

## H.264 Thermal Imaging Camera with Embedded Analytics

### **Feature Highlights**

- 320x240 Resolutions
- 17 🔎 Next Generation Microbolometer Technology
- 42, 22, or 12 Degrees Field of View
- Video Frame Rate: 9Hz or 30Hz
- Video Compression: H.264, MPEG-4, MJPEG
- Embedded Intelligent Video Analytics
- Optimize Outdoor surveillance capability through VCAdetect License included as standard
- Burnt-in Text, Video Motion Detection Support
- Two-way Audio
- USB 2.0 Support (Local Storage, Wireless LAN)
- MicroSD Memory Support
- Comprehensive SDK Support



The **RTC1100 Series** is one of the world's first thermal imaging IP cameras combining state of the art thermal imaging technology with state of the art intelligent video analytics. Including a reliable video analytics as a standard feature, the **RTC1100 Series** is a highly advanced thermal imaging IP camera, capable of long distance detection customers have come to expect of thermal imaging products, but also provides increased analytics reliability for applications such as object tracking, people counting, car counting, loitering and much more. The **RTC1100 Series** thermal imaging products are ideally suited for customers who seek to experience ever more accurate video analytics performance combined with the high detection capabilities characteristic of thermal imaging technology.

#### Affordability

With its reliable surveillance performance and affordability, the RTC1100 Series provides new opportunities for applications such as general purpose video security, people counting and footfall metrics in retail environments, traffic and congestion monitoring, and much more.

### **Advanced Thermal Imaging Technology**

Using state-of-the art 17<sup>µm</sup> microbolometer sensors and specially designed thermal imaging lenses, the RTC1100 Series is one of the most advanced camera systems available in the marketplace today. It works in the 8-14<sup>µm</sup> wavelengths detecting heat radiation that all objects emit.

#### Wide Field of View and High Resolution

The RTC1100 Series offers wide angle lens options with up to 42 degrees field of view to optimize its coverage

efficiency. The RTC1100 series is available in standard resolution of 320x240 .

#### **Benefits of IP Camera**

Like all RIVA products, the RTC1100 Series is a product designed for network use and it shares the same core networking technologies as all imaging products. A user can easily upgrade the firmware over network, and set up or administrate the camera through its standard Web browser.

#### **Video Analytics**

Integrating VCA advanced tracking engine into the RTC1100 Series contributes to improving the video analytics performance. The RTC1100 Series brings the accuracy in object detection with fewer false alarm rates to unprecedented level.

#### **Ordering information**

The RTC1100 Series is designed for a wide variety of applications and distance requirements. Models are available in a varying resolutions and lens options. Lens options not listed are available upon request. All products comes standard with VCAdetect license to optimize obeject detektion in outdoor application together with the thermal imaging technology.

Option Model	Resolution	Frame Rate*	Focal length	FOV (Degree)	PoE	USB	SD	VCAdetect
RTC1130-320-7,5	320x240	30 Hz	7.5mm	42.1	0	0	0	0
RTC1130-320-15	320x240	30 Hz	14.25mm	21.9	0	0	0	0
RTC1130-320-25	320x240	30Hz	25mm	12.4	0	0	0	0
RTC1130-320-35	320x240	30Hz	35mm	8.9	0	0	0	0

\* 9Hz will be supported from Q1 2012.

# RIVA - RTC1100

## Specifications

Specifications Camera Module					
Focal Plane Array	17 Jm Uncooled Vanadium Oxide Microbolometer				
Effective Pixels	320x240				
Scanning System	Progressive Scan				
Spectral Response	8 - 14 µm				
Lens (Optional)	7.5mm, F1.4 (42.1 Degree FoV) 14.25mm (21.9 Degree FoV) 25mm, F1.2 (12.4 Degree FoV) 35mm, F1.2 (8.9 Degree FoV) Other Lenses available upon request				
NEDT	Less than 50mK				
Video					
Compression	H.264, MPEG-4, MJPEG				
Frame Rate	9Hz or 30Hz Models Available (9Hz from Q1 2012)				
Number of Streams	Dual Stream, Configurable				
Resolution	Sensor is 320x240, Image can be scaled from QCIF				
	to D1				
Motion Detection	Support (DSP)				
Burnt-in Text (Digital)	Support (DSP)				
Audio					
Input	1 channel				
Output	1 channel				
Compression Format	G.711				
Function					
Digital Input	1 channel (Dry and Wet Contact Selectable)				
Digital Output	1 channel (Dry Contact)				
Serial Port	Support (RS-485 only)				
Network	10 / 100 Base-T				
Protocol	TCP/IP, UDP/IP, HTTP, RTSP, RTCP, RTP/UDP, RTP/TCP, SNTP, mDNS, UPnP, SMTP, SOCK, IGMP, DHCP, FTP, DDNS, SSL v2/v3, IEEE 802.1X, SSH, SNMP v2/v3				
USB 2.0	Support (Mini-B plug)				
SD Memory Card Slot	Support (microSD type)				
Electrical					
Power Source	12V DC (Screw Terminal, Camera Unit)				
Power over Ethernet	Support (IEEE 802.3af) Camera Unit				
Power Consumption	(Approx) 6-8 Watts				
Environmental					
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)				
Operating Temperature (Outdoor Housing)	-40°C ~ 50°C (-40°F ~ 122°F) *Cold start: 0°C				
Operating Humidity	Up to 85% RH (Non-condensing)				
Mechanical - Camera					
Material	Aluminum Die Casting-2				
Color	White Pearl				
Dimension	55(W) x 55(H) x 120(D) mm				
Weight (Approx)	300g				
Outdoor Housing (Optic	•				
Fan/Heater	230V AC – Fan (5W) / Heater (30W)				
Fan/Heater Material	Aluminum-Die Casting/Plate Germanium Window				
Color					
Dimension	Light gray Outside: 320L×136H×138W				
Dimension	Inside: 200Lx136Hx138W				
Weight / Protection	(Approx) 1.9kg / IP66				

Video Content Analysis (Included as Standard)					
High Performance	Advanced Tracking Algorithm, Low False Alarm Rate				
Easy to Use	Intuitive Web Browser Interface				
Detection Zones	Multi-segment Polygons and Lines				
On-screen Display	Real-time Display of Tracking Data and Events				
Camera Shake Cancellation	Improve the VCA performance with cameras that are prone to shake				
Tamper Detection	Detect camera tampering				
VCAdetect IP - License	(Included as Standard)				
3D VCA Calibration	Camera Scene Settings will be configured with innovative graphical controls and tools to optimize VCA output				
Object Classification	Design of different Object classes to include in VCA Alarm Rules				
Included VCA Filters	Direction Filter, Speed Filter, Dwell Filter				
Video Content Analysis (Option)					
Detection Behavior	Direction, Stopping, Loitering, Entering, Exiting, Appear, and Disappear Filters, Abandoned/Removed Object Detection, Tailgating Detection				
3D Behavior	Perspective Corrected Size and Speed Filters				
Statistics	Counting Functions and Other Statistics				
Meta Data	Plain XML Format				
Image Stabilization (Option)					
Electronic Stabilization	Removes Camera Sway				

Dimension

(unit: mm)

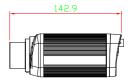
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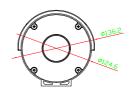
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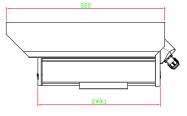
VIDEO ANALYTICS IN PERFECTION

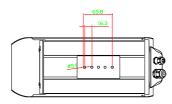
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Please Note: Datasheet Primarily Version

# RIVA - RTC1100



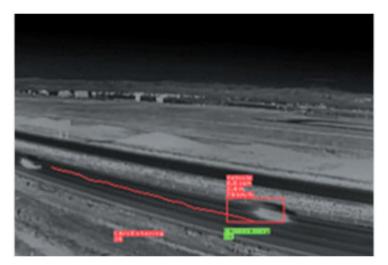
# Standard CCTV Camera Compare to Thermal Imaging Camera





General Surveillance Camera

RTC



High Accuracy Traffic Monitoring with RTC

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