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# RTMS Sx-300 HDCAM



The RTMS Sx-300 with HD camera is an advanced radar sensor with a High-Definition camera that empowers smart decisions by detecting and measuring traffic while also providing the user with visual confirmation, data capture and verification over a TCP/IP connection. It is all-weather accurate and virtually maintenance-free. Best of all, Sx-300 is renowned for long-term worry-free reliability.

The RTMS Sx-300 is a small roadside pole-mounted radar with a High-Definition camera, that simultaneously provides per-lane presence as well as volume, occupancy, speed and classification information in up to 12 user-defined detection zones. Output information is provided to existing controllers via contact closure and to other computing systems by TCP/IP communication port.

The RTMS technology provides meaningful and reliable data that maximizes the full potential of existing infrastructure and optimizes the safety and efficiency of every city.

## KEY BENEFITS

- Fast, safe installation, on existing road-side poles, with no traffic disruptions
- Provides visibility from the detector to verify the accuracy of zone setup across all lane
- Simplified visual ground truth ability for deployment verification
- Facilitate real-time visual traffic surveillance anywhere, anytime
- Low power requirement allows low cost solar power operation





# RTMS Sx-300 HDCAM

## SPECIFICATION

### Average Coverage (Radar)

The Sx-300 detection field of view covers the area defined by:

- Elevation angle  
50 degrees
- Azimuth  
12 degrees
- Range  
0 to 76 m (0 to 250 ft)

### Measurement Resolution

- Detection zones  
up to 12 zones
- Detection range (increment)  
0.4 m (1.3 ft)
- Zone width  
2 to 7 m (7 - 20 ft)
- Time events  
1.3 msec

### Frequency Bands

- K band, model Sx-300 operates at high resolution in the 24 GHz band

### Regulatory

- FCC
- CE ETSI EN 300 440-1, ETSI EN 300 440-2, ETSI EN 301 489-1, ETSI EN 301 489-3, ETSI EN 301 489-17
- Canadian CSA C108.8 - M1983

### Interface

- Single MS type connector provides communications and output signals
- Data: volume, occupancy, speed, gap or headway, six vehicle classes, 85th percentile
- 8MB built-in memory for data storage
- Isolated configurable RS232/RS-485 port provides vehicle presence, per vehicle and statistical data
- Eight (8) optically isolated output pairs rated for 100mA and 24VDC for presence indication and dual-loop speed
- Bluetooth communication for setup, calibration and data access

### Mechanical

- Unit is encased in a rugged, water-tight NEMA 4X & IP-67 polycarbonate enclosure
- Universal mounting bracket mountable on any structure. Tilts on three axes and is lockable.

- Size  
21 x 21 x 16 cm (8 x 8 x 6 in)
- Weight  
1.5 kg (3.5 lbs)

### Power

- Operates on 12 - 24 VAC or VDC  
3.6W max standard  
12W max with HD camera option
- EN 61000-4-5

### Video Resolution

- 1280 x 720, 704 x 576, 640 x 352, 320 x 192
- Video Compression: H.264
- Compression Rate: Variable Bit Rate (VBR) and Constant Bit Rate (CBR) from 512Kb/s to 5Mb/s
- Video Frame Rate: 1 to 30 frames per second
- Video Snapshot: JPEG
- Streaming Format: Real Time Streaming Protocol (RTSP) with two (2) independent streams
- Adjustment of Video: Brightness, contrast, saturation, sharpness and image quality via web browser

### Maintainability

- Ultra reliable: MTBF (mean time between failures) designed for 90,000 hours (10 years)
- Self-test diagnostic software
- Quick replacement
- Firmware field upgradable

### Environmental Conditions

- Temperature range  
Radar: -34° to +74°C (-29° to 165°F)  
Camera: -10° C to +60° C (14° F to 140° F)  
For optimum image performance
- NEMA TS2: 2003
- Wind  
Up to 190 km/hr (120 mph)
- IP 67 compliant

### Warranty

- Three-year warranty



## CONTACTS

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