

Engineered Computer Appliance

Spec Sheet

AX50

ECA



ECA-AX50 is an industrial-grade live display system engineered with high-performance display technology for Video Workstation and Video Wall environments. Effective surveillance depends on the reliability and performance of the system managing multiple live video streams, and the AX Series is purpose-built to meet this demand.

Combining powerful processing capabilities with a compact small-form-factor design, the AX Series delivers exceptional display performance while optimizing workspace efficiency. The platform enables efficient management and real-time analysis of surveillance operations, ensuring situational awareness and operational control.

The AX system can be flexibly configured as a Video Workstation for command-and-control operations, or as a Video Wall client for automated multi-screen display environments.

Key Specifications & Capabilities

- Processing power of up to **18 threads** with **32GB DDR5 system memory**
- Video display architecture optimized specifically for surveillance applications
- Supports up to **200 live channels** for real-time video decoding and display
- Supports up to **4 x HDMI 4K monitors** for video wall matrix configurations
- **Automatic network failover** to ensure uninterrupted recording and continuous operations

Best-in-Class Service & Management

- **ecaCentral Dashboard** for centralized system monitoring and remote management
- **System log auditing** with built-in support escalation reporting
- **TrueBlue Proactive Service** delivering premium, hassle-free support and long-term operational continuity.
- **3-year Next Business Day onsite parts replacement warranty**, including **TrueBlue Care Premium support**

Software

<p>Operating System (ecaOS)</p> <p>Triple-Layers ecaOS7 64bits OS architecture with remote dash-board and machine control capability.</p> <p>powered by Microsoft® Windows 11 IoT Enterprise LTSC</p>	<p>App Monitor</p> <p>User configurable: ADD, DELETE application monitoring watchdog. Type: Application or Script (support arguments command) Launch Delay: First execution delay for x seconds (user configurable) Instance: Force single instance, terminate the rest, or allow multi instance. Monitoring: Terminate App if no respond. Auto Respawn: Auto respawn app/script after close, terminated or No respond.</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>Temperature: Monitor and alert system temperature, and processor temperature. As well as power supply unit (PSU) temperature* * Available in redundant PSU model only</p> <p>System Voltage: System voltage stability auto monitoring and alert for 3.3Vdc, 24Vdc and Mainboard Clock battery. System power supply (PSU) redundant module monitoring and alert is only available in system with redundant PSU option.</p> <p>System Fan: Auto monitoring and alert for system and processor fan.</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, and Disk volume details.</p>
<p>System Recovery (Remote capable)</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 Report and Log</p> <p>Events: System event notification alert page</p> <p>Comprehensive Log: Details system log with search function. Filter by date/ time. Ability to single-click log export with windows events log in single ZIP file for further technical troubleshoot sharing.</p> <p>Auto-Daily Report: System will generate a system health status summary report and email to user everyday.</p>
<p>Security Key</p> <p>2048-bit RSA encryption. Uniquely paired to machine specific authenticator token. Default all ECA shipped with 1unit physical and 2 virtual security keys. Additional keys can be purchased from GSF.</p> <p>Physical Key Type: USB 2.0 Type-A. Virtual Key Type: 6 digit OTP access code. Refreshed every 30 seconds.</p>	<p>Device Monitor*</p> <p>Monitor IP devices and Web Resources and notifies if they are down. Device monitor offer 4 types of deice uptime monitor function. Ping, Port, Keyword and URL. The monitoring GUI offer user an overview timeline bar on the device uptimes.</p> <p>*Available in ecaOS version 6.3 and above. May need separate license purchase.</p>
<p>ECA Central Server Connection</p> <p>Ability to connect to ECA CENTRAL SERVER for centralized monitored ECA machines. ECA CENTRAL Server also part of TrueBlue Pro-Active Service, we enhanced next level of professional service by automatic monitoring all connec ted ECA machines and pro-actively report / inform customer in case any machine failure events happened. TrueBlue Pro-active service also pro-actively make service appointment with customer.</p> <p>*TrueBlue Pro-Active Service is an optional paid service subscription.</p>	<p>Remote Support Control</p> <p>TrueBlue: Single click activation for TrueBlue service remote support</p> <p>Microsoft Remote Desktop: Enable/Disable RDP for Local Area Remote Support.</p> <p>Chrome Remote Desktop: Enable/Disable chrome remote support for over the internet remote support. Remote setup capable via ecaOS HTTPs Dash-board.</p> <p>NOTE: all above remote support services can be activate or deactivate via eca dashboard for better security and privacy</p>

Hardware	<p>Storage</p> <p>1unit internal 512GB NVMe SSD dedicated for ecaOS & Operating Software use.</p>	<p>Redundant Storage System (RSS)</p> <p>N/A</p>										
	<p>Monitor Outputs</p> <p>Intel ARC Graphic with 1GB shared memory HDMI x 4port.</p> <p>Max Resolutions HDMI Port 1 &2: 7680x4320 @60Hz (8K) HDMI Port 3 &4: 4096x2160 @60Hz (4K)</p>	<p>Graphic Performance</p> <p>Client mode. Display as client only. 196CH live display. (QUAD display, FHD TV) 200CH live display. (DUAL display, FHD TV)</p>										
	<p>Processor</p> <p>Configurable to: Intel® Core Ultra 5 125H</p>	<p>Memory</p> <p>Configurable to: 16GB DDR5 system memory 32GB DDR5 system memory</p>										
	<p>Network</p> <p>Dual LAN (RJ45 connector) Ethernet . Support Redundant Fail-over (LAN1 & LAN2). LAN1: Intel® I219LM with 10/100/1000Mbps LAN2: Realtek® RTL8125BGwith 10/100/1000/2500</p>	<p>Audio</p> <p>Line-out. 3.5mm jack (green). Mic-in. 3.5mm jack (pink). Support Audio over HDMI</p>										
Electrical	<p>Power Input & Consumption</p> <p>Line voltage: 100 - 240V AC (auto select) Frequency: 50-60Hz, single phase Power output rated: 24Vdc 5A 120W (max)</p>	<p>Power Protection & Safety</p> <p>Over Voltage Protection Short Circuit Protection Over Load Protection Over Temperature Protection</p>										
	<p>Operating Temperature</p> <p>Operating Temperature: 10 ~ 55 °C Storage Temperature: -40 ~ 65 °C</p>	<p>Humidity</p> <p>Operating Humidity: 10% ~ 85% (Non-condensing) Storage Humidity: 10% ~ 85% (Non-condensing)</p>										
Environmental	<p>Warranty Support</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 & labor onsite replacement. (Service code: TBC Premium)</p>	<p>System Commissioning 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>Customer Care</p> <p>Phone, Email & Remote Support</p> <ul style="list-style-type: none"> • Phone and Email Support (During working hour only) • Remote Support (During working hour only) <p>Support Email: trueblue@gscorp.com</p> <p>Service Centre Unit21, Level 3A, IOI Boulevard, Jalan Kenari 6, Bandar Puchong Jaya, 47170 Puchong, Selangor D.E. Malaysia. Google map: https://goo.gl/maps/k1gep</p>	<p>Maintenance Service</p> <p>Maintenance Service Frequency: every 12 months of ECA runtime.</p> <p>TrueBlue Maintenance (Service code: TBM) ECA preventive maintenance service. We recommend a minimum 1 year service interval for each ECA deployed.</p> <p>GSF recommend customer to signup with our certified professional manufacturer maintenance service. (Code: TBM). This maintenance service is important to ensure continuous ECA operation without interruption or down time. Please visit for more info.</p>										
Service & Warranty	<p>Size & Weight</p> <table border="0"> <tr> <td>Machine Only:</td> <td>Packaging Box:</td> </tr> <tr> <td>Depth : 190mm</td> <td>Depth : 225mm</td> </tr> <tr> <td>Width : 183mm</td> <td>Width : 296mm</td> </tr> <tr> <td>Height : 37mm</td> <td>Height : 86mm</td> </tr> <tr> <td>Weight: 1KG</td> <td>Weight: 2KG</td> </tr> </table>	Machine Only:	Packaging Box:	Depth : 190mm	Depth : 225mm	Width : 183mm	Width : 296mm	Height : 37mm	Height : 86mm	Weight: 1KG	Weight: 2KG	<p>Form Factor & Mounting Requirements</p> <p>Small Form Factor. Wall mount or Desktop Come with Wall / Vesa mounting kits.</p>
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