

ROBUST DATA ARCHIVING

Recording Server

FX44



ECA-FX44 is the most cost effective solution for long term data archiving server, with built-in redundancy. Ideal for enterprise or large scale facilities. The FX series capable to handle up to 400Mbps VMS Workloads. It is also feature network redundancies and optional redundant power supply to help ensure continuity operation without interruption.

- Ultimate processing technology up to 400Mbps validated real world surveillance workloads.
- Automatic network fail-over feature to ensure uninterrupted recording operations.
- Up to 270 Terabytes (TB) of dedicated video storage with 15 hot swap hard disk drive bays.
- Configurable to Redundant Storage System (RSS) in dual or single parity mode, allow for up to two disk failures before any data is lost.
- Automatic daily hard disk drive health check, disk guard and recording activity for potential CCTV no recording monitoring.
- 3 years next business day part replacement onsite warranty, with TrueBlue Care Premium support pack.

<p>Hardware</p>	<p>Storage</p> <p>1 unit internal 256GB SSD dedicated for OS & VMS Software use.</p> <p>Fifteen (15) hot swap 3.5inch SATA HDDs bay for dedicated video storage support up to 18TB capacity per HDDs, or 270TB in total.</p>	<p>Redundant Storage System (RSS)</p> <p>Configurable RSS in single or dual parity model, allow up to two disk failure before any data lost. RSS powered by Microsoft® Storage Space technology.</p> <p>In built RSS tools, can create, repair or extend storage.</p> <p>400Mbps or 200CH FHD@2Mbps cameras real world VMS performance, based on Seagate® Skywalk Ai Surveillance grade HDD.</p>
	<p>GPU & Display Performance</p> <p>GPU: Intel® UHD Graphics 630. 1GB shared memory. Server Client (SC) mode. Record and Display in same machine. FX44E: 63CH live display. Max 400Mbps recordings. FX44P: 150CH live display. Max 400Mbps recordings. Details Report: http://gsf.ms/LB202104210944.pdf</p>	<p>Monitor Outputs</p> <p>HDMI x 1port. Ver 2.0a. Max Resolutions 4096x2160 @60Hz (4K) DP x 1port. Ver 1.2. Max Resolutions 4096x2160 @60Hz (4K) VGA x 1port. Max Resolutions 1920x1200 @60Hz</p> <p>Multi Display Support: 3 monitors</p>
	<p>Processor</p> <p>FX44E: Intel® Xeon W-1250. 6 core 12 threads. FX44P: Intel® Xeon W-1270. 8 core 16 threads. FX44W: Intel® Xeon W-1290. 10 core 20 threads.</p>	<p>Memory</p> <p>4C / 4S: DDR4 16GB 5C / 5S: DDR4 32GB 6C / 6S: DDR4 64GB NOTE: FX44E, FX44P, & FX44W come with ECC system memory.</p>
	<p>Network</p> <p>Dual LAN (RJ45 connector) 10/100/1000 Base-T Gigabit Ethernet . Support Redundant Fail-over. LAN1: Intel® I225LM with 10/100/1000/2500 Mbps LAN2: Intel® I219LM with 10/100/1000 Mbps.</p>	<p>Audio</p> <p>Realtek ALC887 HD , High Definition Audio. Line-out. 3.5mm jack (green). Mic-in. 3.5mm jack (pink). Support Audio over HDMI and DP</p>
	<p>Heartbeat</p> <p>System on chip (SoC) microprocessor IoT controller board 32GB system recovery heartbeat storage. 12 hours self sustained 6000mAh Li-Po battery. 100Mbps LAN for system notifications. Relay-Out x 1. (NC/NO/COM), for machine failed buzzer. Programmable Digital I/O: DI x 2. DO x 2. 3.3V@500mA max.</p>	<p>Security Key</p> <p>2048-bit RSA encryption. Uniquely paired to machine specific authenticator token.</p> <p>Physical Key Type: USB 2.0 Type-A. Virtual Key Type: 6 digit OTP access code. Refreshed every 30 seconds.</p>
<p>Software</p>	<p>Operating System (OS)</p> <p>Triple layer ecaOS version 5.2 64bits OS architecture powered by Microsoft® Windows 10 Enterprise LTSC</p> <p>Protection: Built-in SHIELD™ technology, write protected OS. Recovery Step: SOFT and HARD reset Recovery Layer: FACTORY and DEPLOYMENT layers</p>	<p>App Monitor</p> <p>User configurable: ADD, DEL application monitoring watchdog. Type: Application or Script (support arguments command) Lunch Delay: First execution delay for x seconds (user configurable) Instance: Force single terminate the rest, or allow multi instance. Monitoring: Terminate App if no respond. Auto Respawn: Auto respawn app/script after close or terminated.</p>
	<p>System Recovery</p> <p>FAST RESET: Reboot from windows OS, load fresh ecaOS from SSD (SHIELD must be enabled). This reset recovered most daily operation errors like miss places settings, or trojan attacks. Recovery time about 1 minute.</p> <p>SOFT RESET: Command by Security Key, perform by Heartbeat. This reset recover the whole ecaOS, and it solve problem like windows OS corrupted or changes or change of new SSD. Recovery time about 10 minutes.</p> <p>HARD RESET: Same as soft reset, but recovery based on factory default without any user software and settings.</p>	<p>System Monitoring</p> <p>CPU: Usage (%) threshold value for x minute of time MEMORY: Usage (%) threshold value for x minute of time NETWORK TX/RX: Usage (Mbps) threshold value for x minute of time DISK WRITE/READ: Usage (Bytes) threshold value for x minute of time</p> <ul style="list-style-type: none"> • With automatic value prediction • With notification and email alert • Optional action to reboot or shutdown the machine (CPU and Memory) <p>Machine shutdown authorization: Security Key only Machine stability monitoring: Notify if reboot more than 3 times within 30 minutes. Auto reboot if system halt / blue screen. AC power monitoring: Alert & log if unexpected AC power lost, auto power up when AC power resume.</p>
	<p>Disk Health</p> <p>Frequency of health check: Automatic daily. Disk Check: OS SSD and All 15 Bay hot swap HDD. Notification: Email alert with detail disk health information. Disk Health: Disk health %, Power on time, Temperature, S.M.A.R.T values analysis. SSD ware, HDD bad sector, etc.</p>	<p>Disk Guard</p> <p>Automatic log and notify when disk was REMOVED or ADDED. Track all individual HDD SERIAL NO. for evidence trace. Disk Info: Serial number, Firmware version, Model number, Controller information and Partition details.</p>

<p>Electrical</p>	<p>Power Input & Consumption</p> <p>Line voltage: 100 - 240V AC (auto select) Frequency: 50-60Hz, single phase Power output rated: 600W (max) Power Efficiency: >82% 80PLUS rated. Continuous power consumption for UPS calculation Platform Only: 60W Platform with 15 HDD: 230W.</p> <p>Option: Redundant 1+1 PSU 500 Watt</p>	<p>Power Protection & Safety</p> <p>Over Voltage Protection (OVP) Short Circuit Protection (SCP) Over Power Protection (OPP) Over Current Protection (OCP) Under Voltage Protection (UVP)</p> <p>PSU will automatic shutdown if fault above detected. RESET: Remove all fault, with AC input cycle ON/OFF reset > 3seconds.</p>										
<p>Environmental</p>	<p>Operating Temperature</p> <p>Operating Temperature: 10 ~ 45 °C Storage Temperature: -40 ~ 65 °C</p>	<p>Humidity</p> <p>Operating Humidity: 10% ~ 85% (Non-condensing) Storage Humidity: 10% ~ 85% (Non-condensing)</p>										
<p>Dimension & Weight</p>	<p>Size & Weight</p> <table border="0"> <tr> <td>Machine Only:</td> <td>Packaging Box:</td> </tr> <tr> <td>Depth : 465mm</td> <td>Depth : 600mm</td> </tr> <tr> <td>Width : 430mm</td> <td>Width : 560mm</td> </tr> <tr> <td>Height : 176mm</td> <td>Height : 295mm</td> </tr> <tr> <td>Weight: 21.1KG</td> <td>Weight: 26.2KG</td> </tr> </table>	Machine Only:	Packaging Box:	Depth : 465mm	Depth : 600mm	Width : 430mm	Width : 560mm	Height : 176mm	Height : 295mm	Weight: 21.1KG	Weight: 26.2KG	<p>Form Factor & Mounting Requirements</p> <p>Rack mounted 4U Come with rail mounting kits.</p> <p>Rail mount requirement: Minimum vertical mounting column front to back is 600mm depth.</p>
Machine Only:	Packaging Box:											
Depth : 465mm	Depth : 600mm											
Width : 430mm	Width : 560mm											
Height : 176mm	Height : 295mm											
Weight: 21.1KG	Weight: 26.2KG											
<p>Service & Warranty</p>	<p>Warranty Support & Customer Care</p> <p>1 year standard manufacturer warranty. Carry-IN.</p> <p>TrueBlue Care. Upgrade to 3 years hardware warranty, with next business day carry-IN part replacement service. (Service Code: TBC)</p> <p>TrueBlue Care Premium. Upgrade TBC to Premium with hardware parts & labour onsite replacement. (Service code: TBC Premium)</p> <p>During warranty customer care:</p> <ul style="list-style-type: none"> • Phone and Email Support (During working hour only) • Remote Support (During working hour only) 	<p>TrueBlue® Service</p> <p>TrueBlue TNC (Service Code: TNC) Deployment Service: Professional onsite testing and commissioning. Training: User operation training.</p> <p>TrueBlue Onsite (Service Code: TBO) Incident based pay-per-request onsite service support.</p> <p>TrueBlue Maintenance (Service code: TBM) ECA preventive maintenance service. We recommend a minimum 1 year service interval for each ECA deployed.</p>										

Models & Configurations

ECA-FX44PMO-15HSXXXSSSSS

ECA-FX44: Generic ECA Platform 4.4

Configuration (Processor): P
 E: Intel® Xeon W-1250. 6 core 12 threads.
 P: Intel® Xeon W-1270. 8 core 16 threads.
 W: Intel® Xeon W-1290. 10 core 20 threads.

Configuration (RAM): M
 4C / 4S: DDR4 16GB
 5C / 5S: DDR4 32GB
 6C / 6S: DDR4 64GB
 Model with Xeon processor installed with ECC memory.

Configuration (OS): O
 C: Windows 10 Enterprise LTSC OS
 S: Windows Server 2019 OS

Configuration (Storage): 15HSXXX
 15 Hot swap Bay, with XXX factory pre-installed HDD capacity.

Configuration (Software): SSSSS
 Factory pre-loaded software code.



Ports:

1. Com port | 2. DisplayPort | 3. HDMI | 4. VGA | 5. LAN1
 6. USB3.2 x 4 | 7. LAN2 | 8. MIC | 9. Audio Out | 10. Heatbeat LAN
 11. Heartbeat Reset | 12. Heartbeat I/O Port

