

KBN and KBE Series Prepackaged Cameras



- ▶ **General purpose, high performance, and Day/Night cameras**
- ▶ **Network and analog cameras**
- ▶ **Various lens options available**
- ▶ **Bilinx bi-directional communication**
- ▶ **Indoor or outdoor versions (Outdoor IP66 enclosure rating)**
- ▶ **Camera and lens are pre-wired into a Bosch housing**
- ▶ **Plug and Play design includes feed through mount and 1.5 m (5 ft) of cabling**
- ▶ **Coax, Fiber, UTP, and IP outputs**

The KBN and KBE Series Prepackaged Cameras are complete surveillance systems that include a camera and lens installed and pre-wired into a Bosch housing which includes a feed-through wall-mount.

All packages feature Bosch's signature line of Dinion, Dinion^{XF}, or Dinion 2X cameras. Each package offers choices of a varifocal lens to fit a wide range of surveillance applications. Outdoor models are enclosed in a Bosch housing with an IP66 enclosure rating.

The Dinion Series cameras deliver unsurpassed pictures under even the most difficult light and scene conditions. The 20-bit digital signal processing found in the Dinion 2X Day/Night camera series enhances sensitivity; the 2X Dynamic extends the dynamic range. This unique combination provides a sharper, more detailed image with outstanding accuracy in color reproduction even under harsh light conditions.

Dinion IP network cameras are designed to ensure the highest possible image quality at all times, providing DVD-like, high-quality MPEG-4 video, at up to 30 images per second. Dinion IP is a true hybrid camera with both Ethernet and BNC connections for network and analog video.

Each camera is equipped with Bosch's innovative Bilinx bi-directional communication for remote programming. Bilinx uses standard video cable to transmit alarm and status messages, providing superior performance and simplified installation.

The true advantage of the Bosch prepackaged cameras lie with the plug-and-play design. Installation is quick and easy, since these units include a factory-installed camera and lens with adjusted back-focus - all of which are pre-wired through the housing base. Coax and power cable (1 1/2 m or 5 ft) are fed through the included mount to the connection point.

Camera packages are also available with transmitters for sending video signals over fiber optic or unshielded twisted pair (UTP) cable.

Everything about the KBN and KBE Series Prepackaged Cameras, from the installer-friendly design, coupled with the Dinion, Dinion^{XF} or the Dinion 2X Series Cameras and a wide range of options make the KBN and KBE Series Prepackaged cameras an ideal solution for every surveillance requirement.

Certifications and Approvals

Electro Magnetic Compatibility

Emission	EN55022 class B, FCC part 15 class B, EN6100-3, EN50121-4
Immunity	EN50130-4 (CE), EN50121-4 (CE)
Vibration	Camera with 500 gr (1.1 lbs) lens according to IEC60068-2-6

Safety

LTC0498/11: UL1950-1, CSA 22.2 No. 950-1, EN60950-1 (CE), UL60950, CAN/CSA No. 60950

LTC0498/51: UL1950-1, CSA 22.2 No. 950-1, EN60950-1 (CE), EN61000-3-2 2000 +A2:2005, EN61000-3-3 1995 +A1:2001 +A2:2005

LTC0498/21 and LTC0498/61: UL1950-1, CSA 22.2 No. 950-1, EN60950-1 (CE), UL60950, CAN/CSA No. 60950

Installation/Configuration Notes

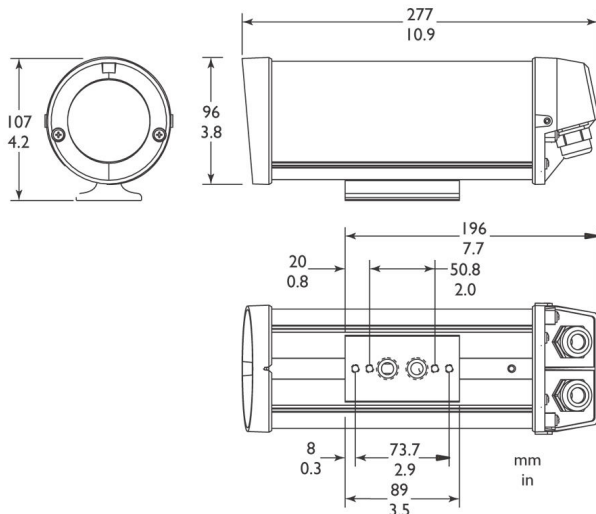


Figure 1: Indoor Models

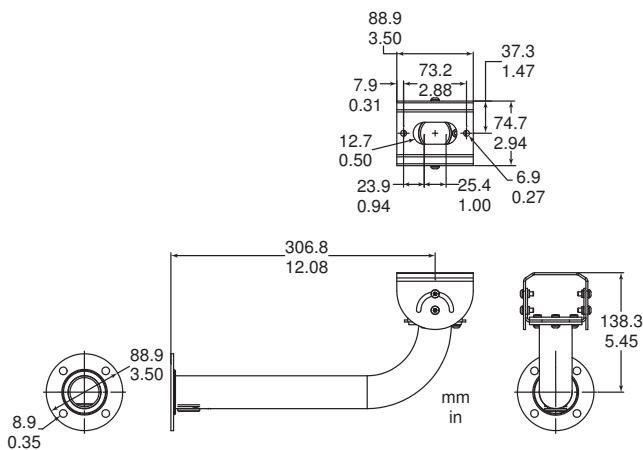


Figure 2: Indoor Mount

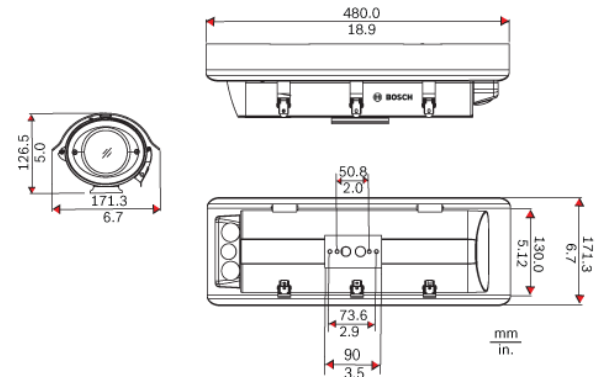


Figure 3: Outdoor Models

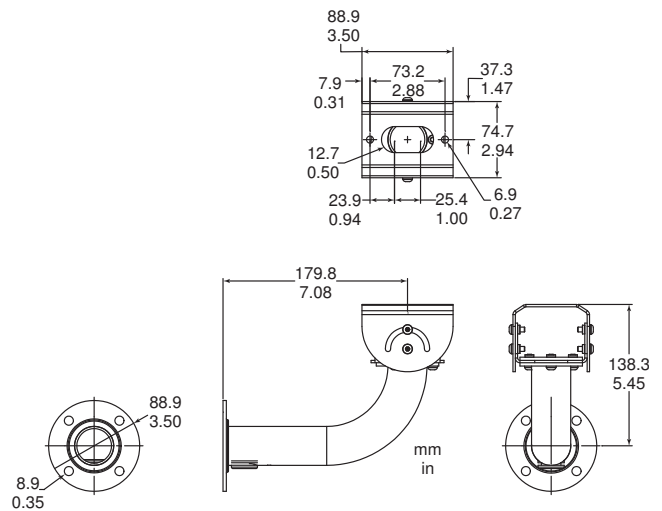


Figure 4: Outdoor Mount

Ordering Guide

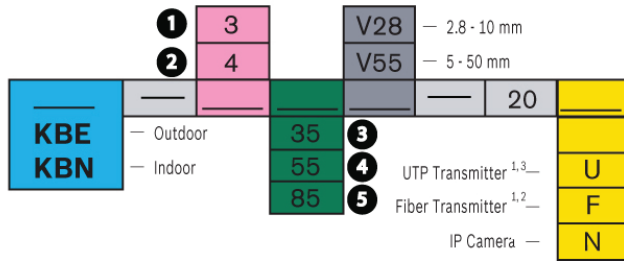
Use the following charts to create your order numbers.

Sample: KBE-498V75-20

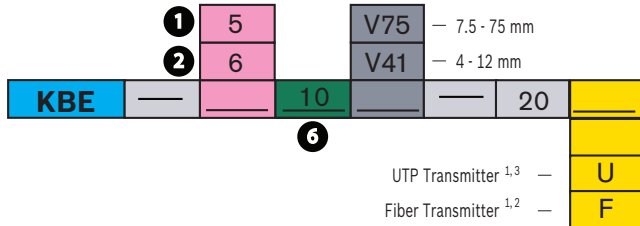
KBE	Prepackaged Outdoor Model
498	1/3 in. High Resolution Day/Night
V75	7.5–50 mm Varifocal Lens
20	24 VAC

					V14	— 10 - 40 mm			
					V41	— 4 - 12 mm			
KBE	—	6	30	—	—	20	—		
								UTP Transmitter ^{1,3}	U
								Fiber Transmitter ^{1,2}	F

1/2-inch Day/Night High Resolution Prepackaged Cameras

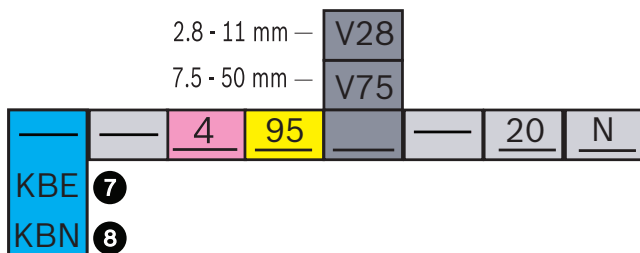


1/3-inch B&W and Color Prepackaged Cameras

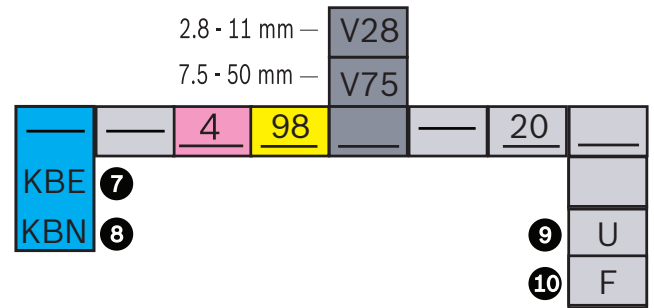


1/2-inch B&W and Color Prepackaged Cameras

Number	Reference
1	Monochrome camera
2	Color camera
3	1/3 in. Standard resolution
4	1/3 in. High resolution
5	1/3 in. High resolution, high sensitivity
6	1/2 in. High resolution, high sensitivity



1/3-inch Day/Night High Resolution Prepackaged IP Cameras



1/3-inch Day/Night High Resolution Prepackaged Cameras

Number	Reference
7	Outdoor
8	Indoor
9	UTP transmitter ^{1,3}
10	Fiber transmitter ^{1,2}

NOTES

- "U" and "F" options are available on 85, 98, 10, and 20 models only.
- "F" option transmitters are compatible with Bosch LTC 4642/60 Fiber Receiver (requires 24 VAC).
- "U" option transmitters are compatible with UTP Passive Receivers up to 750 ft distance; and UTP Active Receivers up to 3,000 ft distance.
- "N" option is available on the KBE outdoor versions of the 455 and 495 models only

Technical Specifications

For a detailed list of camera technical specifications, refer to the appropriate datasheet for additional information.

Cameras

Imager	KBx-x35/55/85/98: Interline transfer CCD 1/3 in. format
	KBx-510/610/630: Interline transfer CCD 1/2 in. format

	Active Picture Elements (H x V)	Horizontal Resolution
Monochrome		
KBx-335	512 x 492	380 TVL
KBx-355, KBx-385, KBx-510	582 x 494	570 TVL
Color		
KBx-435	510 x 494	330 TVL
KBx-455, KBx-485, KBx-610	768 x 492	540 TVL
Day/Night		
KBx-498, KBx-630	768 x 494	540 TVL
Sensitivity (3200 K)	Scene Illumination (100 IRE)	Scene Illumination (50 IRE)
Monochrome		
KBx-335V28 Series	0.65 lux (0.06 fc)	0.16 lux (0.015 fc)
KBx-335V55 Series	0.96 lux (0.089 fc)	0.24 lux (0.022 fc)
KBx-355V28 Series	0.49 lux (0.046 fc)	0.12 lux (0.011 fc)
KBx-355V55 Series	0.72 lux (0.067 fc)	0.18 lux (0.017 fc)
KBx-385V28 Series	0.31 lux (0.029 fc)	0.063 lux (0.006 fc)
KBx-385V55 Series	0.46 lux (0.043 fc)	0.092 lux (0.009 fc)
KBx-510V41 Series	0.16 lux (0.015 fc)	0.032 lux (0.003 fc)
KBx-510V75 Series	0.32 lux (0.03 fc)	0.064 lux (0.006 fc)
Color		
KBx-435V28 Series	2.18 lux (0.203 fc)	0.53 lux (0.049 fc)
KBx-435V55 Series	3.2 lux (0.297 fc)	0.78 lux (0.072 fc)
KBx-455V28 Series	3.5 lux (0.325 fc)	0.885 lux (0.082 fc)
NightSense	1.42 lux (0.132 fc)	0.354 lux (0.033 fc)
KBx-455V55 Series	5.2 lux (0.483 fc)	1.3 lux (0.121 fc)
NightSense	2.1 lux (0.195 fc)	0.52 lux (0.048 fc)
KBx-485V28 Series	3.27 lux (0.304 fc)	0.8 lux (0.074 fc)
NightSense	0.327 lux (0.03 fc)	0.0327 lux (0.003 fc)
KBx-485V55 Series	4.82 lux (0.448 fc)	1.18 lux (0.110 fc)
NightSense	0.482 lux (0.045 fc)	0.0482 lux (0.004 fc)
KBx-610V41 Series	1.4 lux (0.130 fc)	0.35 lux (0.033 fc)
NightSense	0.18 lux (0.017 fc)	0.018 lux (0.002 fc)
KBx-610V75 Series	2.81 lux (0.261 fc)	0.702 lux (0.065 fc)
NightSense	0.361 lux (0.034 fc)	0.0361 lux (0.003 fc)
Day/Night		
KBx-498V28 Series		
Color	3.26 lux (0.303 fc)	0.8 lux (0.074 fc)
Color + SensUP 10x	0.326 lux (0.03 fc)	0.08 lux (0.007 fc)
Monochrome	n/a	0.11 lux (0.01 fc)
Monochrome + SensUP 10x	n/a	0.011 lux (0.001 fc)
KBx-498V75 Series		
Color	2.82 lux (0.262 fc)	0.69 lux (0.064 fc)
Color + SensUP 10x	0.282 lux (0.026 fc)	0.069 lux (0.006 fc)
Monochrome	n/a	0.1 lux (0.009 fc)

Sensitivity (3200 K)	Scene Illumination (100 IRE)	Scene Illumination (50 IRE)
Monochrome + SensUP 10x	n/a	0.01 lux (0.001 fc)
KBE-630V14 Series		
Color	1.9 lux (0.177 fc)	0.42 lux (0.039 fc)
Color + SensUP 10x	0.19 lux (0.018 fc)	0.042 lux (0.004 fc)
Monochrome	n/a	0.071 lux (0.007 fc)
Monochrome + SensUP 10x	n/a	0.0071 lux (0.001 fc)
KBE-630V41 Series		
Color	1.4 lux (0.130 fc)	0.31 lux (0.029 fc)
Color + SensUP 10x	0.14 lux (0.013 fc)	0.031 lux (0.003 fc)
Monochrome	n/a	0.052 lux (0.005 fc)
Monochrome + SensUP 10x	n/a	0.0052 lux (0.0005 fc)

Connections

Video	Prewired 1.5 m (5 ft) coax with female BNC connector
Power ²	1 mm ² (18 AWG), 3 conductor, 1 m (5 ft) wiring harness with flying leads (Brown/Blue-24 V, Green-Ground)
"N" Models	Ethernet: 10/100 Base-T, auto sensing half/full duplex, RJ-45

² Power supply input terminals are isolated from video output terminals.

UTP "U" Models

Receiver	UTP Passive Receivers up to 750 ft (NV-213A, NV-213 A-M) UTP Active Receivers (NV-652R) up to 3,000 ft
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Fiber Optic "F" Models

Receiver	Bosch LTC 4642/60 Fiber Receiver (requires 24 VAC)
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IP "N" Models

Video Standards	MPEG-4; M-JPEG Video
Data Rate	9.6 Kbps – 6 Mbps constant & variable
Video Resolution	704 x 576/480 (4CIF: 25/30 IPS) 704 x 288/240 (2CIF: 25/30 IPS) 352 x 576/480 (Half D1: 25/30 IPS) 352 x 288/240 (CIF: 25/30 IPS) 176 x 144/120 (QCIF: 25/30 IPS)
Select. Frame Rate	1-25/30 IPS (PAL/NTSC); field/frame based coding
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMP, ICMP
Software Update	Flash ROM, remote programmable
Configuration	Using web browser, built-in Web server interfaces

Power**Indoor Models**

Analog Cameras (KBN-xxxVxx-20N)	12 to 28 VAC, 60 Hz, 4 W
IP-enabled Cameras KBN-xxxVxx-20N)	12 to 28 VAC, 60 Hz, 8 W (if not using Power over Ethernet)

Outdoor Models

Analog Cameras KBE xxxVxx-20	21 to 28 VAC, 60 Hz, 45 W
IP-enabled Cameras KBE-xxxVxx-20N	21 to 28 VAC, 60 Hz, 45 W
IP-enabled Cameras using PoE	PoE: IEEE 802.3af compliant (camera only; housing requires 40 W)

Mechanical**Housing**

Construction	Aluminum housing casing, neoprene gaskets, UV-resistant polymer end caps, and all stainless steel hardware
Finish	Gray
Window	3 mm (0.12 in.) Thick UV-stabilized polycarbonate
Mounting	Four (4), 8 mm (5/16 in.) diameter fasteners (not included) are required for mounting
Dimensions	See figures 1 and 2
Weight (approx.)	Indoor model: 2.85 kg (6.28 lb) Outdoor model: 4.1 kg (9.04 lb)

Feed-through Mount

Max Load	9 kg (20 lb)
Size	30 cm (12 in.)
Weight	0.4 kg (0.9 lb)

Environmental - Outdoor Models

Operating Temperature	External temperature -40°C to 50°C (-40°F to 122°F) Internal temperature -20°C and 55°C (-4°F to 131°F)
	"N" models External temperature -40°C to 46°C (-40°F to 116°F)
Humidity	0% to 93% relative, non-condensing
Enclosure Protection	IP66, NEMA-4X

Accessories

Heater/Blower	Included (outdoor models only)
Sunshield	Included (outdoor models only)
Wall Mount	Included
Pole Mount Adapter	LTC 9213/01

Ordering Information

KBE-335V28-20 B/W Unity Camera	KBE-335V28-20
KBE-355V55-20 B/W Unity Camera	KBE-355V55-20
KBE-355V28-20 B/W Unity Camera	KBE-355V28-20
KBE-355V55-20 B/W Unity Camera	KBE-355V55-20
KBE-385V28-20 B/W Unity Camera	KBE-385V28-20
KBE-385V28-20F B/W Unity Camera, Fiber Optic	KBE-385V28-20F
KBE-385V28-20U B/W Unity Camera, UTP	KBE-385V28-20U
KBE-385V55-20 B/W Unity Camera	KBE-385V55-20
KBE-385V55-20F B/W Unity Camera, Fiber Optic	KBE-385V55-20F
KBE-385V55-20U B/W Unity Camera, UTP	KBE-385V55-20U
KBE-435V28-20 Color Unity Camera	KBE-435V28-20
KBE-435V55-20 Color Unity Camera	KBE-435V55-20
KBE-455V28-20 Color Unity Camera	KBE-455V28-20
KBE-455V28-20N IP Unity Camera	KBE-455V28-20N
KBE-455V28-20 Color Unity Camera	KBE-455V28-20
KBE-455V55-20N IP Unity Camera	KBE-455V55-20N
KBE-485V28-20 Color Unity Camera	KBE-485V28-20
KBE-485V28-20F Color Unity Camera, Fiber Optic	KBE-485V28-20F
KBE-485V28-20U Color Unity Camera, UTP	KBE-485V28-20U
KBE-485V55-20 Color Unity Camera	KBE-485V55-20
KBE-485V55-20F Color Unity Camera, Fiber Optic	KBE-485V55-20F
KBE-485V55-20U Color Unity Camera, UTP	KBE-485V55-20U
KBE-495V28-20 Day/Night Unity Camera	KBE-495V28-20
KBE-495V28-20F Day/Night Unity Camera, Fiber Optic	KBE-495V28-20F
KBE-495V28-20N IP Day/Night Unity Camera	KBE-495V28-20N
KBE-495V28-20U Day/Night Unity Camera, UTP	KBE-495V28-20U
KBE-495V75-20 Day/Night Unity Camera	KBE-495V75-20
KBE-495V75-20F Day/Night Unity Camera, Fiber Optic	KBE-495V75-20F
KBE-495V75-20N IP Day/Night Unity Camera	KBE-495V75-20N
KBE-495V75-20U Day/Night Unity Camera, UTP	KBE-495V75-20U
KBE-498V28-20 Day/Night Unity Camera	KBE-498V28-20
KBE-498V28-20F Day/Night Unity Camera, Fiber Optic	KBE-498V28-20F
KBE-498V28-20U Day/Night Unity Camera, UTP	KBE-498V28-20U

Ordering Information

KBE-498V75-20 Day/Night Unity Camera	KBE-498V75-20
KBE-498V75-20F Day/Night Unity Camera, Fiber Optic	KBE-498V75-20F
KBE-498V75-20U Day/Night Unity Camera, UTP	KBE-498V75-20U
KBE-510V41-20 B/W Unity Camera	KBE-510V41-20
KBE-510V41-20F B/W Unity Camera, Fiber Optic	KBE-510V41-20F
KBE-510V41-20U B/W Unity Camera, UTP	KBE-510V41-20U
KBE-510V75-20 B/W Unity Camera	KBE-510V75-20
KBE-510V75-20F B/W Unity Camera, Fiber Optic	KBE-510V75-20F
KBE-510V75-20U B/W Unity Camera, UTP	KBE-510V75-20U
KBE-610V41-20 Color Unity Camera	KBE-610V41-20
KBE-610V41-20F Color Unity Camera, Fiber Optic	KBE-610V41-20F
KBE-610V41-20U Color Unity Camera, UTP	KBE-610V41-20U
KBE-610V75-20 Color Unity Camera	KBE-610V75-20
KBE-610V75-20F Color Unity Camera, Fiber Optic	KBE-610V75-20F
KBE-610V75-20U Color Unity Camera, UTP	KBE-610V75-20U
KBE-620V14-20 Day/Night Unity Camera	KBE-620V14-20
KBE-620V14-20F Day/Night Unity Camera, Fiber Optic	KBE-620V14-20F
KBE-620V14-20U Day/Night Unity Camera, UTP	KBE-620V14-20U
KBE-620V41-20 Day/Night Unity Camera	KBE-620V41-20
KBE-620V41-20F Day/Night Unity Camera, Fiber Optic	KBE-620V41-20F
KBE-620V41-20U Day/Night Unity Camera, UTP	KBE-620V41-20U
KBE-630V14-20 Day/Night Unity Camera	KBE-630V14-20
KBE-630V14-20F Day/Night Unity Camera, Fiber Optic	KBE-630V14-20F
KBE-630V14-20U Day/Night Unity Camera, UTP	KBE-630V14-20U
KBE-630V41-20 Day/Night Unity Camera	KBE-630V41-20
KBE-630V41-20F Day/Night Unity Camera, Fiber Optic	KBE-630V41-20F
KBE-630V41-20U Day/Night Unity Camera, UTP	KBE-630V41-20U
KBN-335V28-20 Indoor B/W Unity Camera	KBN-335V28-20
KBN-335V55-20 Indoor B/W Unity Camera	KBN-335V55-20

Ordering Information

KBN-355V28-20 Indoor B/W Unity Camera	KBN-355V28-20
KBN-355V55-20 Indoor B/W Unity Camera	KBN-355V55-20
KBN-385V28-20 Indoor B/W Unity Camera	KBN-385V28-20
KBN-385V55-20 Indoor B/W Unity Camera	KBN-385V55-20
KBN-435V28-20 Indoor Color Unity Camera	KBN-435V28-20
KBN-435V55-20 Indoor Color Unity Camera	KBN-435V55-20
KBN-455V28-20 Indoor Color Unity Camera	KBN-455V28-20
KBN-455V55-20 Indoor Color Unity Camera	KBN-455V55-20
KBN-485V28-20 Indoor Color Unity Camera	KBN-485V28-20
KBN-485V55-20 Indoor Color Unity Camera	KBN-485V55-20
KBN-495V28-20 Indoor Day/Night Unity Camera	KBN-495V28-20
KBN-495V75-20 Indoor Day/Night Unity Camera	KBN-495V75-20
KBN-455V28-20N Indoor IP Color Unity Camera	KBN-455V28-20N
KBN-455V55-20N Indoor IP Color Unity Camera	KBN-455V55-20N
KBN-495V28-20N Indoor IP Day/Night Unity Camera	KBN-495V28-20N
KBN-495V75-20N Indoor IP Day/Night Unity Camera	KBN-495V75-20N
KBN-498V28-20 Indoor Day/Night Unity Camera	KBN-498V28-20
KBN-498V75-20 Indoor Day/Night Unity Camera	KBN-498V75-20