Budgetary Series

	FD-502Ae V6	VD-502Ae V6	OB-502Ae V6	FB-300Ne Star	FD-302Ne Star	VD-302Ne Star	OB-302Ne Star
	e	e	e	Project Only 3G Option e	Project Only e	e	e
Environment	Indoor	Outdoor	Outdoor	Indoor	Indoor	Outdoor	Outdoor
Image Sensor	1/2.5" CMOS	1/2.5" CMOS	1/2.5" CMOS	1/2.8" Sony Exmor™ CMOS	1/2.8" Sony Exmor™ CMOS	1/2.8" Sony Exmor™ CMOS	1/2.8" Sony Exmor™ CMOS
Shutter Speed	1/32000 s ~ 1 s	1/32000 s ~ 1 s	1/32000 s ~ 1 s	1/120000 s ~ 1 s	1/120000 s ~ 1 s	1/120000 s ~ 1 s	1/120000 s ~ 1 s
Max. Resolution	5M (2592 x 1944)	5M (2592 x 1944)	5M (2592 x 1944)	3M (2048 x 1536)	3M (2048 x 1536)	3M (2048 x 1536)	3M (2048 x 1536)
Focal Length / F Value	f=3.3~10.5mm/F1.4	f=3.3~10.5mm/F1.4	f=3.3~10.5mm/F1.4	-	f=2.8~12mm/F1.4	f=2.8~12mm/F1.4	f=2.8~12mm/F1.4
View Angle H/V/D (Normal)	86°~33° / 64°~25° / 112°~41°	86°~33° / 64°~25° / 112°~41°	86°~33° / 64°~25° / 112°~41°	-	95°~33° / 68°~24° / 116°~41°	95°~33° / 68°~24° / 116°~41°	95°~33° / 68°~24° / 116°~41°
View Angle H/V/D (Ultra Wide Mode)	-	-	-	-	-	-	-
Min. Illumination (without Infrared)	0 Lux (IR On,B/W) 0.01 Lux (F1.4,B/W) 0.02 Lux (F1.4,Color)	0 Lux (IR On,B/W) 0.01 Lux (F1.4,B/W) 0.02 Lux (F1.4,Color)	0 Lux (IR On,B/W) 0.01 Lux (F1.4,B/W) 0.02 Lux (F1.4,Color)	0.0005 Lux (F1.4,B/W) 0.0006 Lux (F1.4,Color)	0 Lux (IR On,B/W) 0.0005 Lux (F1.4,B/W) 0.0006 Lux (F1.4,Color)	0 Lux (IR On,B/W) 0.0005 Lux (F1.4,B/W) 0.0006 Lux (F1.4,Color)	0 Lux (IR On,B/W) 0.0005 Lux (F1.4,B/W) 0.0006 Lux (F1.4,Color)
Iris Control	Fixed	Fixed	Fixed	DC-Iris	Fixed	Fixed	Fixed
Infrared LED/Max.Distance	12pcs / 30m	12pcs / 30m	12pcs / 30m	-	12pcs / 30m	12pcs / 30m	12pcs / 30m
Mechanical ICR	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Frame Rate (FPS)	13fps/5M (2592 x 1944) 30fps/2M (1920 x 1080)	13fps/5M (2592 x 1944) 30fps/2M (1920 x 1080)	13fps/5M (2592 x 1944) 30fps/2M (1920 x 1080)	30fps/3M (2048 x 1536) 30fps/2M (1920 x 1080)	30fps/3M (2048 x 1536) 30fps/2M (1920 x 1080)	30fps/3M (2048 x 1536) 30fps/2M (1920 x 1080)	30fps/3M (2048 x 1536) 30fps/2M (1920 x 1080)
Audio Compression	G.711/AMR	G.711/AMR	G.711/AMR	G.711/AMR	G.711/AMR	G.711/AMR	G.711/AMR
Audio Streaming	2-Way	2-Way	2-Way	2-Way	2-Way	2-Way	2-Way
Audio Input	Line In	Line In	Line In	Line In	Line In	Line In	Line In
Audio Output	Line Out	Line Out	Line Out	Line Out	Line Out	Line Out	Line Out
DI/DO	Yes (1/1)	Yes (1/1)	Yes (1/1)	Yes (1/1)	Yes (1/1)	Yes (1/1)	Yes (1/1)
RS-485	-	-	-	Yes	-	-	-
Analog Video Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wireless	-	-	-	-	-	-	-
Local Storage	Micro SD/SDHC/SDXC Slot Max. 128GB	Micro SD/SDHC/SDXC Slot Max. 128GB	Micro SD/SDHC/SDXC Slot Max. 128GB	Micro SD/SDHC/SDXC Slot Max. 128GB	Micro SD/SDHC/SDXC Slot Max. 128GB	Micro SD/SDHC/SDXC Slot Max. 128GB	Micro SD/SDHC/SDXC Slot Max. 128GB
Start-up Temperature	-20°C ~ 50°C (-4°F ~122°F)	-20°C ~ 50°C (-4°F ~122°F)	-20°C ~ 50°C (-4°F ~122°F)	-20°C ~ 50°C (-4°F ~122°F)	-20°C ~ 50°C (-4°F ~122°F)	-20°C ~ 50°C (-4°F ~122°F)	-20°C ~ 50°C (-4°F ~122°F)
Power Input							
	802.3af PoE	802.3af PoE	802.3af PoE	802.3af PoE	802.3af PoE	802.3af PoE	802.3af PoE
	DC12V / AC24V	DC12V / AC24V	DC12V*/ AC24V*/ DC48V*	DC12V	DC12V / AC24V	DC12V / AC24V	DC12V*/ AC24V*/ DC48V*
Value-Added Features							
	RTC, Temperature Alarm, FocusEasy™ WDR Enhancement	IP67, Vandal Proof, RTC, Temperature Alarm, Smart IR, FocusEasy™ WDR Enhancement	IP66, RTC, Temperature Alarm, Smart IR, FocusEasy™, Cable Management WDR Enhancement	RTC WDR Enhancement	RTC, Temperature Alarm, FocusEasy™ WDR Enhancement	IP67, Vandal Proof, RTC, Temperature Alarm, Smart IR, FocusEasy™ WDR Enhancement	IP66, RTC, Temperature Alarm, Smart IR, FocusEasy™, Cable Management WDR Enhancement
Remarks							
			*with PB-03	Lens Optional (CS Mount)			*with PB-03

Budgetary Series

	FD-202Ne V6	VD-202Ne V6	OB-202Ne V6	VD-E200Nf	OB-E200Nf
Environment	Indoor	Outdoor	Outdoor	Outdoor	Outdoor
Image Sensor	1/2.8" Sony Exmor™ CMOS	1/2.8" Sony Exmor™ CMOS	1/2.8" Sony Exmor™ CMOS	1/2.8" Sony Exmor™ CMOS	1/2.8" Sony Exmor™ CMOS
Shutter Speed	1/32000 s ~ 1 s	1/32000 s ~ 1 s	1/32000 s ~ 1 s	1/32000 s ~ 1 s	1/32000 s ~ 1 s
Max. Resolution	2M (1920 x 1080)	2M (1920 x 1080)	2M (1920 x 1080)	2M (1920 x 1080)	2M (1920 x 1080)
Focal Length / F Value	f=2.8~12mm/F1.4	f=2.8~12mm/F1.4	f=2.8~12mm/F1.4	f=3.6/F2.0	f=3.6/F2.0
View Angle H/V/D (Normal)	96°~35° / 52°~20° / 106°~40°	96°~35° / 52°~20° / 106°~40°	96°~35° / 52°~20° / 106°~40°	87° / 46° / 99°	87° / 46° / 99°
View Angle H/V/D (Ultra Wide Mode)	-	-	-	-	-
Min. Illumination (without Infrared)	0 Lux (IR On,B/W) 0.001 Lux (F1.4,B/W) 0.002 Lux (F1.4,Color)	0 Lux (IR On,B/W) 0.001 Lux (F1.4,B/W) 0.002 Lux (F1.4,Color)	0 Lux (IR On,B/W) 0.001 Lux (F1.4,B/W) 0.002 Lux (F1.4,Color)	0 Lux (IR On,B/W) 0.001 Lux (B/W) 0.002 Lux (Color)	0 Lux (IR On,B/W) 0.001 Lux (B/W) 0.002 Lux (Color)
Iris Control	Fixed	Fixed	Fixed	Fixed	Fixed
Infrared LED/Max.Distance	12pcs / 30m	12pcs / 30m	12pcs / 30m	15pcs / 20m	15pcs / 20m
Mechanical ICR	Yes	Yes	Yes	Yes	Yes
Frame Rate (FPS)	30fps/2M (1920 x 1080)	30fps/2M (1920 x 1080)	30fps/2M (1920 x 1080)	25fps/2M (1920 x 1080)	25fps/2M (1920 x 1080)
Audio Compression	G.711/AMR	G.711/AMR	G.711/AMR	-	-
Audio Streaming	2-Way	2-Way	2-Way	-	-
Audio Input	Line In	Line In	Line In	-	-
Audio Output	Line Out	Line Out	Line Out	-	-
DI/DO	Yes (1/1)	Yes (1/1)	Yes (1/1)	-	-
RS-485	-	-	-	-	-
Analog Video Out	Yes	Yes	Yes	-	-
Wireless	-	-	-	-	-
Local Storage	Micro SD/SDHC/SDXC Slot Max. 128GB	Micro SD/SDHC/SDXC Slot Max. 128GB	Micro SD/SDHC/SDXC Slot Max. 128GB	-	-
Start-up Temperature	-20°C ~ 50°C (-4°F ~122°F)	-20°C ~ 50°C (-4°F ~122°F)	-20°C ~ 50°C (-4°F ~122°F)	-25°C ~ 40°C (-13°F ~104°F)	-20°C ~ 40°C (-4°F ~104°F)
Power Input					
	802.3af PoE	802.3af PoE	802.3af PoE	802.3af PoE	802.3af PoE
	DC12V / AC24V	DC12V / AC24V	DC12V*/ AC24V*/ DC48V*	DC12V	DC12V
Value-Added Features					
	RTC, Temperature Alarm, FocusEasy™ WDR Enhancement	IP67, Vandal Proof, RTC, Temperature Alarm, Smart IR, FocusEasy™ WDR Enhancement	IP66, RTC, Temperature Alarm, Smart IR, FocusEasy™, Cable Management WDR Enhancement	IP66, EN50155, IK10 WDR Enhancement	IP66 WDR Enhancement
Remarks					

*with PB-03

Unique Camera Series

	PH-100Ah kit-A	PH-100Ah kit-B	WMB-300Ap V6	MD-H600Np-360 DN	MD-300Np-360 Star
	3G Option p	3G Option p	Coming Soon WiFi p	Coming Soon p	p
Environment	Indoor	Indoor	Indoor	Outdoor	Outdoor
Image Sensor	1/4" CMOS	1/4" CMOS	1/3" CMOS	1/1.8" Sony Exmor™ CMOS	1/2.8" Sony Exmor™ CMOS
Shutter Speed	1/20000 s ~ 1/5 s	1/20000 s ~ 1/5 s	1/32000 s ~ 1 s	1/120000 s ~ 1 s	1/120000 s ~ 1 s
Max. Resolution	1M (1280 x 720)	1M (1280 x 720)	3M (2304 x 1296)	5.5M (2720 x 2040)	3M (2048 x 1536)
Focal Length / F Value	f=3.7mm/F2.5	f=2.3mm/F2.5	f=2.8mm/F1.8	f=1.05mm/F2.8	f=1.05mm/F2.8
View Angle H/V/D (Normal)	57° / 30° / 66°	100° / 56° / 128°	100° / 56° / 114°	182°± 2°	182°± 2°
View Angle H/V/D (Ultra Wide Mode)	-	-	-	-	-
Min. Illumination (without Infrared)	1 Lux (F2.5,B/W) 1.2 Lux (F2.5,Color)	1 Lux (F2.5,B/W) 1.2 Lux (F2.5,Color)	0 Lux (IR On,B/W) 0.003 Lux (F1.8,B/W) 0.005 Lux (F1.8,Color)	0 Lux (IR On,B/W) 0.005 Lux (F1.6,B/W) 0.006 Lux (F1.6,Color)	0.008 Lux (F1.6,B/W) 0.01 Lux (F1.6,Color)
Iris Control	Fixed	Fixed	Fixed	Fixed	Fixed
Infrared LED/Max.Distance	-	-	30pcs/15m	4pcs/10m	-
Mechanical ICR	-	-	Yes	Yes	-
Frame Rate (FPS)	30fps/1M (1280 x 720)	30fps/1M (1280 x 720)	30fps/3M (2304 x 1296) 30fps/2M (1920 x 1080)	15fps/5.5M (2720 x 2040)	30fps/3M (2048 x 1536) 30fps/2M (1920 x 1080)
Audio Compression	G.711/AMR	G.711/AMR	G.711/AMR	G.711/AMR	G.711/AMR
Audio Streaming	2-Way	2-Way	2-Way	2-Way	1-Way
Audio Input	Line In	Line In	Built-in Mic	Built-in Mic	Built-in Mic
Audio Output	Line Out	Line Out	Built-in Speaker	Built-in Speaker	-
DI/DO	Yes (2/2)	Yes (2/2)	Yes (1/1)	Yes (1/1)	-
RS-485	-	-	-	-	-
Analog Video Out	-	-	-	-	Yes
Wireless	-	-	802.11 a/b/g/n with WPS	-	-
Local Storage	Micro SD/SDHC/SDXC Slot Max. 128GB	Micro SD/SDHC/SDXC Slot Max. 128GB	Micro SD/SDHC/SDXC Slot Max. 128GB	Micro SD/SDHC/SDXC Slot Max. 128GB	Micro SD/SDHC/SDXC Slot Max. 128GB
Start-up Temperature	-20°C ~ 50°C (-4°F ~122°F)	-20°C ~ 50°C (-4°F ~122°F)	-20°C ~ 50°C (-4°F ~122°F)	-20°C ~ 50°C (-4°F ~122°F)	-25°C ~ 55°C (-13°F ~131°F)
Power Input					
	802.3af PoE	802.3af PoE	802.3af PoE	802.3af PoE	802.3af PoE
	DC12V	DC12V	DC12V	DC12V*/ AC24V*/ DC48V*	DC12V*/ AC24V*/ DC48V*
Value-Added Features					
	Super-Covert Camera Design, Max. 3 Lenses, Edge Recording Support	Super-Covert Camera Design, Max. 3 Lenses, Edge Recording Support	Privacy Mask Button WDR Enhancement PIR	Vandal Proof, RTC, IP67, WDR Enhancement	EN50155, Vandal Proof, RTC, IP67, WDR Enhancement
Remarks					
				*with PB-03	*with PB-03

Unique Camera Series

	WOB-300Np Star	GOB-300Np Star LTE	OB-200Np-LR WDRPro-20x	OSD-200Np 30x	OSD-200A 20xp
	3G Wi-Fi p	3G LTE p	p	p	p
Environment	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor
Image Sensor	1/2.8" Sony Exmor™ CMOS	1/2.8" Sony Exmor™ CMOS	1/3" Progressive CMOS	1/3" Progressive CMOS	1/2.8" Sony Progressive CMOS
Shutter Speed	1/120000 s ~ 1 s	1/120000 s ~ 1 s	1/30000 s ~ 1/30 s	1/60000 s ~ 1/30s	1/10000 s ~ 1 s
Max. Resolution	3M (2048 x 1536)	3M (2048 x 1536)	2M (1920 x 1080)	2M (1920 x 1080)	2M (1920 x 1080)
Focal Length / F Value	f=2.8~12mm/F1.4	f=2.8~12mm/F1.4	f=4.7mm~94.0mm/F1.6	f=4.3~129mm/F1.6	f = 4.7~94 mm / F1.6
View Angle H/V/D (Normal)	95°~33° / 68°~24° / 116°~41°	95°~33° / 68°~24° / 116°~41°	55.4°~2.9° / 32.6°~1.6° / 62.7°~3.3°	58.9°~2.1° / 45.3°~1.61° / 71.3°~2.6°	57°~4° / 33°~2° / 64°~4°
View Angle H/V/D (Ultra Wide Mode)	-	-	-	-	-
Min. Illumination (without Infrared)	0 Lux (IR On,B/W) 0.0005 Lux (F1.4,B/W) 0.0006 Lux (F1.4,Color)	0 Lux (IR On,B/W) 0.0005 Lux (F1.4,B/W) 0.0006 Lux (F1.4,Color)	0 Lux (IR On,B/W) 0.001 Lux (B/W) 0.002 Lux (Color)	0.001 lux (B/W) 0.002 lux (Color)	0.01 lux (B/W) 0.05 lux (Color)
Iris Control	P-Iris	P-Iris	DC-Iris	DC-Iris	DC-Iris
Infrared LED/Max.Distance	20pcs / 60m	20pcs / 60m	4pcs / 150m	-	-
Mechanical ICR	Yes	Yes	Yes	Yes	Yes
Frame Rate (FPS)	30fps/3M (2048 x 1536) 30fps/2M (1920 x 1080)	30fps/3M (2048 x 1536) 30fps/2M (1920 x 1080)	30fps/2M (1920 x 1080)	30fps/2M (1920 x 1080)	30fps/2M (1920 x 1080)
Audio Compression	G.711/AMR	G.711/AMR	G.711/AMR	G.711/AMR	G.711 / G.726 ADPCM / AAC
Audio Streaming	2-Way	2-Way	2-Way	2-Way	2-Way
Audio Input	Line In	Line In	Line In	Line In	Line In
Audio Output	Line Out	Line Out	Line Out	Line Out	Line Out
DI/DO	Yes (1/1)	Yes (1/1)	Yes (1/1)	Yes (4/2)	Yes (4/2)
RS-485	Yes	Yes	Yes	-	-
Analog Video Out	Yes	Yes	Yes	-	-
Wireless	802.11 a/b/g/n with WPS	B1/B2/B3/B5/B7/B8/B20	-	-	-
Local Storage	Micro SD/SDHC/SDXC Slot Max. 128GB	Micro SD/SDHC/SDXC Slot Max. 128GB	Micro SD/SDHC/SDXC Slot Max. 128GB	Micro SD/SDHC/SDXC Slot Max. 128GB	Micro SD/SDHC/SDXC Slot Max. 128GB
Start-up Temperature	-40°C~60°C (-40°F~140°F): 802.3at -20°C~60°C (-4°F~140°F)	-40°C~60°C (-40°F~140°F): 802.3at -20°C~60°C (-4°F~140°F)	-40°C~60°C (-40°F~140°F): 802.3at -20°C~60°C (-4°F~140°F)	-40°C~50°C (-40°F~122°F): 802.3at -20°C~50°C (-4°F~122°F)	-40°C~50°C (-40°F~122°F): AC24V -7°C~50°C (19.4°F~122°F): 802.3at
Power Input	802.3at PoE Plus	802.3at PoE Plus	802.3at PoE Plus	802.3at PoE Plus	AC24V
	802.3af PoE	802.3af PoE		802.3af PoE	802.3at PoE Plus
	DC12V	DC12V		DC12V	
Value-Added Features					
	IP67, Vandal Proof, RTC, Temperature Alarm, Smart IR, SmartFocus, Auto IR Focus WDR Enhancement	IP67, Vandal Proof, RTC, Temperature Alarm, Smart IR, SmartFocus, Auto IR Focus WDR Enhancement	IP67, Vandal Proof, RTC, Electronic Image Stabilizer (EIS), Temperature Alarm, Smart IR AutoFocus, 20X Optical Zoom WDRPro (120dB)	IP66,16 Privacy Masks,256 Presets, Electronic Image Stabilizer (EIS), 30X Optical Zoom WDRPro (120dB)	IP66,16 Privacy Masks,256 Presets, 20X Optical Zoom WDR Enhancement
Remarks					

Video Server

VS-04A V2

Enviroment	Indoor
Max. Resolution	NTSC (720 x 480) PAL (720 x 576)
Number of Analog Video Channels	4
Video Compression	H.264 / Motion JPEG
Frame Rate (FPS)	30
Audio Compression	G.711 / AMR
Audio Streaming	2-Way
Audio Input	External Mic
Audio Output	External Speaker
DI/DO	Yes (4/4)
RS-485	Yes
VGA Out	Yes
Local Storage	SD/SDHC Slot Max. 32GB
Start-up Temperature	5°C ~ 45°C (41°F ~ 113°F)
Power Input	DC 12V
Value Added Features	
Remarks	

Video Management System

BRC64 Professional

General	
Camera Support	1~64
Compression Format	Motion-JPEG/ MPEG-4/ H.264
E-Map	Yes
Video Access by Web Browser	Yes
PTZ Control	Yes
Preset Control	Yes
Recording	
Continuous Recording	Yes
Manual Recording	Yes
Schedule Recording	Yes
Alarm Recording	Yes
Audio Recording	Yes
Buffer Storage for Alarm Images (before and after events)	Post-Recording: 1~600 sec
Playback	
Playback Mode	Play/Pause/ Stop/ Forward/ Reverse/ Speed Adjust/ Frame by Frame
Video Search	Time/ Date, Event
Multi-Channel Playback	Max.16
Security	
User Authority Management	Yes
Concurrent Login	Yes
Network	
DHCP Client Support	-
DHCP Server	-
UPnP Support	Yes
I/O Port	
USB 2.0	depends on PC H/W SPEC
Network Port	depends on PC H/W SPEC
HDD i/f	depends on PC H/W SPEC
Value-Added Features	
	Remote Live View & Playback, Broadcast, TV Wall, Generic RTSP, Corridor Mode

CMS Client / Matrix

General	
Max. Channels	Up to 1024 channels with multiple Brickcom NVRs
Advanced Image Rotation	90°, 180° or 270° degree image rotation supported
Smart Stream Optimization	Automatically adjust streaming quality
Event Notification	Highlight Video Window Event Log History Event Log Instant Playback
Emap	Multi-layer Maps for comprehensive overview Intuitive E-map Indicator Multiple Image Formats Support Event Notification
Playback	
Multi-channel Playback	16 channels high megapixel simultaneous playback for detail scene investigation
Smart Search	Motion Detection Foreign Object Detection Missing Object Detection DeFocus Alarm Tampering Detection
De-warping Methods	Yes
Digital Zoom	Yes
Video Export and Snapshot	Yes
Video Wall Configuration (with CMS-Matrix**)	
Multi-Monitor Management	Monitor identification Flexible User-defined layout Sequential Setting
Video Wall Setting Preview	Yes
Dual-Stream Support	Yes