

Rialto™ I4

4 Channel IP Video Analytics Appliance



Self-Learning Video Analytics For Fixed Security Cameras

The Rialto™ I4 analytics appliance provides a cost-effective way to easily add video analytics to IP video surveillance systems. Analyze and record up to four standard definition, three 720p or two 1080p resolution IP security cameras per unit. The high density, small footprint makes it easy to deploy and scale, and there are no complicated per camera license fees or registration processes. The I4 is a fast and easy way to add real-time response capabilities to any H.264 RTSP IP video system.



Self-Learning Video Analytics

Avigilon's field proven video analytics classify people and vehicles while eliminating normal scene activity such as moving trees, leaves, shadows, or reflections from water or glass. Advanced video pattern-based analytics detect, track and classify activities of interest. Even in the most challenging outdoor environments customers experience extremely low false positive rates while receiving instant notification of when suspicious activity occurs. Additionally the Rialto appliance's advanced self-learning technology continuously improves the system's performance over time. The I4 supports full 30 fps 1080p (1920 x 1080). Objects are detected at up to 200 ft for D1 and 500 ft for 1080p resolutions. The I4 also supports thermal for critical perimeter protection requirements for a maximum range to 2000 ft. Detection ranges are camera, lens, and lighting dependent.

Instant Notification

Within seconds of a suspect triggering user defined analytics rules, an instant notification is sent to your security personnel's workstation. Officers can view live video and use audio talk down direct from their PC.

Fast Install

The I4 is easy to use and install. Simply connect the I4 to your network and add or set up your cameras. It's ready to use right out of the box. Self-learning and an intuitive rules interface makes it straightforward to integrate our awardwinning analytics with either your existing cameras and VMS system or as a stand-alone system.

Edge Storage

The Rialto I4 appliance is available with a 40 GB of SSD or 500 GB HDD for on board storage. On-board storage eliminates the need for central servers, reducing network traffic and bandwidth consumption by over 90%. The I4 is easily deployed in any environment, including mixed IT networks, wireless networks and WAN deployments and requires no additional infrastructure upgrades.

Optimized Bandwidth & Storage

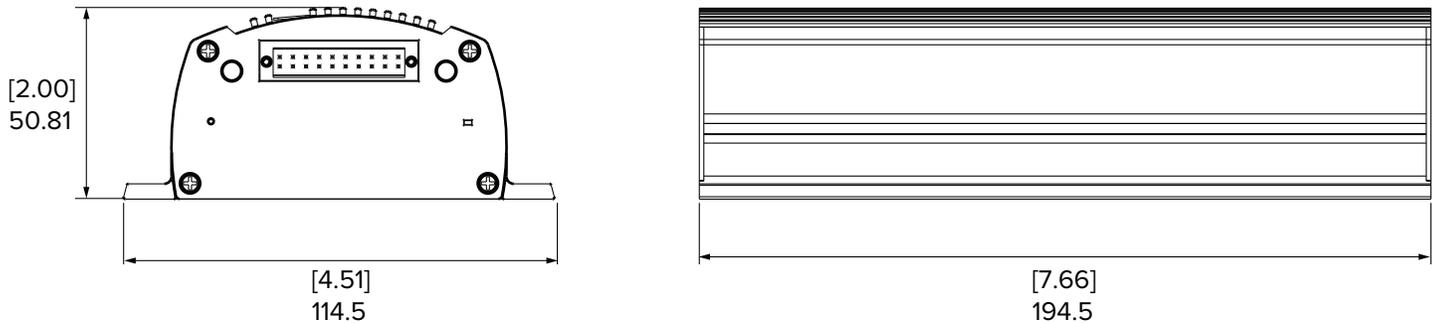
Like all Avigilon devices, the Rialto I4 appliance is designed for optimal network bandwidth and storage usage – the I4 includes a 40GB SSD or 500GB HDD for local storage.

The I4 supports Triple Stream Encoding - an intelligent recording stream, which varies compression quality and frame rate, based on whether or not the video contains an event that the user is interested in. A low Bandwidth Network Stream allows the user to view live video across low bandwidth networks (i.e. 3G/4G cellular networks) and a mobile MJPEG stream allows easy decoding and display on mobile devices.

Enhanced Features

Audio Channels	Multiple audio inputs and outputs allow for flexibility in designing a system adapted for alarm response
Onboard Storage	Every device comes with storage, eliminating the requirement for extra equipment
4 Channel Layout	Single chassis supports multiple cameras, including a mix of Day/Night, Thermal, etc.
Power Options	12VDC, 15 Watts with 110V/60Hz and 220V/50Hz power adapters

Outline Dimensions



[X.X]	INCHES
X	MM

Supported Video Analytics Events

Objects in Area	The event is triggered when the selected object type moves into the region of interest. If the number of objects is exceeded, a new event is not triggered until the number of objects falls below the defined value.
Object Loitering	The event is triggered when the selected object type stays within the region of interest for an extended amount of time. The event is reset when the object leaves the region of interest.
Objects Crossing Beam	The event is triggered when the specified number of objects have crossed the directional beam that has is configured over the camera's field of view. The beam can be unidirectional or bidirectional. If the number of objects is exceeded, a new event is not triggered until the event timesout.
Object Appears or Enters Area	The event is triggered by each object that enters the region of interest. This event can be used to count objects.
Object Not Present in Area	The event is triggered when no objects are present in the region of interest.
Objects Enter Area	The event is triggered when the specified number of objects have entered the region of interest.
Objects Leave Area	The event is triggered when the specified number of objects have left the region of interest.
Object Stops in Area	The event is triggered when an object in a region of interest stops moving for the specified threshold time.
Direction Violated	The event is triggered when an object moves in the prohibited direction of travel.
Tamper Detection	The event is triggered when the scene unexpectedly changes.

Rialto™ I4 Analytics Bridge Specifications

VIDEO ANALYTICS SUPPORT

Advanced Video Pattern Detection

VIDEO COMPRESSION

H.264 compression, (Baseline, High, & Main profile support) MJPEG for mobile

Frame Rate: Up to 30 frames per second in all resolutions

Triple Stream Encoding: Alarm events at high quality, resolution & frame rate. Continuous recording at lower quality, resolution & frame rate (selectable).

Visual alarm indicators (colored boxes around objects detected) can be turned on or off at the display

Programmable pre-alarm video recording

COMPATIBLE AVIGILON CAMERAS

Resolution 1, 1.3 and 2 MP

HD Cameras

HD Bullet cameras

HD Dome cameras

HD Micro Dome cameras

NETWORKING & COMMUNICATIONS

Ethernet 10/100 BaseT — RJ45 connector

Protocols: HTTP, HTTPS, TCP, RTSP, UDP, RTP, DHCP, NTP, DNS

Security: Multiple user access levels with password protection, IP address filtering, & HTTPS encryption

Web browser access to Rialto via built-in web server

ALARM & AUDIO INPUTS & OUTPUTS

2 Audio inputs, 2 Audio outputs via two 3.5mm jacks

Audio compression: G.711

Audio streaming live two-way: half duplex

Audio recording — alarm or continuous

Four alarm inputs — TTL

Four Alarm outputs — Optical relay,

20mA max. programmable normally open or normally closed

One alarm relay output — SPST, 400mA max, programmable normally open or normally closed

DIAGNOSTICS

Loss of communications trouble alert

Hard drive failure alert

Scene change trouble alert

Camera tampering alert

POWER

12 VDC: 15W max

10 watts typical

AC/DC adapter supplied

Optionally powered via Terminal Block

ENVIRONMENTAL

Operating Temp: 0°C to 50°C (32°F to 122°F)

Storage Temp: -20°C to 85°C (-4°F to 185°F)

Humidity: 20-80% RH (non-condensing)

DIMENSION & WEIGHT

(L x W x H): 194.5mm x 114.5mm x 50.81mm
7.66" x 4.51" x 2"

Weight: 816 g (1.8 lbs)

STORAGE

40 GB SSD: 3-5 days typical storage

500 GB HDD: 30-90 days typical storage

ORDERING INFORMATION

VAA-I4-S40GB	Rialto™ I4 analytics appliance, 4 channel IP encoder (Up to 4 x D1, 3 x 720p or 2 x 1080p IP cameras) with 40GB of solid state drive storage
VAA-I4-H500G	Rialto™ I4 analytics appliance, 4 channel IP encoder (Up to 4 x D1, 3 x 720p or 2 x 1080p IP cameras) with 500GB of hard disk drive storage