

CAMERAS																							
CATEGORY	VANDAL											TURRET								PTZ		PANORAMIC	
MODEL NUMBER	 <i>IPV240</i>	 <i>IPV4E28</i>	 <i>IPV428B IPV428B IPV436</i>	 <i>IPV4E212M</i>	 <i>IPV4212M</i>	 <i>IPVLP428</i>	 <i>IPV5E28</i>	 <i>IPV528</i>	 <i>IPV5E212M</i>	 <i>IPV5213M</i>	 <i>IPV4K212M</i>	 <i>IPT4E28</i>	 <i>IPT428B IPT428B IPT436</i>	 <i>IPT4212M</i>	 <i>IPT5E28</i>	 <i>IPT528B IPT528B</i>	 <i>IPT5213M</i>	 <i>IPT4K28</i>	 <i>IPT4K212M</i>	 <i>IPCS230</i>	 <i>IPCS4K22</i>	 <i>IPFE4180</i>	 <i>IPFE4K360</i>
DESCRIPTION	2MP Vandal Dome	4MP Vandal Dome	4MP Vandal Dome	4MP Vandal Dome	4MP Vandal Dome	4MP Low Profile Vandal Dome	5MP Vandal Dome	5MP StarView Vandal Dome	5MP Vandal Dome	5MP StarView Vandal Dome	4K Vandal Dome	4MP Turret Dome	4MP Turret Dome	4MP Turret Dome	5MP Turret Dome	5MP StarView Turret Dome	5MP StarView Turret Dome	4K Turret Dome	4K Turret Dome	2MP PTZ	12MP PTZ	4MP 180°/360° Panoramic Fisheye	12MP 360° Panoramic Fisheye
RESOLUTION	1920 x 1080	2592 x 1520	2592 x 1520	2592 x 1520	2592 x 1520	2592 x 1520	2592 x 1944	2592 x 1944	2592 x 1944	2592 x 1944	3840 x 2160	2592 x 1520	2592 x 1520	2592 x 1520	2592 x 1944	2592 x 1944	2592 x 1944	3840 x 2160	3840 x 2160	1920 x 1080	4000 x 3000	2560 x 1440	4000 x 3000
FPS @ MAX. RESOLUTION	25-fps	20-fps	20-fps	20-fps	20-fps	20-fps	20-fps	20-fps	20-fps	20-fps	15-fps	20-fps	20-fps	20-fps	20-fps	20-fps	20-fps	15-fps	15-fps	30-fps	20-fps	25-fps	15-fps
LENS	Fixed 4.0mm	Fixed 2.8mm	Fixed 2.8mm / 3.6mm	Motorized 2.8-12mm VF	Motorized 2.8-12mm VF	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	Motorized 2.8-12mm VF	Motorized 2.7-13.5mm VF	Motorized 2.8-12mm VF	Fixed 2.8mm	Fixed 2.8mm / 3.6mm	Motorized 2.8-12mm VF	Fixed 2.8mm	Fixed 2.8mm	Motorized 2.7-13.5mm VF	Fixed 2.8mm	Motorized 2.8-12mm VF	30x, 4.5 ~ 135mm	22x, 6.5 ~ 143mm	Fixed 1.6mm Panoramic	Fixed 1.8mm Panoramic
IMAGE SENSOR	1/2.7" Prog Scan CMOS	1/3" Prog Scan CMOS	1/3" Prog Scan CMOS	1/3" Prog Scan CMOS	1/3" Prog Scan CMOS	1/3" Prog Scan CMOS	1/3" Prog Scan CMOS	1/2.7" Prog Scan CMOS	1/3" Prog Scan CMOS	1/2.7" Prog Scan CMOS	1/2" Prog Scan CMOS	1/3" Prog Scan CMOS	1/3" Prog Scan CMOS	1/3" Prog Scan CMOS	1/3" Prog Scan CMOS	1/2.7" Prog Scan CMOS	1/2.7" Prog Scan CMOS	1/2.5" Prog Scan CMOS	1/2" Prog Scan CMOS	1/3" Prog Scan CMOS	1/3" Prog Scan CMOS	1/3" Prog Scan CMOS	1/1.7" Prog Scan CMOS
IR LED RANGE (MAX)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	49ft (15M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	492ft (150M)	825ft (250M)	33ft (10M)	65ft (20M)
MIN. SCENE ILLUM. (LUX)	0.02 (Col); 0 (BW, w/ IR)	0.03 (Col); 0 (BW, w/ IR)	0.03 (Col); 0 (BW, w/ IR)	0.01 (Col); 0 (BW, w/ IR)	0.005 (Col); 0 (BW, w/ IR)	0.03 (Col); 0 (BW, w/ IR)	0.01 (Col); 0 (BW, w/ IR)	0.005 (Col); 0 (BW, w/ IR)	0.005 (Col); 0 (BW, w/ IR)	0.002 (Col); 0 (BW, w/ IR)	0.003 (Col); 0 (BW, w/ IR)	0.03 (Col); 0 (BW, w/ IR)	0.2 (Col); 0 (BW, w/ IR)	0.01 (Col); 0 (BW, w/ IR)	0.01 (Col); 0 (BW, w/ IR)	0.005 (Col); 0 (BW, w/ IR)	0.002 (Col); 0 (BW, w/ IR)	0.001 (Col); 0 (BW, w/ IR)	0.003 (Col); 0 (BW, w/ IR)	0.01 (Col); 0 (BW, w/ IR)	0.01 (Col); 0 (BW, w/ IR)	0.01 (Col); 0 (BW, w/ IR)	0.05 (Col); 0 (BW, w/ IR)
WIDE DYNAMIC RANGE	Digital	Digital	120dB	Digital	120dB	120dB	Digital	120dB	Digital	120dB	120dB	Digital	120dB	120dB	Digital	120dB	120dB	120dB	120dB	120dB	Digital	120dB	Digital
DAY/NIGHT	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
VIDEO COMPRESSION	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265
MULTI-STREAMING	3	3	3	3	3	3	2	3	2	3	3	3	3	3	2	3	3	3	3	3	3	3	3
ONBOARD STORAGE	-	-	Micro-SD Slot	Micro-SD Slot	Micro-SD Slot	Micro-SD Slot	-	Micro-SD Slot	Micro-SD Slot	Micro-SD Slot	Micro-SD Slot	-	-	Micro-SD Slot	-	-	Micro-SD Slot	-	Micro-SD Slot	Micro-SD Slot	Micro-SD Slot	Micro-SD Slot	Micro-SD Slot
ALARM (I/O)	-	-	1 / 1	-	1 / 1	-	-	1 / 1	-	1 / 1	1 / 1	-	-	-	-	-	-	-	-	1 / 1	2 / 1	1 / 1	2 / 1
AUDIO (I/O)	-	-	2 / 1	-	1 / 1	1 / 1; B/I Mic	-	2 / 1	-	1 / 1	1 / 1	-	-	1 / 0; B/I Mic	-	1 / 0; B/I Mic	1 / 0; B/I Mic	-	1 / 0; B/I Mic	1 / 1	1 / 1	1 / 0; B/I Mic	1 / 1; B/I Mic & Spkr
ADDITIONAL FEATURES	ONVIF, 3D-DNR, BLC, Defog, Privacy, VMD	ONVIF, 3D-DNR, BLC, Defog, Privacy, VMD	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, 3D-DNR, BLC, Defog, Privacy, VMD	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, 3D-DNR, BLC, Defog, Privacy, VMD	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, 3D-DNR, BLC, Defog, Privacy, VMD	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, 3D-DNR, BLC, Defog, Privacy, VMD	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, 3D-DNR, BLC, Defog, Privacy, VMD	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, 3D-DNR, BLC, Defog, Privacy, VMD	ONVIF, 3D-DNR, BLC, Defog, Privacy, VMD
ACCESSORIES	TR-WM03-C-IN Wall Mt TR-UP06-IN Pole Mt TR-JB03-G-IN Junction Box TR-UM06-B-IN Wedge Mt TR-CE45-IN Pendant Mt TR-UF45-D-IN Pendant Mt Adap 4KTESTMON Test Monitor	TR-WM03-B-IN Wall Mt TR-UP06-IN Pole Mt TR-JB03-G-IN Junction Box TR-UM06-B-IN Wedge Mt TR-CE45-IN Pendant Mt TR-UF45-D-IN Pendant Mt Adap 4KTESTMON Test Monitor	TR-WM03-B-IN Wall Mt TR-UP06-IN Pole Mt TR-JB03-G-IN Junction Box TR-UM06-B-IN Wedge Mt TR-CE45-IN Pendant Mt TR-UF45-D-IN Pendant Mt Adap TR-JB03-G-IN-Black Junction Box (IPV428B only) 4KTESTMON Test Monitor	TR-WM04-IN Wall Mt TR-UP06-IN Pole Mt TR-JB04-C-IN Junction Box TR-CE45-IN Pendant Mt TR-UF45-E-IN Pendant Mt Adap TR-FM152-A-IN Flush Mt 4KTESTMON Test Monitor	TR-WM04-IN Wall Mt TR-UP06-IN Pole Mt TR-JB04-C-IN Junction Box TR-CE45-IN Pendant Mt TR-UF45-E-IN Pendant Mt Adap TR-FM152-A-IN Flush Mt 4KTESTMON Test Monitor	TR-WM04-IN Wall Mt TR-UP06-IN Pole Mt TR-JB04-C-IN Junction Box TR-CE45-IN Pendant Mt TR-UF45-E-IN Pendant Mt Adap TR-FM152-A-IN Flush Mt 4KTESTMON Test Monitor	TR-WM03-B-IN Wall Mt TR-UP06-IN Pole Mt TR-JB03-G-IN Junction Box TR-UM06-B-IN Wedge Mt TR-CE45-IN Pendant Mt TR-UF45-D-IN Pendant Mt Adap 4KTESTMON Test Monitor	TR-WM03-B-IN Wall Mt TR-UP06-IN Pole Mt TR-JB03-G-IN Junction Box TR-UM06-B-IN Wedge Mt TR-CE45-IN Pendant Mt TR-UF45-D-IN Pendant Mt Adap 4KTESTMON Test Monitor	TR-WM04-IN Wall Mt TR-UP06-IN Pole Mt TR-JB04-C-IN Junction Box TR-CE45-IN Pendant Mt TR-UF45-E-IN Pendant Mt Adap TR-FM152-A-IN Flush Mt 4KTESTMON Test Monitor	TR-WM04-IN Wall Mt TR-UP06-IN Pole Mt TR-JB04-C-IN Junction Box TR-CE45-IN Pendant Mt TR-UF45-E-IN Pendant Mt Adap TR-FM152-A-IN Flush Mt 4KTESTMON Test Monitor	TR-WM04-IN Wall Mt TR-UP06-IN Pole Mt TR-JB04-C-IN Junction Box TR-CE45-IN Pendant Mt TR-UF45-E-IN Pendant Mt Adap TR-FM152-A-IN Flush Mt 4KTESTMON Test Monitor	TR-WM03-C-IN Wall Mt TR-UP06-IN Pole Mt TR-JB03-H-IN Junction Box 4KTESTMON Test Monitor TR-CM24-IN, TR-SE24-IN & TR-SE24-A-IN Pendant Mt Pipes	TR-WM03-B-IN Wall Mt TR-UP06-IN Pole Mt TR-JB03-H-IN Junction Box 4KTESTMON Test Monitor TR-CM24-IN, TR-SE24-IN & TR-SE24-A-IN Pendant Mt Pipes	TR-WM03-B-IN Wall Mt TR-UP06-IN Pole Mt TR-JB03-H-IN Junction Box 4KTESTMON Test Monitor TR-CM24-IN, TR-SE24-IN & TR-SE24-A-IN Pendant Mt Pipes	TR-WM03-C-IN Wall Mt TR-UP06-IN Pole Mt TR-JB03-H-IN Junction Box 4KTESTMON Test Monitor TR-CM24-IN, TR-SE24-IN & TR-SE24-A-IN Pendant Mt Pipes	TR-WM03-B-IN Wall Mt TR-UP06-IN Pole Mt TR-JB03-H-IN Junction Box 4KTESTMON Test Monitor TR-CM24-IN, TR-SE24-IN & TR-SE24-A-IN Pendant Mt Pipes	TR-WM03-B-IN Wall Mt TR-UP06-IN Pole Mt TR-JB03-H-IN Junction Box 4KTESTMON Test Monitor TR-CM24-IN, TR-SE24-IN & TR-SE24-A-IN Pendant Mt Pipes	TR-WM03-B-IN Wall Mt TR-UP06-IN Pole Mt TR-JB03-H-IN Junction Box 4KTESTMON Test Monitor TR-CM24-IN, TR-SE24-IN & TR-SE24-A-IN Pendant Mt Pipes	TR-WM03-B-IN Wall Mt TR-UP08-A-IN Pole Mt TR-UC08-A-IN Corner Mt TR-CE45-IN Pendant Mt TR-UF45-A-IN Pendant Mt Adap TR-WE45-B-IN Parapet Mt RUPTZI-1 PoE Injector KB-1100 Keyboard Controller TR-JB12-IN Junction Box 4KTESTMON Test Monitor	TR-WE45-A-IN Wall Mt TR-UP08-A-IN Pole Mt TR-UC08-A-IN Corner Mt TR-CE45-IN Pendant Mt TR-UF45-A-IN Pendant Mt Adap TR-WE45-B-IN Parapet Mt KB-1100 Keyboard Controller TR-JB12-IN Junction Box 4KTESTMON Test Monitor	TR-WE45-A-IN Wall Mt TR-UP08-A-IN Pole Mt TR-UC08-A-IN Corner Mt TR-CE45-IN Pendant Mt TR-UF45-A-IN Pendant Mt Adap TR-WE45-B-IN Parapet Mt KB-1100 Keyboard Controller TR-JB12-IN Junction Box 4KTESTMON Test Monitor	TR-WM03-B-IN Wall Mt TR-UP06-IN Pole Mt TR-JB03-H-IN Junction Box TR-CE45-IN Pendant Mt TR-UF45-F-IN Pendant Mt Adap TR-CM24-IN, TR-SE24-IN & TR-SE24-A-IN Pendant Mt Pipes 4KTESTMON Test MonitorN	
USER INSTRUCTION MANUAL	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual
OPERATING TEMP RANGE	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-35°C ~ 60°C (-31°F ~ 140°F)	-40°C ~ 60°C (-40°F ~ 140°F)	-40°C ~ 60°C (-40°F ~ 140°F)	-35°C ~ +60°C (-31°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-35°C ~ 60°C (-31°F ~ 140°F)	-40°C ~ 60°C (-40°F ~ 140°F)	-40°C ~ 60°C (-40°F ~ 140°F)	-40°C ~ 60°C (-40°F ~ 140°F)	-30°C ~ +60°C (-22°F ~ 140°F)	-35°C ~ 60°C (-31°F ~ 140°F)	-40°C ~ 60°C (-40°F ~ 140°F)	-30°C ~ +60°C (-22°F ~ 140°F)	-35°C ~ 60°C (-31°F ~ 140°F)	-40°C ~ 60°C (-40°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-40°C ~ 60°C (-40°F ~ 140°F)	-40°C ~ 65°C (-40°F ~ 149°F)	-40°C ~ 70°C (-40°F ~ 158°F)	-40°C ~ 60°C (-40°F ~ 140°F)	-35°C ~ 60°C (-31°F ~ 140°F)
CONFORMITY CERTS	IP66, IK10, CE, FCC	IP67, IK10, CE, FCC	IP67, IK10, CE, FCC	IP67, IK10, CE, FCC	IP67, IK10, CE, FCC	IP66, IK10, CE, FCC	IP67, IK10, CE, FCC	IP67, IK10, CE, FCC	IP67, IK10, CE, FCC	IP67, IK10, CE, FCC	IP67, IK10, CE, FCC	IP67, CE, FCC	IP67, CE, FCC	IP67, CE, FCC	IP67, CE, FCC	IP67, CE, FCC	IP67, CE, FCC	IP67, CE, FCC	IP67, CE, FCC	IP66, CE, FCC	IP66, CE, FCC	IP66, IK10, CE, FCC	IP66, IK10, CE, FCC
POWER	12VDC / PoE 5W Max	12VDC / PoE 4W Max	12VDC / PoE 5.5W Max	12VDC / PoE 6W Max	12VDC / PoE 7.2W Max	12VDC / PoE 4.5W Max	12VDC / PoE 4W Max	12VDC / PoE 5.5W Max	12VDC / PoE 6W Max	12VDC / PoE 8.7W Max	12VDC / PoE 10W Max	12VDC / PoE 4W Max	12VDC / PoE 5.5W Max	12VDC / PoE 8.16W Max	12VDC / PoE 4W Max	12VDC / PoE 5.5W Max	12VDC / PoE 8.16W Max	12VDC / PoE 5.5W Max	12VDC / PoE 8.16W Max	24VAC / 24VDC / PoE (PSE Req'd) 42W Max	24VAC / 24VDC 56W Max	12VDC / PoE 11W Max	12VDC / PoE 21W Max

CAMERAS												
CATEGORY	BULLET											
MODEL NUMBER	 <i>IPB2447M</i>	 <i>IPB436</i>	 <i>IPB4E40</i>	 <i>IPB4E212M</i>	 <i>IPB4212M</i>	 <i>IPB5E40</i>	 <i>IPB540</i>	 <i>IPB5E212M</i>	 <i>IPB5213M</i>	 <i>IPB4K40</i>	 <i>IPB4K212M</i>	 <i>IPBP4K180</i>
DESCRIPTION	2MP StarView Bullet	4MP Bullet	4MP Bullet	4MP Bullet	4MP Bullet	5MP Bullet	5MP StarView Bullet	5MP Bullet	5MP StarView Bullet	4K Bullet	4K Bullet	4K 180° StarView Bullet
RESOLUTION	1920 x 1080	2592 x 1520	2592 x 1520	2592 x 1520	2592 x 1520	2592 x 1944	2592 x 1944	2592 x 1944	2592 x 1944	3840 x 2160	3840 x 2160	4096 x 1800
FPS @ MAX. RESOLUTION	30-fps	20-fps	20-fps	20-fps	20-fps	20-fps	20-fps	20-fps	20-fps	15-fps	15-fps	30-fps
LENS	Motorized 4.7-47mm VF	Fixed 3.6mm	Fixed 4mm	Motorized 2.8-12mm VF	Motorized 2.8-12mm VF	Fixed 4mm	Fixed 4mm	Motorized 2.8-12mm VF	Motorized 2.7-13.5mm VF	Fixed 4.0mm	Motorized 2.8-12mm VF	Fixed 4.2mm x 4
IMAGE SENSOR	1/2.8" Prog Scan CMOS	1/3" Prog Scan CMOS	1/3" Prog Scan CMOS	1/3" Prog Scan CMOS	1/3" Prog Scan CMOS	1/3" Prog Scan CMOS	1/2.7" Prog Scan CMOS	1/3" Prog Scan CMOS	1/2.7" Prog Scan CMOS	1/2.5" Prog Scan CMOS	1/2" Prog Scan CMOS	1/1.8" Prog Scan CMOS x 4
IR LED RANGE (MAX)	328ft (100M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	164ft (50M)	98ft (30M)	164ft (50M)	164ft (50M)
MIN. SCENE ILLUM. (LUX)	0.001 (Col); 0 (BW, w/ IR)	0.2 (Col); 0 (BW, w/ IR)	0.03 (Col); 0 (BW, w/ IR)	0.01 (Col); 0 (BW, w/ IR)	0.005 (Col); 0 (BW, w/ IR)	0.01 (Col); 0 (BW, w/ IR)	0.005 (Col); 0 (BW, w/ IR)	0.01 (Col); 0 (BW, w/ IR)	0.001 (Col); 0 (BW, w/ IR)	0.001 (Col); 0 (BW, w/ IR)	0.003 (Col); 0 (BW, w/ IR)	0.001 (Col); 0 (BW, w/ IR)
WIDE DYNAMIC RANGE	120dB	120dB	Digital	Digital	120dB	Digital	120dB	Digital	120dB	120dB	120dB	120dB
DAY/NIGHT	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
VIDEO COMPRESSION	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265
MULTI-STREAMING	3	3	3	3	3	2	3	2	3	3	3	3
ONBOARD STORAGE	Micro-SD Slot	-	-	Micro-SD Slot	Micro-SD Slot	-	-	Micro-SD Slot	Micro-SD Slot	-	Micro-SD Slot	Micro-SD Slot
ALARM (I/O)	2 / 1	-	-	-	1 / 1	-	-	-	1 / 1	-	1 / 1	2 / 1
AUDIO (I/O)	1 / 1	-	-	-	1 / 1	-	1 / 0; B/I Mic	-	1 / 1	-	1 / 1	1 / 1
ADDITIONAL FEATURES	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, 3D-DNR, BLC, Privacy, VMD	ONVIF, 3D-DNR, BLC, Privacy, VMD	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, 3D-DNR, BLC, Privacy, VMD	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	ONVIF, Corridor, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics	Panoramic 180° View, ONVIF, 3D-DNR, BLC, Defog, Privacy, VMD, Video Analytics
ACCESSORIES	TR-UP06-A-IN Pole Mt TR-JB07-D-IN Junction Box 4KTESTMON Test Monitor	TR-UP06-IN Pole Mt TR-JB05-A-IN Junction Box 4KTESTMON Test Monitor	TR-UP06-IN Pole Mt TR-JB05-A-IN Junction Box 4KTESTMON Test Monitor	TR-UP06-A-IN Pole Mt TR-JB07-D-IN Junction Box 4KTESTMON Test Monitor	TR-UP06-A-IN Pole Mt TR-JB07-D-IN Junction Box 4KTESTMON Test Monitor	TR-UP06-IN Pole Mt TR-JB05-A-IN Junction Box 4KTESTMON Test Monitor	TR-UP06-IN Pole Mt TR-JB05-A-IN Junction Box 4KTESTMON Test Monitor	TR-UP06-A-IN Pole Mt TR-JB07-D-IN Junction Box 4KTESTMON Test Monitor	TR-UP06-A-IN Pole Mt TR-JB07-D-IN Junction Box 4KTESTMON Test Monitor	TR-UP06-A-IN Pole Mt TR-JB05-B-IN Junction Box 4KTESTMON Test Monitor	TR-UP06-A-IN Pole Mt TR-JB07-D-IN Junction Box 4KTESTMON Test Monitor	TR-UP06-A-IN Pole Mt TR-JB07-D-IN Junction Box 4KTESTMON Test Monitor
USER INSTRUCTION MANUAL	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual
OPERATING TEMP RANGE	-40°C ~ +60°C (-40°F ~ 140°F)	-35°C ~ 60°C (-31°F ~ 140°F)	-30°C ~ +60°C (-22°F ~ 140°F)	-30°C ~ +60°C (-22°F ~ 140°F)	-35°C ~ 60°C (-31°F ~ 140°F)	-30°C ~ +60°C (-22°F ~ 140°F)	-35°C ~ 60°C (-31°F ~ 140°F)	-30°C ~ +60°C (-22°F ~ 140°F)	-35°C ~ 60°C (-31°F ~ 140°F)	-30°C ~ +60°C (-22°F ~ 140°F)	-35°C ~ 60°C (-31°F ~ 140°F)	-40°C ~ +70°C (-40°F ~ 158°F)
CONFORMITY CERTS	IP67, CE, FCC	IP67, CE, FCC	IP67, CE, FCC	IP67, CE, FCC	IP67, CE, FCC	IP67, CE, FCC	IP67, CE, FCC	IP67, CE, FCC	IP67, CE, FCC	IP67, CE, FCC	IP67, CE, FCC	IP67, CE, FCC
POWER	12VDC / 24VAC / PoE 3.7W Max	12VDC / PoE 6.4W Max	12VDC / PoE 4W Max	12VDC / PoE 6.5W Max	12VDC / PoE 9W Max	12VDC / PoE 4W Max	12VDC / PoE 6.4W Max	12VDC / PoE 6.5W Max	12VDC / PoE 10W Max	12VDC / PoE 6.4W Max	12VDC / PoE 10W Max	24VAC / 24VDC 40W Max

CAMERA ACCESSORIES								
MODEL NUMBER	 <i>KB-1100</i>	 <i>TR-FM152-A-IN</i>	 <i>TR-WM03-B-IN</i> <i>TR-WM03-C-IN</i> <i>TR-WM04-IN</i>	 <i>TR-WE45-A-IN</i>	 <i>TR-WE45-B-IN</i>	 <i>TR-WE45-D-IN</i>	 <i>TR-UP06-IN</i> <i>TR-UP08-A-IN</i>	 <i>TR-UP06-A-IN</i>
DESCRIPTION	Keyboard Controller	Ceiling Flush Mount	Wall Mount	Wall Mount	Parapet Mount	Wall Mount	Pole Mount - 2.6" ~ 5" Diameter	Pole Mount - 2.6" ~ 5" Diameter
FEATURES	LCD Screen	Sheet Metal / ABS	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Galvanized Sheet Metal	Galvanized Sheet Metal
	4 dimensional, Joystick Control	In-ceiling mount for VF vandal domes	Wall Installation for Fixed Domes	Wall Installation for PTZ Domes	Over-The-Roof Installation of PTZ Cameras	Wall Installation for IPBP4K180	Pole Installation for Fixed Dome & PTZ cameras	Pole Installation for bullet cameras
	IP Network Based	White Color	White Color	White Color	White Color	White Color	Gray	Gray
	NVR Connectable for PTZ Control	No add'l Mount req'd	TR-JB07-C-IN Junction Box optional	TR-UC08-A-IN Corner Mount optional	No add'l Mount req'd	No add'l Mount req'd	Requires use of TR-WE45-A-IN Wall Mount	No add'l Mount req'd
	Multiple User Permissions	Indoor	Indoor & Outdoor	Indoor & Outdoor	Outdoor	Indoor & Outdoor	Outdoor	Outdoor

CAMERA ACCESSORIES									
MODEL NUMBER	 <i>TR-UC08-A-IN</i>	 <i>TR-JB03-G-IN</i> <i>TR-JB03-H-IN</i> <i>TR-JB03-I-IN</i>	 <i>TR-JB03-G-IN-BLACK</i> <i>TR-JB03-H-IN-BK</i>	 <i>TR-JB04-B-IN</i> <i>TR-JB04-C-IN</i>	 <i>TR-JB05-A-IN</i>	 <i>TR-JB05-B-IN</i>	 <i>TR-JB07-D-IN</i>	 <i>TR-JB12-IN</i>	 <i>TR-UM06-B-IN</i> <i>TR-UM06-E-IN</i>
DESCRIPTION	Corner Mount	Junction Box	Junction Box	Junction Box	Junction Box	Junction Box	Junction Box	Junction Box	Wedge Mount
FEATURES	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	VMQ Silicone Rubber
	Corner Installation or PTZ Domes	Wall Installation J-Box for Fixed Dome Cameras	Wall Installation J-Box for Black Cameras	Wall Installation J-Box for Fixed Dome Cameras	Wall Installation J-Box for Bullet Cameras	Wall Installation J-Box for Bullet Cameras	Wall Installation J-Box for Bullet Cameras	Wall Installation J-Box for PTZ domes	Tilted, Indoor Wall Installation for Fixed Dome Cameras
	White Color	White Color	Black Color	White Color	White Color	White Color	White Color	White Color	White Color
	Requires use of Wall Mount	No add'l Mount req'd	No add'l Mount req'd	No add'l Mount req'd	No add'l Mount req'd	No add'l Mount req'd	No add'l Mount req'd	Use w/ TR-WE45-A-IN wall mt	No add'l Mount req'd
	Outdoor	Indoor & Outdoor	Indoor & Outdoor	Indoor & Outdoor	Indoor & Outdoor	Indoor & Outdoor	Indoor & Outdoor	Indoor & Outdoor	Indoor

CAMERA ACCESSORIES								
MODEL NUMBER	 <i>TR-CE45-IN</i>	 <i>TR-CM24-IN</i>	 <i>TR-SE24-IN</i> <i>TR-SE24-A-IN</i>	 <i>TR-UF45-A-IN</i>	 <i>TR-UF45-D-IN</i> <i>TR-UF45-E-IN</i> <i>TR-UF45-F-IN</i>	 <i>RUPTZ1-1</i>	 <i>R50CAT5E</i> <i>R100CAT5E</i> <i>R200CAT6</i> <i>R300CAT6</i>	 <i>4KTESTMON</i>
DESCRIPTION	Pendant Mount Pipe	Pendant Mount Pipe	Pendant Mount Pipe	Pendant Mount Adapter	Pendant Mount Adapter	PTZ PoE Injector	Ethernet Cable	Video Test Monitor
FEATURES	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	For use w/ IPCSD230 2MP PTZ	CAT5E or CAT6	Support CVBS, TVI, CVI, AHD & IP
	Pendant Installation for Fixed Dome and PTZ Cameras	Pendant Installation for Turret Dome Cameras	Pendant Installation for Turret Dome Cameras	Pendant Installation for PTZ Cameras	Pendant Installation for Fixed Dome Cameras	Compatible w/ IEEE 802.3af & 802.3at	Premade Lengths w/ RJ-45 Connectors	7" Retina Touch Screen
	White Color	White Color	White Color	White Color	White Color	Supports up to 60W	Blue Color	HDMI I/O, up to 4K resolution
	Requires use of Pendant Mount Adapter	Requires use of Junction Box	Requires use of Junction Box	Requires use of Pendant Mount	Requires use of Pendant Mount	Provides short circuit and over current protection	Assorted Lengths (ft): 50 / 100 / 200 / 300	Audio, Video, PoE and PING Support
	Indoor & Outdoor 6.5" (164mm) Length	Indoor & Outdoor 7.9" (200mm) Length	Indoor & Outdoor 7.9" (200mm) & 19.7" (500mm) Length	Indoor & Outdoor	Indoor & Outdoor	RoHS compliant	Indoor Only	Battery Operated or 12VDC

HYBRID NVR'S				NETWORK RECORDERS (NVR'S)							
MODEL NUMBER	 <i>HNR04</i>	 <i>HNR08</i>	 <i>HNR16</i>	 <i>NR08P</i>	 <i>NR16P2</i>	 <i>NR16P4</i>	 <i>NR32P</i>	 <i>NR648</i>	 <i>NR6416</i>	 <i>NR12816</i>	 <i>NR25616</i>
DESCRIPTION	4ch Analog + 2ch IP Hybrid	8ch Analog + 8ch IP Hybrid	16ch Analog + 8ch IP Hybrid	8ch w/ 8 PoE	16ch w/ 16 PoE	16ch w/ 16 PoE	32ch w/ 16 PoE	64ch NVR	64ch NVR	128ch NVR	256ch NVR
MAX. RECORDING RESOLUTION	AHD - 5MP; TVI & CVI - 2MP; CVBS - 750TVL; IP - 5MP	AHD, TVI, CVI - 8MP; CVBS - 750TVL; IP - 8MP	AHD, TVI, CVI - 8MP; CVBS - 750TVL; IP - 8MP	4K (8MP)	12MP	12MP	12MP	12MP	12MP	12MP	12MP
VIDEO COMPRESSION	H.264	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265	H.265
BANDWIDTH - I / O	40 / 40 Mbps	64 / 64 Mbps	40 / 80 Mbps	60 / 64 Mbps	160 / 320 Mbps	160 / 320 Mbps	320 / 320 Mbps	320 / 320 Mbps	384 / 384 Mbps	512 / 384 Mbps	512 / 384 Mbps
LIVE VIEW / PLAYBACK (FPS)	Analog & IP Cameras: 2 x 1080p @30; IP Cameras Only: 5 x 1080p @30	2 x 8MP @30; 2 x 6MP @30; 3 x 8MP @30; 4 x 4MP @30; 4 x 3MP @30; 6 x 3MP @25; 8 x 1080p @30; 16 x 720P @30	2 x 8MP @30; 2 x 6MP @30; 3 x 8MP @30; 4 x 4MP @30; 4 x 3MP @30; 6 x 3MP @25; 8 x 1080p @30; 16 x 720P @30	1 x 4K @30, 2 x 4MP @30, 4 x 1080p @30, 8 x 720p @30	3 x 12MP@25, 4 x 4K@30, 8 x 4MP@30, 16 x 1080P@30	3 x 12MP@25, 4 x 4K@30, 8 x 4MP@30, 16 x 1080P@30	3 x 12MP@25, 4 x 4K@30, 8 x 4MP@30, 16 x 1080P@30, 32 x 960p @25	3 x 12MP@25, 4 x 4K@30, 8 x 4MP@30, 16 x 1080P@30, 32 x 960P@25, 36 x 720P@30, 64 x D1@30	4 x 12MP@20, 4 x 4K@30, 16 x 1080P@30, 36 x 720P@30, 64 x D1@30	4 x 12MP@20, 4 x 4K@30, 16 x 1080P@30, 36 x 720P@30, 64 x D1@30	4 x 12MP@20, 4 x 4K@30, 16 x 1080P@30, 36 x 720p @30; 64 x D1 @30
CONNECTIONS											
HDMI OUTPUT	1 x 1080p - 720p	1 x 4K - 720p	1 x 4K - 720p	1 x 4K ~ 720p	1 x 4K ~ 720p	2 x 4K ~ 720p	2 x 4K ~ 720p	2 x 4K ~ 720p	2 x 4K ~ 720p; (Add'l 4 or 6 optional)	2 x 4K ~ 720p; (Add'l 4 or 6 optional)	2 x 4K ~ 720p; (Add'l 4 or 6 optional)
VGA OUTPUT	1 x 1080 ~ 720p	1 x 1080 - 720p	1 x 1080 - 720p	1 x 1080 ~ 720p	1 x 1080 ~ 720p	1 x 1080 ~ 720p	1 x 1080 ~ 720p	1 x 1080 ~ 720p	1 x 1080 ~ 720p	1 x 1080 ~ 720p	1 x 1080 ~ 720p
AUDIO IN / OUT	RCA 4 / 1	RCA 4 / 1	RCA 4 / 1	RCA 1 / 1	RCA 1 / 1	RCA 1 / 1	RCA 1 / 1	RCA 1 / 1	RCA 1 / 1	RCA 1 / 1	RCA 1 / 1
USB	Front panel: 1 x USB2.0 Rear panel: 1 x USB2.0	Front panel: 1 x USB2.0 Rear panel: 1 x USB3.0	Front panel: 1 x USB2.0 Rear panel: 1 x USB3.0	Rear panel: 2 x USB2.0	Front panel: 1 x USB2.0 Rear panel: 1 x USB3.0	Front panel: 2 x USB2.0 Rear panel: 1 x USB3.0	Front panel: 2 x USB2.0 Rear panel: 1 x USB3.0	Front panel: 2 x USB2.0 Rear panel: 1 x USB3.0	Rear panel: 4 x USB3.0	Rear panel: 4 x USB3.0	Rear panel: 4 x USB3.0
ALARM IN / OUT	-	8 / 4	-	-	4 / 1	16 / 1	16 / 1	16 / 4	24 / 8	24 / 8	24 / 8
ETHERNET	1 - RJ45 Port, 10M/100M	1 - RJ45 Port, 10M/100M/1000M	1 - RJ45 Port, 10M/100M/1000M	1 - RJ45 Port, 10M/100M	1 - RJ45 Port, 10M/100M/1000M	1 - RJ45 Port, 10M/100M/1000M	1 - RJ45 Port, 10M/100M/1000M	2 - RJ45 Port, 10M/100M/1000M	4 - RJ45 Port 10M/100M/1000M (adaptive); 2 - RJ45 1000M SFP Ethernet	4 - RJ45 Port 10M/100M/1000M (adaptive); 2 - RJ45 1000M SFP Ethernet	4 - RJ45 Port 10M/100M/1000M (adaptive); 2 - RJ45 1000M SFP Ethernet
PoE	-	-	-	8 – 100Mbps RJ45 ports; IEEE 802.3af/at	16 – 100Mbps RJ45 ports; IEEE 802.3af/at	16 – 100Mbps RJ45 ports; IEEE 802.3af/at	16 – 100Mbps RJ45 ports; IEEE 802.3af/at	-	-	-	-
ESATA	-	-	-	-	-	-	-	1	1	1	1
SERIAL INTERFACE	1 x RS485	1 x RS485	1 x RS485	-	-	1 x RS485	1 x RS485	1 x RS232; 1 x RS485	1 x RS232; 1 x RS485	1 x RS232; 1 x RS485	1 x RS232; 1 x RS485
MINI-SAS PORTS	-	-	-	-	-	-	-	-	2	2	2
OPERATION											
MAXIMUM PoE POWER	-	-	-	30W / port; 108W total	30W / port; 240W total	30W / port; 200W total	30W / port; 200W total	-	-	-	-
RACK MOUNT	No	Yes; Optional Accessory	Yes; Optional Accessory	No	Yes; Optional Accessory	Yes; Ears Included	Yes; Ears Included	Yes; Ears Included	Yes; Shelf or Rails Req'd	Yes; Shelf or Rails Req'd	Yes; Shelf or Rails Req'd
HDD BAYS & SIZES	1 SATA, up to 10TB	2 SATA, up to10TB each	2 SATA, up to 10TB each	1 SATA, up to 10TB	2 SATA, up to 10TB each	4 SATA, up to 10TB each	4 SATA, up to 10TB each	8 SATA, up to 10TB each; Raid 0, 1, 5, 6, 10	16 SATA, (hot swappable) up to 10TB each; Raid 0, 1, 5, 6, 10, 50, 60	16 SATA, (hot swappable) up to 10TB each; Raid 0, 1, 5, 6, 10, 50, 60	16 SATA, (hot swappable) up to 10TB each; Raid 0, 1, 5, 6, 10, 50, 60
USER INSTRUCTION MANUAL	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual	Click Here for Manual
REMOTE USERS	128	128	128	128	128	128	128	128	128	128	300
PTZ CONTROL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
QUICK SETUP GUIDE	Click Here for QSG	Click Here for QSG	Click Here for QSG	Click Here for QSG	Click Here for QSG	Click Here for QSG	Click Here for QSG	Click Here for QSG	Click Here for QSG	Click Here for QSGk	Click Here for QSG
ONVIF SUPPORT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ACCESSORIES	4KTESTMON Video Test Monitor; NSW081P PoE Switch	4KTESTMON Video Test Monitor; XDLBB2 Lockbox; NSW081P & NSW162P PoE Switches; RCKERS1 Rack Ears	4KTESTMON Video Test Monitor; XDLBB2 Lockbox; NSW081P, NSW162P & NSW242P PoE Switches; RCKERS1 Rack Ears	4KTESTMON Video Test Monitor	4KTESTMON Video Test Monitor; XDLBB2 Lockbox; RCKERS1 Rack Ears	4KTESTMON Video Test Monitor; LB3L Lockbox	4KTESTMON Video Test Monitor; LB3L Lockbox; NSW081P, NSW162P & NSW242P PoE Switches	4KTESTMON Video Test Monitor; LB3L Lockbox; NSW081P, NSW162P & NSW242P PoE Switches	4KTESTMON Video Test Monitor; PWR-300A-IN Redundant Power Supply; NASDE08 & DE1600 Disk Enclosures; NSW081P, NSW162P & NSW242P PoE Switches; FB-HDMI4-C-NB & FB-HDMI6-C-NB HDMI Decoder Cards	4KTESTMON Video Test Monitor; PWR-300A-IN Redundant Power Supply; NASDE08 & DE1600 Disk Enclosures; NSW081P, NSW162P & NSW242P PoE Switches; FB-HDMI4-C-NB & FB-HDMI6-C-NB HDMI Decoder Cards	4KTESTMON Video Test Monitor; PWR-300A-IN Redundant Power Supply; NASDE08 & DE1600 Disk Enclosures; NSW081P, NSW162P & NSW242P PoE Switches; FB-HDMI4-C-NB & FB-HDMI6-C-NB HDMI Decoder Cards

NVR & DISPLAY ACCESSORIES							
MODEL NUMBER	 <i>DC4K</i>	 <i>RCKERS1</i>	 <i>LB3L XDLBB2</i>	 <i>NASDE08 DE1600</i>	 <i>NSW081P NSW162P NSW242P</i>	 <i>FB-HDMI4-C-NB FB-HDMI6-C-NB</i>	 <i>PWR-300A-IN</i>
DESCRIPTION	Video Decoder	Rack Ears	Lockbox	Mini-SAS Disk Enclosure	8, 16 & 24 Port PoE Network Switches	HDMI Output Decoder Cards	Redundant Power Supply
FEATURES	Displays on HDMI or VGA Monitors, up to 4K Resolution	Provide easy rack mounting	Provide Security and Protection	8 or 16 HDD Bays	10/100Mbps Ethernet Ports	4 & 6ch HDMI outputs for Video Walls	For NVR's w/ large quantities of HDD's
	Decodes up to 12MP (4000 x 3000) Resolution Video	Rigid Galvanized Iron	Removable top Lid for easy Access	Up to 10TB each HDD	1 (8-port) & 2 x Gigabit combo ports	Multi-Window display	Protection against short circuit, overload and overvoltage
	Up to 16 cameras displayed simultaneously	No add'l Mount req'd	Keyed Lock , Front Door	Mini-SAS Interface	IEEE802.3af/t, up to 30W for single port	HDMI display output up to 4k	Front panel indicator lights
	Supports H.265, H.264, MPEG4, MPEG2	Black Color	Rack Mounts Included	Rack Mountable but mounts are not included	Up to 825ft transmission distance	Supports H.265 or H.264	Built-in Fan for heat dissipation
	2-way Audio Decoding	For use w/ HNR08, HNR16 & NR16P2 recorder	Tough Electrolytic Galvanized Iron	For use w/NR6416, NR12816 & NR25616 recorders	For use w/ Hybrid's, NR32P, NR648, NR6416, NR12816 & NR25616 recorders	For use w/ NR6416, NR12816 & NR25616 recorders	For use w/ NR6416, NR12816 & NR25616

Sales Team Support		
National Sales Mgr	Paul Lange	603-303-7422
Northeast Region	Bill O'Day	973-647-2282
South Central Region	Todd Dunham	678-372-4365
Midwest Region	Jim Ball	847-757-7765
South West Region	Brian Crockett	512-574-0854
West Region	John Jacobsen	503-857-3207