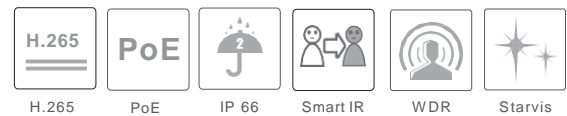## 4" 2MP 20x Network IR Speed Dome

- 1/2.8" 2MP progressive scan CMOS
- Up to 1920 x 1080@30fps resolution
- Min. illumination:
  Color: 0.005 Lux@(F1.6, AGC ON)
  B/W: 0.001 Lux@(F1.6, AGC ON)
  0 Lux with IR
- 20× optical zoom, 16x digital zoom
- WDR, HLC, BLC, 3D DNR, Defog
- Up to 150m smart IR distance
- PoE (802.3 at class 4)
- Support H.265+/H.265 video compression

| H.265 | PoE | IP 66 | Smart IR | WDR | Starvis |
|---|---|---|---|---|---|

CE FC ONVIF

### System Overview

Featuring powerful optical zoom and accurate pan/tilt/zoom performance, the camera provides a wide monitoring range and great detail. The camera delivers 2MP full high definition resolution at 25/30fps. The camera is equipped with smooth control, high quality image, and good protection, meeting compact size demands of video surveillance applications.

### Features

#### High Efficiency Video Coding (H.265)

The H.265 (ITU-T VCEG) video compression standard offers double the data compression ratio at the same level of video quality, and substantially improved video quality at the same bit rate, compared to older video compression technologies. H.265 offers such impressive compression by expanding the pattern comparison and different coding, improving motion vector prediction and motion region merging, and incorporating an additional filtering step called sample-adaptive offset filtering.

#### Smart IR (2.0)

The product updates its IR lighting sub-system to Smart IR 2.0. The Infrared illumination lens adopts new freedom surface design pattern , and improves the uniformity of illumination above 0.5, compared to 0.3 of the older TIR fashion. And the new hardware is able to accurately adjust the IR LED driving current, step by step. Mixing the auto-exposure algorithm and IR LED control algorithm together makes the IR brightness control self-adaptive and no more over-exposed for most conditions.

#### Smart TM 1.0 (Thermal Management)

The camera has built-in temperature sensor, high-efficient turbofan, as well as high power heater. The system uses PID control algorithm to adjust the turbofan's speed and heater's power to make the camera working in a suitable temperature chamber.

#### Superior Image Quality

The product adopts high MTF 20x zoom lens and Sony latest STARVIS image sensor so that it can capture vivid color image at low light conditions, avoid Smear for very bright objects, such as street road lamp, car's bright lamp, and output high-quality image. Besides, when WDR is selected, the camera will combine long exposure frame and short exposure frame into one frame-the so called physcial WDR (true WDR).

#### Working Environment and Interoperability

This product is rated for use in temperatures from -30 °C to +55 °C , under 90% humidity. Subjected to rigorous dust and water immersion tests and certified to the IP66 Ingress Protection rating, makes it work well outdoor. The special design eyebrow upon the lens window, which could reduce the lens temperature and avoid the image flare when the sun direct glare the camera lens. This product allows for 4KV lightning rating, which provides effective protection against lightning.
The camera conforms to the ONVIF specifications, ensuring interoperability between network video products regardless of manufacturer.

## SPECIFICATION

### Camera Module

| | |
|---|---|
| Image Sensor | 1 / 2.8 "progressive scan CMOS |
| Min. Illumination | Color: 0.005 lux @F1.6, AGC ON<br>B/W: 0.001lux @F1.6, AGC ON<br>0 lux with IR |
| White Balance | Auto/Manual/ATW (Auto-tracking WB)/Indoor/Outdoor/Fluorescent Lamp/Sodium Lamp |
| S/N ratio | More than 50dB |
| Gain | Auto/Manual |
| Shutter Time | 50Hz: 1 / 1 s ~ 1 / 25, 000 s; 60Hz: 1 / 1 s ~ 1 / 30, 000 s |
| Day&Night | IR Cut Filter |
| Privacy Mask | 4 programmable privacy masks |
| Focus Mode | Auto/Manual |
| WDR | True WDR, 2 frames in one |

### Lens

| | |
|---|---|
| Focal Length | 5.5-110mm, 20x optical zoom |
| Zoom Speed | Approx. 3.5s (optical lens, Wide-TELE) |
| Field of View | Horizontal field of view: 52.01° to 1.78° (Wide-TELE)<br>Vertical field of view: 29.30° to 3.15° (Wide-TELE)<br>Diagonal field of view: 59.79° to 3.62° (Wide-TELE) |
| Working Distance | Wide:1.0m~INF<br>Tele: 1.5m~INF |
| Aperture Range | F1.6 (Wide) to F3.5 (TELE) |

### IR

| | |
|---|---|
| IR Distance | 150m |
| Smart IR | Support |

### PTZ

| | |
|---|---|
| Pan Range | 360° endless |
| Pan Speed | Configurable, from 0.5°/s to 80°/s; Preset speed:80°/s |
| Tilt Range | From -5° to 90° (auto-flip) |
| Tilt Speed | Configurable, from 0.5°/s to 80°/s; Preset speed:80°/s |
| Proportional Zoom | Support |
| Preset | 360 |
| Cruise | 8 cruises, up to 16 presets for each cruises |
| Trace | 4 traces, record time over 3 minutes for each trace |
| Power-off Memory | Support |
| Action Mode | Preset/Cruise/Trace/Auto Scan/Random Scan |
| 3D Postioning | Support |
| PTZ Position Display | Support |
| Scheduled Task | Preset/Cruise/Trace/Random Scan/Boundary Scanning/Dome Reboot |

### Compression Standard

| | |
|---|---|
| Video Compression | H.265 / H.264 / MJPEG |
| H.264 Type | Baseline Profile/Main Profile/High Profile |
| H.265 Type | Main Profile |
| Video Bit Rate | 128Kbps ~ 6Mbps |
| SVC | Support |

### Smart Features

| | |
|---|---|
| Basic Event | Motion Detection, Video Tampering Detection, Exception |
| Smart Event | Object Removal Detection, Intrusion Detection, Line Crossing Detection, People Intrusion and People Counting |
| Smart Record | ANR (Automatic Network Replenishment) |

### Image

| | |
|---|---|
| Max. Resolution | 1920×1080 |
| Main Stream | 50Hz:25fps(1920×1080, 1280×720)<br>60Hz:30fps(1920×1080, 1280×720) |
| Sub Stream | 50Hz:25fps(1280×720, D1, CIF)<br>60Hz:30fps(1280×720, D1, CIF) |
| Third Stream | 50Hz:25fps(D1, 480×240, CIF)<br>60Hz:30fps(D1, 480×240, CIF) |
| Image Enhancement | WDR/HLC/BLC/3D DNR/Defog/Regional Exposure/Regional Focus |

### Network

| | |
|---|---|
| Network Storage | Built-in micro SD card slot, up to 128GB |
| Protocols | HTTP, HTTPS, IPv4/IPv6, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, UDP, IGMP, ICMP, DHCP, PPPoE |
| API | ONVIF, support API and third-party management platform |
| Simultaneous Live View | Up to 6 channels |
| User/Host | Up to 16 users, 3 levels: Administrator, Advanced User and Normal User |
| Security Measures | User authentication (ID and PW), Host authentication (MAC address); HTTPS encryption, IEEE802.1x port-based network access control; IP address filtering |
| Client | VMS-9000 Client |
| Web Browser | IE8-11, Chrome 31.0 to 44, Firefox 30.0 to 51 |

### Interface

| | |
|---|---|
| Network Interface | 1 RJ45 10M/100M Ethernet, PoE (802.3at, class4) |

### General

| | |
|---|---|
| Power | 12VDC, 2.0A and PoE (802.3at, class 4); 42.5 to57 VDC, 0.6A, Class4 Max.18W, including max.7W for IR |
| Working Environment | -30°C~55°C(-22°F~131°F), ≤ 90% RH |
| Protection Level | IP 66 Standard, 4000V Lightning Protection, Surge Protection and Voltage Transient Protection |
| Material | ADC12, PC, PC+10%GF |
| Dimensions | Φ 173mm × 247mm (Φ6.8" × 9.7") |
| Weight | Approx. 2.1KG (4.63lb) |

## DORI

DORI ( detect, observe, recognize, identify) distance gives the general idea of the camera ability to distinguish persons or objects within its filed of view.

| DORI | Detect | Observe | Recognize | Identify |
|---|---|---|---|---|
| Definition | 25 px/m | 63 px/m | 125 px/m | 250 px/m |
| Distance(Tele) | 1600m 5240ft) | 635m(2083ft) | 320m (1050ft) | 160m(525ft) |

Orange color function--coming soon

# NGC-7522R

## DIMENSIONS



- 40mm
- 145mm
- 268mm
- Ø153mm
- Ø173mm