

SmartSight S1100

MULTIBAND WIRELESS VIDEO SYSTEM



Designed for the CCTV market
License-Free 2.4/5.3-5.8 GHz Bands

PRODUCT OVERVIEW

Designed for the CCTV market, the SmartSight® S1100 enables digital video transmission over multiple license-free wireless bands (2.4/5.3-5.8 GHz), with AES encryption of the video signal for enhanced security.

The S1100 wireless video system consists of a transmitter and a receiver. Based on digital technology, the S1100 significantly reduces the amount of interference usually encountered when using traditional AM/FM analog systems, for long-term reliability.

Video transmitted by the S1100 offers a clear, crisp image not subject to fading and ghosting, which are common to many analog systems. The easy plug-and-play installation, compact design, and tight integration with motorized domes and Pan-Tilt-Zoom (PTZ) cameras make the S1100 an excellent solution for the CCTV and video security markets.

KEY FEATURES

- ✓ End-to-end secure wireless link using AES encryption
- ✓ 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/alarms
- ✓ Optional bidirectional audio interface
- ✓ Video loss alarm
- ✓ Compact, weatherproof design with an all-external connector for easy installation anywhere

WIRELESS.
DISTRIBUTED.
NETWORKED.



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NETWORK

RF interface	SmartSight SDCF™ for point-to-point applications
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/Output	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)
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MANAGEMENT

Configuration *	Remote: Configuration assistant, SConfigurator, or Telnet Local: via the serial port using any ASCII terminal
Firmware upgrade	Local or remote: via the serial port

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
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ORDERING

Part number	S1100-24VAC-24
Description	Multiband 24V AC wireless transmitter and receiver pair with 8.5 dBi gain, 2.40-2.4835 GHz antenna
Part number	S1100-12VDC-24
Description	Multiband 12V DC wireless transmitter and receiver pair with 8.5 dBi gain, 2.40-2.4835 GHz antenna
Part number	S1100-24VAC-5x
Description	Multiband 24V AC wireless transmitter and receiver pair with 13 dBi gain, 5.25-5.85 GHz antenna
Part number	S1100-12VDC-5x
Description	Multiband 12V DC wireless transmitter and receiver pair with 13 dBi gain, 5.25-5.85 GHz antenna

Note: All items above come with 9-pin cables for video, data, and power; wall-mount and pole-mount brackets.

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>(Not for outdoor use)</i>
Description	110V AC to 12V DC at 1A power supply
Part number	PS2440 <i>(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.