

SALIENT CHARACTERISTICS

Network Switch

CATALYST 3850 24 PORT POE LAN WS-C3850-24P-L

The network switch must have integrated wireless controller capability with up to 40G of wireless capacity per switch (24-port); support for up to 100 access points and 2000 wireless clients on each switching entity; 24 10/100/1000 Mbps data PoE+ and Cisco UPOE models with energy efficient Ethernet (EEE); 24 port 1 gigabit Ethernet SFP-based models; scalability and resiliency with 480 Gbps of stack throughput; five optional uplink modules² with 4 x Gigabit Ethernet, 2 x10 gigabit Ethernet, 4x10 gigabit ethernet³; 8x10 gigabit ethernet⁴, or 2x40 gigabit Ethernet QSFP+4 ports. Dual redundant, modular power supplies and three modular fans providing redundancy, full IEEE 802.3at(PoE+) with 30W power on all copper ports in 1 rack unit (RU) form factor; IEEE 802.3bz (2.5/5 G/s BASE T) to go beyond 1 Gb/s with existing Cat5e and Cat6; IEEE 802.1ba Audio Video bridging(AVB); Software support for IPv4 and IPv6 routing, multicast routing, modular quality of service (QoS), Flexible NetFlow (FNF), and enhanced security features.

Uninterrupted Power Supply

APC SMART-UPS 1500 LCD RM 120V WITH SMT1500R2-NMC

1.0KWatts/1.44 kVA output power capacity
Nominal voltage 120V, output voltage distortion less than 5%
Output connections (6) Nema 5-15R battery backup
Typical 4ms transfer time, 8ms maximum
Maintenance free sealed lead acid battery with suspended electrolyte.
Typical recharge time 3 hours.
Expected battery life of 4-6 years
Maximum dimensions 3.5" x 17" x 18" with net weight 63 lbs.
Operating environment 32-104 °F and 0-95% relative humidity.
CSA, Energy star, FCC Part 15 Class A, UL 1778 compliant.

Rack

6U WM RACK SWITCH DEPTH DEEP SRW6UDP

Wall mount low profile rack enclosure server cabinet.
Dimensions 60 cm X 55.1 cm X 37 cm designated to house 19" rack equipment.
Constructed from heavy duty steel with a durable black powder coated finish, with maximum load capacity of 200lbs.
The side panels and front door to lock to prevent damage, tampering or theft.
Must be fully assembled and ready to mount to wall.
The vertical mounting rails to adjust in 7/8 inch increments to accommodate equipment up to 20.5 in deep.

Fiber Patch Panel

24 PORT PATCH PANEL CAT5E 568B N052-024

19-in. rackmount ready, 1U (1.75 in)
EIA/TIA 2/32 spacing
110-type termination
EIA/TIA TSB 40 Cat5e connecting hardware specifications
Color coded for both EIA/TIA 568A & 568B installations
24 ports, UL approved, ports clearly numbered both on front and back; metal frame
Connector A x 12 RJ45 female
Connector B x 12 RJ45 female

Power Supply

MSTR CAM PWR SUP 20AMP 4OUT/BRKR WX WCS4-20B

The power supply shall support PELCO ESPRIT HD Series ES5230-15N cameras and be compatible with cameras, domes, and pan/tilts.

The power supply shall have dual power supply, 4A or 20A with 1-4 outputs.

The power supply shall have selectable input voltages.

The power supply shall have a 24 VAC output or 28 VAC output for longer wire runs.

The power supply shall meet NEMA type 4x/IP66 Standard for weatherproof enclosure.

The power supply shall operate in -50°F to 122°F environment.

Pedestal Mount IP Positioning System with Integrated Optics Package & Wiper

ESPRIT 1080P WPR 120/230V PED ES5230-15N

The camera shall feature Up to 1920 x 1080 Resolution with 16:9 Aspect Ratio; 1080p at 30 Images per Second (ips) and 2.0 Megapixel (MPx), 30X Optical Zoom, 12X Digital Zoom, Wide Dynamic Range (WDR) Camera.

The system shall have the ability to Control and Monitor Video Over IPv4 and IPv6 Networks with Built-in Analytics Including AutoTracker and Adaptive Motion Detection.

The system shall support 2 Simultaneous Video Streams: Dual H.264 or H.264 and Scalable MJPEG with 360° Continuous Pan Rotation at 100° per Second.

The system shall have the following supported protocols TCP/IP, UDP/IP (Unicast, Multicast IGMP), UPnP, DNS, DHCP, RTP, RTSP, NTP, with Electronic Image Stabilization (EIS) and Pan/Tilt and Enclosure with Integrated Optics Package (IOP) or Pressurized Integrated Optics Cartridge (IOC).

Optical Zoom 30X; Digital Zoom 12X; Maximum Resolution 1920 x 1080; Lens f/1.6 ~ f/4.7, focal length 4.3 mm (wide) ~ 129.0 mm (tele); Horizontal Angle of View 59.5° (wide) ~ 2.1° (tele); Aspect Ratio 16:9; Light Sensitivity with Color (33 ms) 0.65 lux Color (250 ms) 0.07 lux; and Mono (33 ms) 0.20 lux; with Day/Night Capabilities and IR Cut Filter and Wide Dynamic Range 80 dB.

The system shall be capable of video encoding H.264 High, main, or base profile.

The system shall be powered by a 24VAC outdoor power supply 120/240 VAC input and four fused 24/28 VAC outputs totaling current capacity of 20A.

360° Outdoor Panoramic Network Dome Camera with Clear Bubble:

IMM 12 MP 360 ENVRMTL PEND MNDM IMM12036-1EP

Minimum required resolution at each sensor shall be 12MP (4x): 2048 x 1536.

The sensitivity limits shall be as follows: color (33ms): 0.5 lux at f/2.5 and mono (33ms): 0.2 lux at f/2.5, with day/night support availability.

The range of the camera shall be as follows: detection at 130', classification at 70', recognition at 45', and identification at 19'.

The focal lens length shall have, 360° horizontal field of view, and 73° vertical field of view.

The streaming shall be bi-directional, full or half duplex.

The mechanical dome attenuation shall be f/0.0 light loss with 370° pan adjustment and 0 to 180° tilt adjustment.

The Network shall be able support up to 20 simultaneous users and unlimited users H.264.

The security access shall be password protected with web browser view and setup. The supported protocols shall be TCP/IP, UDP/IP, UPnP, DNS, DHCP, RTP, RTPS, NTP, IPv4, IPv6, SNMP v2c/v3, QoS, HTTP, HTTPS, SSH, SSL, SMTP, FTP, ARP, ICMP, and 802.1x(EAP).

Video encoding shall be H.264 High, Main, or Base profiles, with bit rate at 25 Mbps.

The camera shall have an RJ-45 connector for 1000Base-T 1 Gb/sec Auto MDI/MDI-X PoE+; Class 4 Category 5 or better network port with power input through PoE+ (IEEE 802.3at, Class4).

The camera shall have Pelco System VideoXpert, Digital Sentry, Open API Pelco API, Panomersive SDK, ONVIF Profile S and G integration capability.

Network Video Recorder

DS SERVER2, 12TB, US PWR CORD DSSRV2-120-US

The NVR shall be powered by 100 to 240 VAC, 50/60 Hz, autoranging.

The system drive shall be 12TB internal SSD storage drive with 6, 3.5-inch hard drive bays and have 3 USB 2.0 ports and 2 USB 3.0 ports.

The video shall be Intel HD Graphics P4700 shared memory with 3840 x 2160 per Display Port output (2X) and 1920 x 1200 at 60 hz on VGA and DVI-D outputs, supporting MPEG-4 ASP; H.264 Baseline, Main, and High profiles and interfaced with Gigabit Ethernet (1000Base-T) ports (2x).

The audio decoding shall support G.711 speech codec with 64 kbps bit-rate and electret microphone input with up to 3 Vp-p, adjustable 8ohms outputs.

The system shall be windows 7 ultimate 64-bit with 8 gb DDR3 non-ECC RAM with internal RAID 5 level.