

## 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



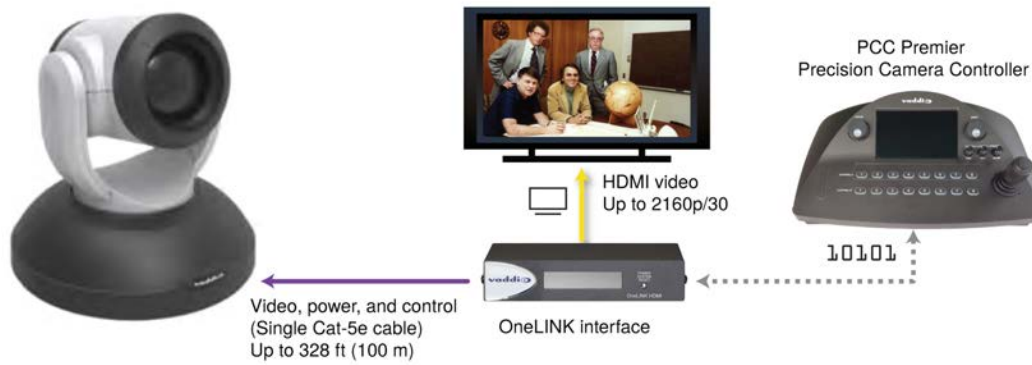
- **12 VDC, 3.0 Amp power connector** – Connect the power supply shipped with the camera
- **OneLINK/HDBT connector** – Connect to OneLINK interface (video, power and control up to 328 ft/100m)
- **HDMI connector** – HDMI video output
- **HD-SDI connector** – HD-SDI video output
- **RS-232 port** – Connect 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™ RS-232 control adapter
- Quick Start Guide

## Basic Connection Diagram



## Specifications

### Video and Image

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

### Camera

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

### Physical and Environmental

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