

SONY

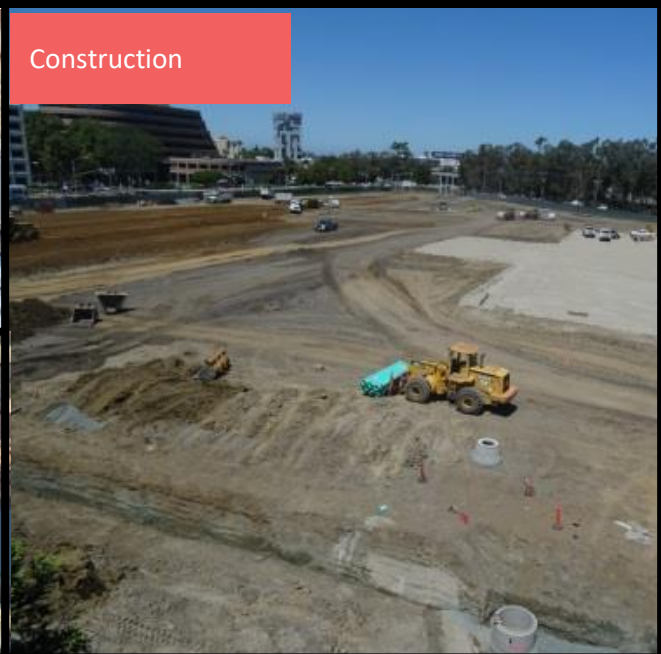


Sony Industrial Cameras

SONY

UAV Solutions

Expanding Market Applications



Consumer vs. Industrial

	Consumer	B2B Modules
Hardware Interface	USB, NFC, Wireless, battery	Unified wired connection(s) for power, video and remote control
Tech Support	Consumer Service (limited)	Industrial-level support & troubleshooting
API	Limited (public) API commands	Comprehensive camera function and control
Firmware Updates	Rare	Remote updates & function releases
Temp Range Operation	Consumer level	Controlled Industrial quality
Performance Improvements	Unpredictable streaming frame rate Slow trigger latency	Lower trigger latency, 30 fps, consistent live view frame rate, eliminates WiFi conflicts, reduced weight
Manufacturing	Consumer Schedule Subject to change without notice	Industrial extended time period. Ability to forecast Production changes announced
SDK	No	Windows and Linux
Zoom Parameter Control	No	Yes

DSC-QX30U

Compact Ultra Zoom

- 30x Optical Zoom, 60x w/SRZ*
- Optical Image Stabilization
- 20 MP Still Images
- 1080p60 Video Recording
- Simultaneous Live View
- Single Cable Control + Power + Video

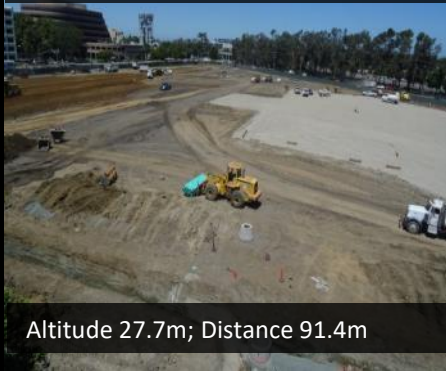


*Super Resolution Zoom

DSC-QX30U

Zoom in on the Details

4.3mm; f/3.5



Altitude 27.7m; Distance 91.4m

129.0mm; f/6.3



Altitude 27.7m; Distance 396.2m

4.3mm; f/3.5



Altitude 27.7m; Distance 69.9m

129.0mm; f/3.5



Altitude 27.7m; Distance 396.2m

UMC-R10C

Compact. Lightweight. Flexible.

- Interchangeable E-mount Lenses
- Large APS-C Sensor
- 20 MP Still Images
- 1080p30 Video Recording
- Simultaneous Live View Mode
- Full Camera Control



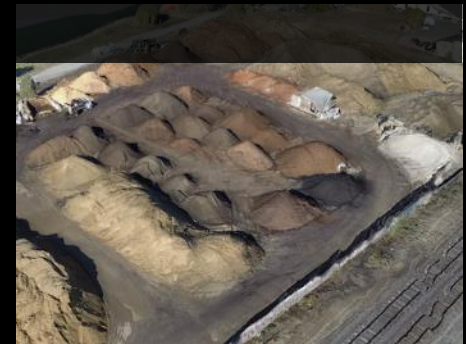
UMC-R10C

Ideal for Mapping/Surveying

Orthomosaic Basemap



3D Modeling



20MP
JPEG

Removable
Lens Options

1080p
Video

E-Mount APS-C Lenses

SELP1650

116g

Sony E-mount

Powered Zoom

Optical Steady Shot

Focal Length

16 – 50 mm

Focal Length (APS-C sensor)

24 – 75 mm

Aperture

F3.5 – 5.6

Angle of View (APS-C sensor)

83– 32°

SEL20F28

69g

Sony E-mount

Wide Angle Prime

Low-Distortion

20 mm

30 mm

F2.8

70°

SEL16F28

67g

Sony E-mount

Slim, Compact Wide

Angle

16 mm

24 mm

F2.8

83°



UMC-R10C Power Solutions

	Sony Rechargeable Battery Pack NP-FW50, 7.2v (Bundled)	Sony DC Plate AC-PW20 7.2v	Non-Sony DC Plate (Chinese Supplier)	Build Own DC Plate
				
Pros	- Bundled - Sony genuine battery - Once battery is charged, it can be charged through USB	- Sony genuine DC Plate - No charge necessary - Use power from host system	- Lower cost Example: Link: https://www.alibaba.com/product-detail/factory-price-PW20-battery-coupler-with_60326826315.html?spm=a2700.7724838.0.0.WtsSjo	- Low cost
Cons	- Must be charged when camera is delivered - Battery charger required (BC-TRW)	- Requires purchase - Wire modification required to meet system requirements	- Not Sony genuine product - Need to negotiate	- Cable and package design required - Disassemble bundled battery to use a battery ID board

UMC-S3C

Unmatched Low Light Sensitivity

- ISO 409,600 (0.004 lux color)
- Full Frame (35mm) Sensor
- 4K Streaming Video via HDMI
- 12 MP Still Images
- Micro SD Card Recording
- DC Power; USB2 Control & Video



MAR 2017

Large Optical Formats

Crop Factor

1.00

Full Frame
35 mm

UMC-S3C

1.29

APS-C

UMC-R10C

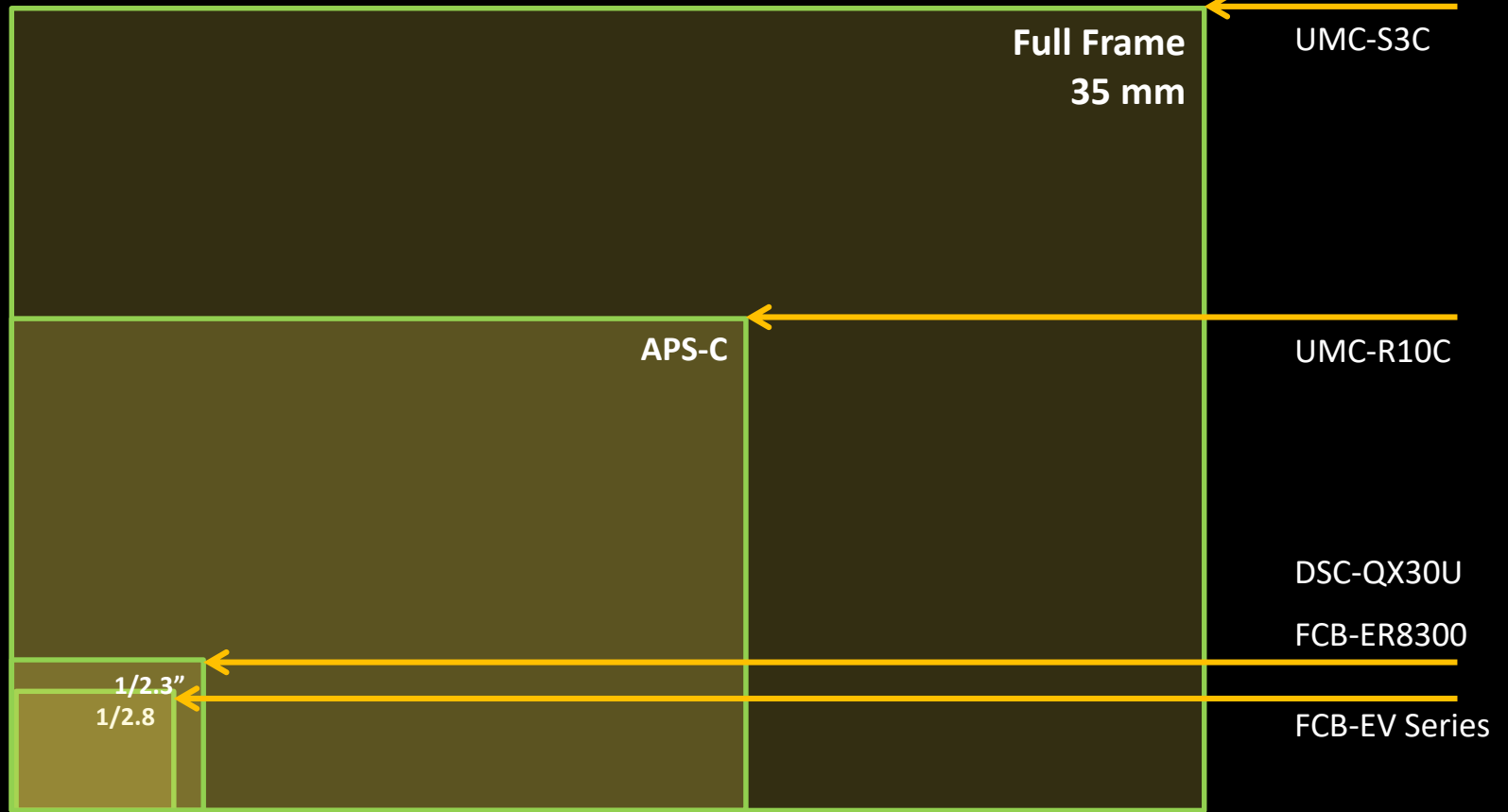
5.62

1/2.3"
1/2.8

DSC-QX30U

FCB-ER8300

FCB-EV Series



Model	FCB-EV7100	DSC-QX30U	UMC-R10C	UMC-S3C
Lens/Lens Mount	10X Optical Zoom; F1.8-3.4	30x Integrated Optical Zoom; F3.4-F6.3	E-mount (zoom and F-stop lens dependent)	E-mount (zoom and F-stop lens dependent)
Sensor	1/2.8 inch Exmor	1/2.3 inch Exmor R®	APS-C, Exmor R®	Full Frame (35mm) Exmor®
Still Resolution		20MP, JPEG	20MP, JPEG	12MP JPEG, RAW
Recorded Movie Resolution	1080p60 YUV 4:2:2	1080p60 MP4	1080p30, MP4	XAVCS 4K 1080p60 MP4
Shutter	Rolling Shutter	Global Mechanical for Still Capture	Global Mechanical for Still Capture	Global Mechanical for Still Capture
Minimum Illumination	0.35 lux F1.8, 1/30s	4 lux ISO 80-12800 1/60s	Depends on Lens	0.004 lux color ISO 409,600 F1.4, 1/12s
Weight	210 g	178g	158g (Body Only)	410g (Body Only)
Applications	UAV, Robot, Marine	Standoff Inspection and Observation	Aerial Mapping, Survey and Inspection	Standoff Inspection and Observation

Key API Features

Comprehensive Camera APIs

Shutter Speed

Target Media

Aperture

Movie Recording

Zoom Control

Image Transfer

Exposure Settings

Auto On/Off

White Balance

Standby Mode

Still Capture

USB FW Update

ISO

Focus Mode

Live View

And many more...

Sony Provides

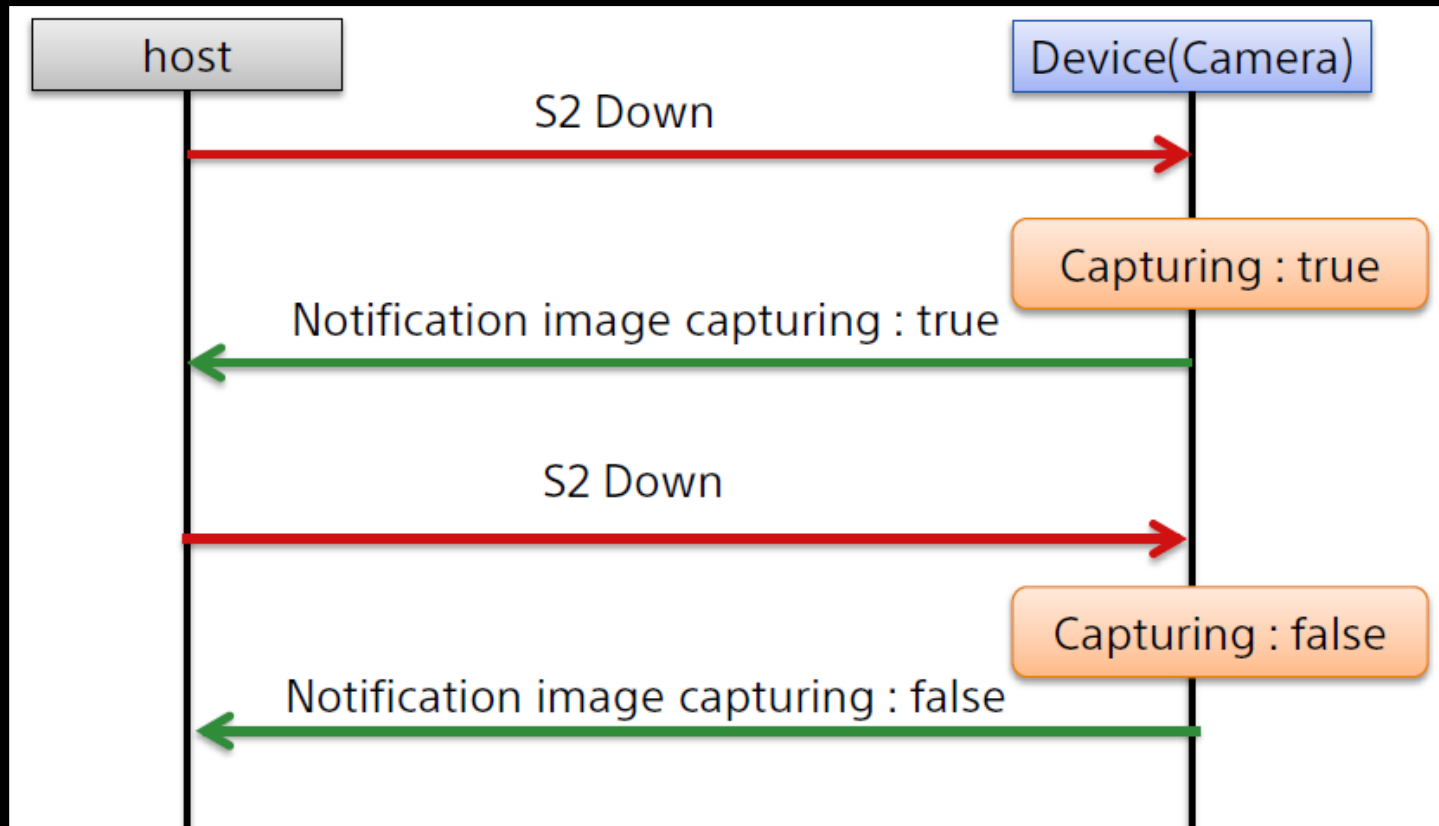
- Diverse industrial product line – size, resolution, zoom, connectivity
- Leading-edge image capture technology
- Compact, light weight, large-format industrial cameras designed for autonomous applications
- Low latency image capture
- Confidence in captured data quality
- Enable game changing image analysis

New FW functions: QX30U v.3 / R10C v.2

- Geotag on EXIF Tags
 - Geo info written on EXIF tag
 - Geo info sent by command script from external device
- Image Capturing Notification
 - Respond ACK command when saved on storage media in still capturing mode
- Interval Rec
 - Interval Rec command for still capturing
 - Minimum interval setting 1.5-2 second

Geotag on EXIF Tags

Latitude_Ref	"north" - 0x00 / "south" - 0x01
Latitude_Degrees	Degrees [0~90]
Latitude_Minutes	Minutes [0~59]
Latitude_Seconds_Numer	Latitude Seconds (Numeration) ※Numer/Denom should be less than 60 [0~2147483647]
Latitude_Seconds_Denom	Latitude Seconds (Denomination) ※Numer/Denom should be less than 60 [1~2147483647]
Longitude_Ref	"west" - 0x00 / "east" - 0x01
Longitude_Degrees	Degrees [0~180]
Longitude_Minutes	Minutes [0~59]
Longitude_Seconds_Numer	Seconds (Numeration) ※Numer/Denom should be less than 60 [0~2147483647]
Longitude_Seconds_Denom	Seconds (Denomination) ※Numer/Denom should be less than 60 [1~2147483647]
AltitudeMslValid	Altitude Validation "true" - 0x01 / "false" - 0x00
AltitudeMslSign	Altitude Sign "+" - 0x00 / "-" - 0x01
AltitudeMsl_Numer	Altitude Value (Numeration) [0~2147483647]
AltitudeMsl_Denom	Altitude Value (Denomination) [1~2147483647]



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