

mSYS-8300

Flexible and Scalable mTCA.4 System Platform



Advanced data control

The mSYS-8300 provides high-performance support for advanced data acquisition, signal processing, and control applications.

Its modular design enables flexible scaling to match a variety of operational requirements, while compatibility with EPICS and TANGO ensures smooth integration with existing control systems.

Reliable real-time

Configurable with high-performance processors, FPGAs, and multiple digitizers, it handles demanding real-time operations efficiently.

Redundant power, effective thermal management, and a robust structure ensure reliable long-term performance, making it a future-ready platform for complex technical environments.



Flexible mTCA.4 platform

Modular, scalable system design



Seamless integration

EPICS and TANGO support



High-performance digitizers

Supports up to four modules



Redundant power

Ensures maximum uptime

Technical key features

- mTCA.4 open standard with branch-standard MCH/Carrier Hub
- EPICS system-level support with IOC integration
- Redundant modular PSU for high reliability
- Flexible payload: x86 CPU, μ RTM, Solid State storage
- High-performance FPGA with RTM/FMC digitizer adaptation
- Up to 4 digitizers with precise timing (50–125 MHz, <math><25\text{ ps}</math> jitter)
- Management & switching: 6 AMCs, front/rear cooling, GbE & PCIe Gen3
- Robust and efficient: 10–12 kg, 300–400 W, $-25\text{ }^{\circ}\text{C}$ to $+55\text{ }^{\circ}\text{C}$, 5–95% humidity, 110–265 VAC