

Camera Types

Here's the table comparing various camera types based on commonly used components:

S. No.	Type of Camera	Categories	Image Sensor	Lens	Processor	Memory Card
1	Panchromatic Satellite Imagery	Satellite Imagery	CCD or CMOS	Single lens with a fixed focal length (FL)	Dedicated image processing chip	Removable memory card (SD, CF, or XQD)
2	Multispectral Satellite Imagery	Satellite Imagery	CCD or CMOS image sensor with multiple channels	Interchangeable lenses with different FL	Dedicated image processing chip with algorithms for band selection, fusion, or analysis	Removable memory card (SD, CF, or XQD)
3	Hyperspectral Satellite Imagery	Satellite Imagery	CCD or CMOS image sensor with multiple channels	Interchangeable lenses with different FL	Powerful image processing unit with spectral unmixing, classification, or anomaly detection	High-speed removable memory (ENVI or HDF card)
4	Fluorescence Microscopes	Bio-Medical Imagery	CMOS or CCD	Interchangeable lenses with a C-mount or F-mount	-	SD or CF
5	Confocal Microscopes	Bio-Medical Imagery	CMOS or CCD with high sensitivity for low-light imaging	Interchangeable lenses with a C-mount or F-mount	-	SD or CF
6	X-ray Cameras	Bio-Medical Imagery	Special type of CCD with high sensitivity for low-dose X-rays	Fixed-focus lenses with specialized coatings to minimize X-ray scatter	-	Specialized memory cards (CF or PCMCIA)
7	Infrared Cameras	Bio-Medical Imagery	Micro-bolometer or indium gallium arsenide (InGaAs) sensor	Fixed-focus lenses with coatings to maximize IR transmission	-	SD or CF
8	Endoscopic Camera	Bio-Medical Imagery	CCD and CMOS	Lenses designed for high-resolution,	Processors with enhancement technologies like narrow band	SD or CF

				low-light imaging	imaging, autofluorescence, spectral imaging	
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Here's the extended table including ANPR/LPR cameras, dome cameras, bullet cameras, C-mount cameras, and additional infrared cameras:

S. No.	Type of Camera	Categories	Image Sensor	Lens	Processor	Memory Card
9	ANPR/LPR Cameras	Surveillance	CMOS or CCD	May vary	-	Internal storage, may support external memory cards
10	Dome Camera	Surveillance	CMOS or CCD	May vary	Typically stores captured images on internal storage	Internal storage
11	Bullet Camera	Surveillance	CMOS or CCD	High-quality lens with wide aperture for low light	Faster processors for better recognition accuracy	-
12	C-mount Camera	Surveillance	CMOS or CCD	C-mount lenses with focal lengths from 8mm to 50mm	Processing speed can vary from 1.5 GHz to 2.5 GHz or higher	Supports memory cards up to 256 GB or higher
13	Infrared Cameras	Surveillance	Micro-bolometer sensor	Range of focal lengths from 9mm to 35mm	Single-core to quad-core, processing speeds 1.5 GHz to 2.5 GHz	Supports memory cards up to 128 GB or higher

This table summarizes various types of surveillance cameras, highlighting key components such as image sensors, lenses, processing capabilities, and memory support.