

RELIABLE TECHNOLOGY AT THE CORE OF ARGUS AXIA

For today's greenhouses and commercial growers, technology reliability is every bit as essential as climate control. The systems powering your operation must be stable, interoperable, and ready to flex as technology evolves.

Argus Axia is built on a foundation of trusted technology partners - each chosen to enhance performance, reinforce security, and ensure long term platform resilience for growers.

This document provides an overview of the core technology partners that support the Axia platform, highlighting how their capabilities strengthen system reliability, protect data, maximize operational uptime, and contribute to overall greenhouse performance.



WHY TECHNOLOGY PARTNERSHIPS MATTER

Modern research greenhouses, commercial operations, and vertical farms rely on diverse systems. From legacy HVAC and lighting controls to advanced sensor networks and cloud based analytics. Your controls platform must operate across this fragmented landscape without creating technical bottlenecks. Argus Axia's multi protocol and multi network architecture ensures that no single technology limits system design, integration, or expansion. Future proofing your facility.

Backbone	Feature Category	Details	What it Means to You
	Cloud security	Encrypted data in transit, at rest and secure APIs along with AWS protects sensitive information by providing enterprise-grade physical and infrastructural security, built-in resilience and redundant systems.	You always own your data, it's not shared or sold and access is role-based and controlled.
	Operating system	The control platform runs on a purpose-built, Debian-based embedded OS designed for continuous, long-term operation. By minimizing unnecessary services and tightly controlling the software environment, the system delivers predictable performance and improved stability - supporting reliable, 24/7 greenhouse operation.	You can rely on stable, always-on control - day and night.
	Control software	Using Go (Golang) to build control software helps greenhouse systems be fast, reliable, scalable, and resilient - especially when they must manage many processes at once (climate, irrigation, lighting, sensors, remote access) while continuing to operate 24/7.	Your control system can perform many tasks simultaneously without compromising stability or response time.
 	Communication protocols	Support for Modbus and BACnet enables direct integration with industry standard climate, irrigation, and energy systems - protecting existing investments and avoiding proprietary lock in.	You benefit from protocols that ensure interoperability and longevity, enabling your facility to expand and upgrade, when and how you want.
 		Wi Fi and Bluetooth simplify commissioning, diagnostics, and local device access, allowing technicians and facility managers to configure and service systems efficiently without physical connections.	You can perform quick, on site setup and service without needing hardwired equipment.
		LoRaWAN coming soon.	You can easily gather data from sensors spread across large facilities, without the complexity and hassle of running wiring.
		5G coming soon*.	You can reliably monitor your facility remotely, even when local networks are unavailable or unreliable.
	Hardware	Based on Arms' high performance TI AM62x processor combining Cortex A53 and Cortex M4 cores, Axia provides dedicated processing for both supervisory control and real time tasks. With 1 GB of DDR4 memory, the platform supports stable multi process operation and long term reliability in continuously running control environments.	Your control system can handle many jobs at once - monitoring conditions, making adjustments, and responding in real time. All while staying stable and reliable, 24/7.

*Where geographically available.