

1.0 Manufacturer

Merit LILIN ENT. Co. Ltd
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2.0 Warranty

Manufacturer shall warrant the camera to be free from defects in material and workmanship for three years from the purchase date.

3.0 General Specifications

The network camera shall be LILIN PSR5024EX20 camera.

Video Performance

- A. The camera shall have a minimum light requirement of 0.5 Lux at F1.6 in color mode, 0.1 Lux at F1.6 in B/W mode or 0 Lux if IR on.

Power

- A. Power requirement for the network camera shall be AC/DC 24V, 80W.
- B. The camera shall provide power consumption PoE++ at 55W.

Sensor

- A. The camera shall use a progressive scan 1/2.8" CMOS image sensor.
- B. The camera shall produce an effective resolution of 1944 (H) × 1224 (V) = 2,379,456 pixels.
- C. The camera shall produce a maximum resolution of 1952 (H) × 1236 (V) = 2,412,672 pixels.

Certifications

- A. The camera shall be compliant with CE certifications.
- B. The camera shall be compliant with FCC Class A certifications.
- C. The camera shall be rated to IP66 standard against water and dust ingress.
- D. The camera shall be rated to IK10 vandal resistant rating.

PC Requirements

- A. The PC CPU requirement shall be Intel® Core™ I3 or higher grade for the camera.
- B. The camera shall support Windows 7 64 bit, Windows 8 64 bit, Windows 10 64 bit.
- C. The PC memory RAM shall be at least 4GB or above for the camera.

Mechanical

- A. The camera shall not exceed a dimension of 395mm (H) × 198mm (D) approximately.
- B. The camera shall not exceed a weight of 6000g approximately.

Video Output

- A. The camera shall support live video output of CVBS 1.0Vp-p, 75 Ω terminal block type.

Video Streaming

- A. Video streaming format shall meet the standard H.264, and in order to provide better quality and compression rate, shall support H.264 main profile, H.264 high profile and also shall support Motion JPEG.
- B. The camera shall provide RTP/HTTP, RTP/TCP, RTP/UDP and multicast features.
- C. The camera shall provide 4 streaming with combine compression and resolution at same time for various Internet or Intranet applications.
- D. The camera shall provide ePTZ & digital zoom is supported.
- E. The camera shall provide 16X optical zoom.
- F. The camera shall support VBR, CBR, GOP adjustable, fixed bitrate range encoding mode.
- G. The camera shall provide 4 of resolution in browser for user easy to change resolution.

Network Security

- A. The camera shall support up to 10 users for accessing the streaming.
- B. The camera shall support multiple user access levels with password protection.

Authentication

- A. The camera shall support base64 HTTP encryption, digest HTTP authentication, 802.1x, IP address filtering, RTSP authentication, DDNS via HTTP.

Integration

- A. The camera shall be able to be accessed by the mobile device (IOS and Android).
- B. The camera shall conform to the ONVIF Profile S standard and provide official documentation.
- C. The camera shall support LILIN Navigator Enterprise 2.0.
- D. The camera shall support 3rd. party VMS through LILIN HTTP API.

SD Card Recording

- A. The camera shall support micro SD, SDHC SD and SDXC SD.
- B. The camera shall support circular recording.
- C. The camera shall support SD card size up to 128GB.

Web Browser

- A. The camera shall support IE 9, IE 10, IE 11, Chrome, Firefox, Opera.

Alarm Events

- A. The camera shall support motion detection, tamper detection, advanced motion detection, audio detection, traffic light detection, tripwire detection, object counting, network loss detection.

Alarm Notification

- A. The camera shall provide alarm notification with SMTP, FTP, HTTP post, SAMBA, SD card, Alarm Output, SNMP Trap, Preset position.

Environmental

- A. The camera shall be operated in following temperature range: - 40°C – + 50°C/- 40°F – 122°F.

Lens

- A. The camera shall support zoom lens at 4.7mm – 117.5mm.
- B. The camera shall support minimum aperture ratio at 1:1.6 (WIDE) – 3.5 (TELE).
- C. The camera shall support F1.6 ~ 32 angle of view at P-iris.
- D. The camera shall support wide end of view horizontal at 59.94°.
- E. The camera shall support wide end of view vertical at 36.16°.
- F. The camera shall support tele end of view horizontal at 3.30°.
- G. The camera shall support tele end of view vertical at 1.87°.
- H. The camera shall support zoom speed at 0 - 7 selectable (fast: approx. 6.0 second (tele to wide) in manual mode).
- I. The camera shall support focus speed at 0 - 7 selectable (fast: approx. 6.0 second (far to near) in manual mode).

PTZ control function

- A. The camera shall provide PTZ Control including: pan and tilt / zoom and focus / iris and ICR / 256 preset position / home position.
- B. The camera shall support panning range at 360° endless.
- C. The camera shall support panning speed at manual approx. 0.1°/s – 120°/s 8 steps, preset approx. 1°/s – 300°/s, alarm trigger speed 300°/s.
- D. The camera shall support panning mode at manual, auto, manual position, sequential position.
- E. The camera shall support tilting range at - 30° – + 210°.
- F. The camera shall support tilting speed at manual approx. 0.1°/s – 120°/s 8 steps, preset approx. 1°/s – 300°/s, alarm trigger speed 300°/s.
- G. The camera shall support tilting mode at manual, auto, manual position, sequential position.
- H. The camera shall provide the auto mode settings including: off, scan(16), seq(256), tour(16), patrol(16), auto tracking.
- I. The camera shall provide the schedule settings including: off, scan(4), seq(256), tour(4), patrol(4), preset position(256)(via web interface).

Infrared LED

- A. The camera shall support IR distance at 150m.

- B. The camera shall support peak wavelength at 850nm.
- C. The camera shall support automatically adjusted beam spread, depending on the zoom ratio.
- D. The camera shall provide rain repellent glass.

Video Resolutions

- A. The network camera shall be able to produce images in 1920x1080 (2MP), 1280x960 (1.3MP), 1280x720 (1MP), 720x480 (D1), 720x576 (D1), 640x480 (VGA) and 352x240 (CIF).

Maximum Frame Rate

- A. The camera shall produce 60Hz: 60 FPS @ 1920 x 1080; 50Hz: 50 FPS @ 1920 x 1080 resolution with normal mode (H.264 / MJPEG) video compression.
- B. The camera shall produce 60Hz: 30 FPS @ 1920 x 1080; 50Hz: 25 FPS @ 1920 x 1080 resolution with WDR mode (H.264 / MJPEG) video compression.

IR-cut Filter

- A. The IR cut filter shall be able to support color (day), monochrome (night), auto.

Scanning System

- A. The camera shall use a progressive scan image sensor.

Picture Setting

- A. The camera shall provide contrast, sharpness.

Picture Effects

- A. The camera shall provide mirror, flip.

White Balance

- A. The camera shall provide the white balance settings including: auto, indoor, outdoor, custom.

Video Quality

- A. The camera is able to specify its shutter speed for min and max range 1/1s to 1/10000s for various environments.
- B. The camera shall support back light compensation.
- C. The camera shall support HDR at 90dB.
- D. The camera shall support 3D noise reduction.
- E. The camera shall support privacy mask up to 16 zones.
- F. The camera shall support Sense up.
- G. The camera shall support Sense up+.
- H. The camera shall support auto gain control up to 50dB.
- I. The S/N ratio shall be more than 50dB (AGC off).
- J. The camera shall support exposure mode including: AUTO / IRIS.P / SHUT.P / MANUAL.
- K. The camera shall support defog.
- L. The camera shall support digital image stabilization.

Network

- A. The camera shall support 10Base-T, 100Base-TX and 1000Base-T.
- B. The camera shall support LILIN API (CGI).
- C. The camera shall support display OSD date, time, camera name.

CPU

- A. The camera shall support up to embedded SoC, 500MHz Dual ARM Cortex-A9 & 500MHz ARM11.
- B. The camera shall support up to 1GB DDR3, 256MB flash memory.

Video Display

- A. The camera shall provide the video display settings including: LILIN Universal Active X, HTML 5.

OS

- A. The OS of the camera should be embedded Linux 3.8.0.

Protocols

- A. The camera shall support the following network protocols: IPv4, IPv6, TCP, UDP, HTTP, SMTP, SIP, QoS, SNMP V1, SNMP V2, SNMP V3, SNMP Trap, NTP, DDNS, UPnP, FTP, ARP, DHCP, PPPoE, DNS, RTSP, RTCP, Telnet, ICMP, IGMP, ONVIF Profile S, Bonjour and 802.1x.

Others

- A. The camera shall support multi IP addresses.

4.0 Installation

- A. All equipments shall be tested and configured based on the manufacturer guide line prior to installation.
- B. All the products shall be updated for the latest firmware.
- C. All the products shall be changed for the default username and password prior to installation.

5.0 Environmental Green Policy

- A. The specified camera shall be manufactured in accordance with ISO 14001.
- B. The specified camera shall be compliant with the EU directives RoHS and WEEE.
- C. The specified camera shall be compliant with the EU regulation REACH.

END OF SECTION