part number	PS2440 <i>(note: not for outdoor use)</i>
Description	110V AC to 24V AC at 40 VA power supply
Part number	CAB8P
Description	10-foot (3-meter) cable assembly for audio and alarms

* Product capabilities are enabled through software.