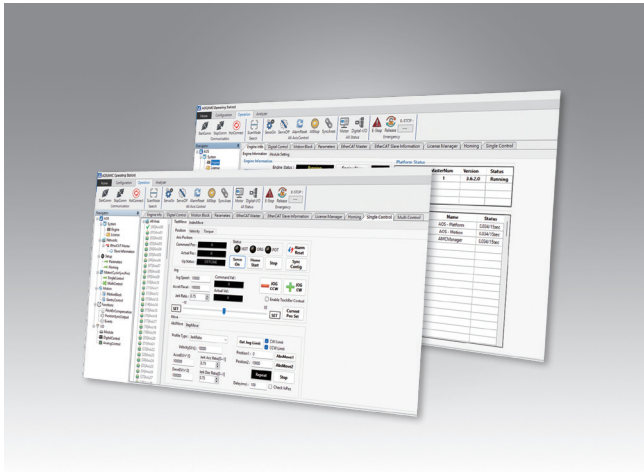


AMC Expert

A software-based motion control solution



Features

- Based on a real-time operating system, it ensures periodic and real-time control by occupying one or more cores of CPU.
- Easy for users to develop the desired functionality using general programming languages such as C, C++, C#, VB.
- Obtained the highest level of EtherCAT Master Class, Class A standard.
- Internal motion kernel optimized for deterministic execution with low jitter
- Provides API Buffer mechanisms, allowing users to implement deterministic real-time tasks directly in the RTX environment.
- Includes advanced motion features such as axis triggering, interpolation, and synchronous control, among others.
- Supports up to 128-axis control, and the minimum cycle time can be configured to 125 μ s depending on system load and axis count.

Introduction

AMC Expert enables software-based motion control on standard Windows PCs. It supports the EtherCAT protocol, reducing complex cabling and simplifying the overall system architecture. With motion control centralized on a single PC, system overhead is minimized, and users can customize real-time control threads to meet their requirements for high speed and precision.

Motion Functions

Functions		AMC Expert 16/32/64/128-axis
Origin(Homing)	Default Origin	v
	Gantry Origin	v
Basic Motion	Motion Profile(CSP)	v
	Interpolation Control	v
	Circular Interpolation	3D
	Helix	v
	Trigger Motion	v
Advanced Motion	PVT	v
	Spline	v
	Path Interpolation	2D
	E-CAM	v
Additional Function	API Buffer	v
	Sync Control	v
	Event	v
	Touch Probe	v
	PSO	v
	Speed Override	v
	Data Log	v
Position Compensation	v	

Specifications

The Number of Control Axis	16, 32, 64, 128 Axes
I/O	64,000 inputs, 64,000 outputs, Total 15.625KB
Communication / Command Cycle	125 μ s – 8ms *Depends on CPU performance and communication platform
Maximum Number of Nodes	256
Communication Platform	EtherCAT
Communication Connection Method	Line Ring Star
Development Language	C C++ C# VB