

AKHET®

Case Study / Success Story

Global Technology Group Controls Mail Sorting Systems Using Industrial Servers from Pyramid

Introduction

The customer is a global technology group. Its broad portfolio of solutions includes sorting systems for national and international mail, parcel, forwarding and courier service companies.

The letter sorting systems record the address using optical character recognition (OCR) and separate the envelopes according to format. In the next step, they merge the mail such that the mail carriers' delivery routes are as short as possible. Several servers are required in one system to control these complex processes.

Pyramid's AKHET® brand hardware has been deployed in these mail sorting systems for more than 10 years. The foundation for this long-lasting and trusting business relationship is Pyramid's expertise in working with customers to develop the exact solution that best meets their specific technology, design and service requirements.

The development project for the next generation of servers began with an intensive dialog, in which the issues discussed included changes to the sorting processes and the system hardware, the space available for the new systems in the machines, and the immission load in mail centers.

Services:

- Component procurement
- Provision of initial samples
- System manufacturing
- System lifecycle at least 5 years
- Functional and operational tests
- Quality assurance
- Coordination of logistics during rollout
- Component availability up to 10 years

Technology

The end product is characterized by a modular design, i.e., the two server variants that the customer requires for their individual mail sorting system can be assembled cost-effectively in one platform. The differences include the expansion cards, I/O ports and the number of CPUs. One variant uses a single-processor mainboard, the other a dual-processor mainboard. The reason for this is the difference in power requirements for the different sorting systems. Thanks to this customized solution, our customers only pay for the performance that they actually need for their respective system.

Space is a precious commodity in industrial plants. That's why our servers are characterized by a compact chassis. With a depth of only 5 cm, the 4 U high 19" systems can be integrated even into the tight dimensions of a sorting machine control cabinet. In order to keep the chassis dimensions as small as possible, Pyramid has developed a special solution for the handles that make it easier for technicians to handle these devices, which weigh about 25 kilograms. The handles can be removed by the technician in seconds without tools after they have installed and hooked up the server to the sorting machine.

AKHET®: Control Computers for Mail Sorting Systems

Chassis: Industrial server

Konnektivität

- VGA, DVI, HDMI, DP
- 2x USB2 3x USB 3.2
- 3x LAN

Weitere Features und Funktionen:

- Dust Protection IP 52
- 19"-mounting bracket removable
- CPU: Intel® 14th Gen Core i
- 32GB DDR4 RAM, 512GB SSD



Effective immission protection for the servers is essential for the trouble-free operation of mail sorting systems, which move several hundred thousand letters a day. The friction between paper and conveyor belts generates considerable amounts of paper dust. To keep the dust out of the interior of the servers, they are fitted with dust filters that can be changed during operation using a device on the housing.

Services

Pyramid's services are a key element in the customer's value chain. These include flashing the different BIOS versions and labeling the I/O ports with customer-specific stickers. These ensure that the team of technicians on standby at the mail centers for assembly and configuration know immediately how to connect the servers. This quick orientation saves time and money.

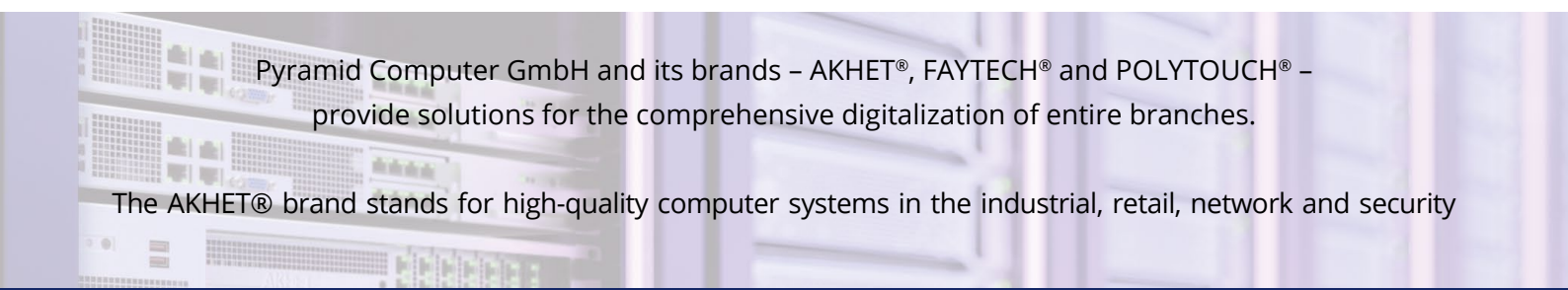
The logistics services that Pyramid provides for the customer are a challenge. The complex roll-out of the systems extends over several months and dozens of mail centers. An organizational plan informs everyone involved about the model and number of servers, the location, day and hour of delivery, as well as the contact person in the mail center and their contact details. The mail center operators impose a „freeze“ during periods with particularly high work volumes (e.g., Christmas), which means that while emergency repairs may be carried out, no maintenance or upgrading is conducted. Any delays in the roll-out can postpone the installation of the servers by months, which would involve immense effort and high costs for the customer. It is a testament to Pyramid's qualities as a full-service provider that there has not been a single delay since the start of the collaboration.

Why Pyramid?

The customer has been relying on our industrial servers for many years, because we always manage to fulfill their specific wishes and requirements in terms of technology and services with great flexibility.

We develop and produce the systems that our customer needs for their mail center clients down to the last detail. In doing so, we draw on our several decades of experience in the development and manufacture of industrial computers and industrial servers.

Our business philosophy also includes providing our customers with the best possible support, i.e., we provide them with a dedicated contact person who accompanies them from kick-off through roll-out to after-sales issues.



Pyramid Computer GmbH and its brands – AKHET®, FAYTECH® and POLYTOUCH® – provide solutions for the comprehensive digitalization of entire branches.

The AKHET® brand stands for high-quality computer systems in the industrial, retail, network and security