

# **Tech Spec**

### RoboSHOT 20 UHD

High Performance, Ultra High Definition PTZ Camera

North America: 999-9950-000 (silver/black), 999-9950-000W (white) International: 999-9950-001 (silver/black), 999-9950-001W (white)

### Camera Features

- Back-illuminated 9.03 Megapixel, ultra high definition 1/2.3-type sensor delivers native 2160p/30 (3840 x 2160) video
- 12X optical zoom and 1.67X digital zoom; effective 20X zoom range; horizontal field of view 74° (wide) to 4.8° (tele) at 20X
- Imaging and performance comparable to 3-chip cameras
- Precise pan and tilt movements from 120° per second down to 0.35° per second
- Simultaneous HDMI, HDBT, 3Gb/s HD-SDI and IP streaming outputs
- Presenter-friendly IR remote control
- Full administrative control from your browser via web interface
- Integration-ready Telnet or serial RS-232 control
- Smooth, silent direct-drive motors

### **Connector Panel**



- 12 VDC, 3.0 Amp power connector Connect the power supply shipped with the camera
- OneLINK/HDBT connector Connect to OneLINK interface (video, power and control up to 328 ft/100m)
- HDMI connector HDMI video output
- HD-SDI connector HD-SDI video output
- RS-232 port Connect to a controller to manage the camera using a modified VISCA protocol
- HD video select switch Select the appropriate HDMI video output resolution for the near-end video display
- DIP switches Set IR frequency, IR on/off, image flip (camera is invertible), and baud rate

### What's Included

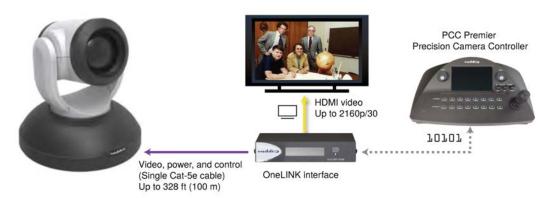
Each RoboSHOT 20 UHD camera is shipped with these items:

- Vaddio IR Remote Commander
- 12 VDC, 3.0 A switching power supply and AC cord set(s)
- Thin Profile Wall Mount with mounting hardware
- EZCamera<sup>™</sup> RS-232 control adapter
- Quick Start Guide





### **Basic Connection Diagram**



## **Specifications**

### Video and Image

| Outputs/protocols                  | HDMI, HDBT, HD-SDI, IP (H.264)   | Aspect ratio                               | HDMI: 16:9 (all resolutions)   |
|------------------------------------|--|--|--|
|                                    |  |  | IP (H.264) Streaming: 16:9, 3:2 and 4:3                              |
| HDMI<br>resolutions/frame<br>rates | QFHD: 2160p/30/25 (3840 x 2160)<br>FHD: 1080p/59.94/50/29.97/25,<br>1080i/59.94/50 | 3Gb/s HD-SDI<br>resolutions/frame<br>rates | FHD: 1080p/59.94/50/29.97/25,<br>1080i/59.94/50<br>HD: 720p/59.94/50 |
|                                    | HD: 720p/59.94/50  |  |  |
| Streaming                          | Simultaneous IP (RTSP format with H.264 compression) up to 1080p/30                |  |  |

#### Camera

| Image device           | 1/2.3-Type Exmor R High-speed, Low-noise CMOS Sensor   |                       |                                  |  |
|------------------------|--|-----------------------|----------------------------------|--|
| Pixels                 | 9.03 Megapixels Total, 8.93 Effective Megapixels   |                       |                                  |  |
| Zoom                   | 12X optical zoom, 1.67X digital zoom; combined total 20X zoom                                    |                       |                                  |  |
| Minimum illumination   | 3.0 lx (F1.8, 50IRE) color; recommended 100+ lux   |                       |                                  |  |
| Horizontal FOV         | 74° (wide) to 4.8° (tele)  | Min. working distance | 10 mm (wide), 1500 mm (tele)     |  |
| Pan angle and speed    | ±160°, 0.35°/sec to 120°/sec   | Tilt angle and speed  | +90, -30°, 0.35°/sec to 120°/sec |  |
| Gain                   | Auto / Manual (0 to 33 dB)   | Aperture/detail       | 16 Steps                         |  |
| Focusing system        | Auto Focus / Manual Focus Mode / One Push Trigger Mode   |                       |                                  |  |
| White balance          | Auto, ATW, Indoor, Outdoor, One-push, Manual   |                       |                                  |  |
| Backlight compensation | On/off   | Sync system           | Internal                         |  |
| Noise reduction        | 6 steps  | S/N ratio             | Over 50 dB                       |  |
| Control and            | Vaddio IR Remote Commander, web interface (Chrome, Firefox, Safari, Internet Explorer, Microsoft |                       |                                  |  |
| management             | Edge), Telnet, RS-232 API (modified VISCA)   |                       |                                  |  |
| Power                  | 12 VDC, 3.0 Amp power supply; LTPoE++  |                       |                                  |  |

### **Physical and Environmental**

| Height | 7.9 in (200 mm) | Operating temperatute | -5 °C to +60°C (23°F to 140°F) |
|--------|-----------------|-----------------------|--------------------------------|
| Width  | 8.0 in (203 mm) | Operating humidity    | 20% to 80% RH (non-condensing) |
| Depth  | 7.7 in (196 mm) | Storage temperature   | -20° to +60° C (-4°F to 140°F) |
| Weight | 6 lbs (2.7 kg)  | Storage humidity      | 20% to 95% RH (non-condensing) |