



## FEATURES

- 2MP, 1/2.8" CMOS image sensor, low illuminance, high image definition
- Outputs 2MP (1920 × 1080) @ 25/30 fps
- H.265 codec, high compression rate, ultra-low bit rate
- Built-in IR LED, max IR distance: 30 m
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- Abnormality detection: Motion detection, video tampering, network disconnected, IP conflict, illegal access, voltage detection
- 12V DC/PoE power supply
- IP67 protection

# MT-IPDW220E

## TECHNICAL SPECIFICATIONS

Camera	Image Sensor	1/2.8" CMOS			
	Effective Pixels	1920 (H) × 1080 (V)			
	ROM	128 MB			
	RAM	128 MB			
	Scanning System	Progressive			
	Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s			
	Min. Illumination	0.01 Lux@F2 (Color, 30 IRE) 0 Lux (Illuminator on)			
	S/N Ratio	> 56 dB			
	Illumination Distance	30 m (98.43 ft) (IR)			
	Illuminator On/Off Control	Auto; manual			
	Illuminator Number	3 (IR LED)			
Pan/Tilt/Rotation Range	Pan: 0°–355° Tilt: 0°–65° Rotation: 0°–355°				
Lens	Lens Type	Fixed-focal			
	Mount Type	M12			
	Focal Length	2.8 mm; 3.6 mm			
	Max. Aperture	2.8 mm: F1.6 3.6 mm: F1.6			
	Field of View	2.8 mm: Horizontal: 107°; Vertical: 56°; Diagonal: 127° 3.6 mm: Horizontal: 88°; Vertical: 44°; Diagonal: 105°			
	Iris Type	Fixed			
	Close Focus Distance	2.8 mm: 0.7 m (2.30 ft) 3.6 mm: 1.3 m (4.27 ft)			
	DORI Distance	Lens	2.8 mm	3.6 mm	
		Detect	43.9 m (144.03 ft)	58.9 m (193.24 ft)	
		Observe	17.5 m (57.41 ft)	23.6 m (77.43 ft)	
Recognize		8.8 m (28.87 ft)	11.8 m (38.71 ft)		
Identify		4.4 m (14.44 ft)	5.9 m (19.36 ft)		
Smart Event	IVS	NO			
Video	Video Compression	H.265; H.264; H.264B; MJPEG (Only supported by the sub stream)			
	Smart Codec	Smart H.265+; Smart H.264+			
	Video Frame Rate	Main stream: 1920 × 1080 @1–25/30 fps Sub stream: 704 × 576 @25 fps; 704 × 480 @30 fps			
	Stream Capability	2 streams			
	Resolution	Main stream: 1920 × 1080@1–25/30 fps Sub stream: 704 × 576@1–25 fps 704 × 480@1–30 fps *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.			
	Stream Capability	2 streams			
	Resolution	1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)			
	Bit Rate Control	CBR/VBR			
	Video Bit Rate	H.264: 32 kbps–6144 kbps H.265: 12 kbps–6144 kbps			
	Day/Night	Auto(ICR)/Color/B/W			
	Video	BLC	Yes		
HLC		Yes			
WDR		DWDR			
White Balance		Auto; natural; street lamp; outdoor; manual; regional custom			
Gain Control		Auto/Manual			
Noise Reduction		3D DNR			
Motion Detection		OFF/ON (4 areas, rectangular)			
Region of Interest (RoI)		Yes (4 areas)			
Image Rotation		0°/90°/180°/270° (Support 90°/270° with 1080p resolution and lower)			
Mirror		Yes			
Privacy Masking		4 areas			
Alarm Event					
Network	Network Port	RJ-45 (10/100 Base-T)			
	Network Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; Bonjour			
	Cyber Security	Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade			
	Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone			
	User/Host	20 (Total bandwidth: 48 M)			
	Storage	FTP; SFTP; Micro SD card (support max. 256 G); NAS			
	Browser	IE - Chrome - Firefox			
	Management Software	Smart PSS; DSS; DMSS			
	Mobile Client	IOS; Android			
	Certification	CE-LVD: EN 62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07			
	Power	Power Supply	12 V DC/PoE		
Power Consumption		Basic: 1.9 W (12 V DC); 2.4 W (PoE) Max. (ICR + H.265 + max. resolution + main stream + IR intensity + WDR + IVS): 4.5 W (12 V DC); 5.4 W (PoE)			
Environment	Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F)			
	Operating Humidity	≤ 95%			
	Storage Temperature	–40 °C to +60 °C (–40 °F to +140 °F)			
	Protection	IP67; IK10			
Structure	Casing	Metal - Plastic shell			
	Dimensions	98.1 mm × Φ122 mm			
	Net Weight	0.35 kg (0.8 lb)			
	Gross Weight	0.48 kg (1.1 lb)			

Datasheet rev.A23.5