

AMAX-354

Ultra Compact ARM-based EtherCAT Controller with Dual-Core Processor, 1 x LAN, 1 x EtherCAT, 1 x MicroSD and Slice IO expansion



Features

- Up to 32-axis EtherCAT ARM-based motion controller
- Dual-Core ARM processor
- 1 x Ethernet LAN, 1 x EtherCAT, 1 x Slice IO, 1 x MicroSD
- Supports Modbus TCP, TCP/IP
- MotionNavi Designer Low-code Development
- Multi-tasking Advantech BASIC Programming
- Retain memory (FRAM)
- Supports PTP, linear and circle interpolation, Path table

Introduction

AMAX-354 is specially designed for machine and equipment builders, with ultra compact format for extremely space-saving, providing a cost-effective solution. AMAX-354 is a up to 32-axis EtherCAT controller with flexible I/O extension including local slice I/O expansion and remote EtherCAT I/O devices expansion, enabling ESI import, dynamic PDO setting, diagnostic for EtherCAT application.

AMAX-354 features MotionNavi designer low-code software environment with Advantech BASIC language achieving rapid development, and softmotion kernel providing motion function including PTP, linear and circle interpolation, Path table.



AMAX-3245/85 is not supported.

Specifications

General

- **Certification** CE, FCC
- **Dimensions (W x D x H)** 34.4 x 70 x 100 mm
- **Enclosure** Aluminum
- **Mount Options** DIN-rail
- **Net Weight** 0.4kg
- **Power Requirement** 24V_{DC} ± 20%
- **Power Consumption** 4.32W (typical), 33W (max.)

System Hardware

- **Processor** Dual-Core ARM Processor
- **Memory** 1GB
- **LED Indicators** STS, LAN (Active, Status)
- **Storage** 8GB emmc
64kb FRAM

I/O Interfaces

- **LAN** 1 x RJ-45 (10/100Mbps)
- **EtherCAT** 1 x RJ-45
- **I/O Expansion** Local slice I/O (AMAX-5000 Series x 8 max.)
- **Power Connector** 1 x 2-pin terminal block

EtherCAT

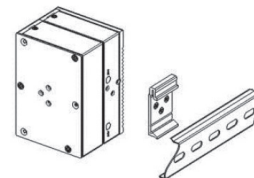
- **Cable Type** CAT5 UTP/STP Ethernet cable and above
- **Cycle Time** Up to 500 us
- **Communication Motion Device** 32 Servo Drive Max.
- **Communication IO Device** 1024-CH DI and 1024-CH DO
128-CH AI and 128-CH AO

Environment

- **Operating Temperature** 0 ~ 60 °C/32 ~ 140 °F with 0.7 m/s airflow
- **Storage Temperature** -40 ~ 85 °C/-40 ~ 185 °F
- **Relative Humidity** Operating, 95% RH @ 40°C, non-condensing
Non-operating, 95% RH @ 60°C, non-condensing

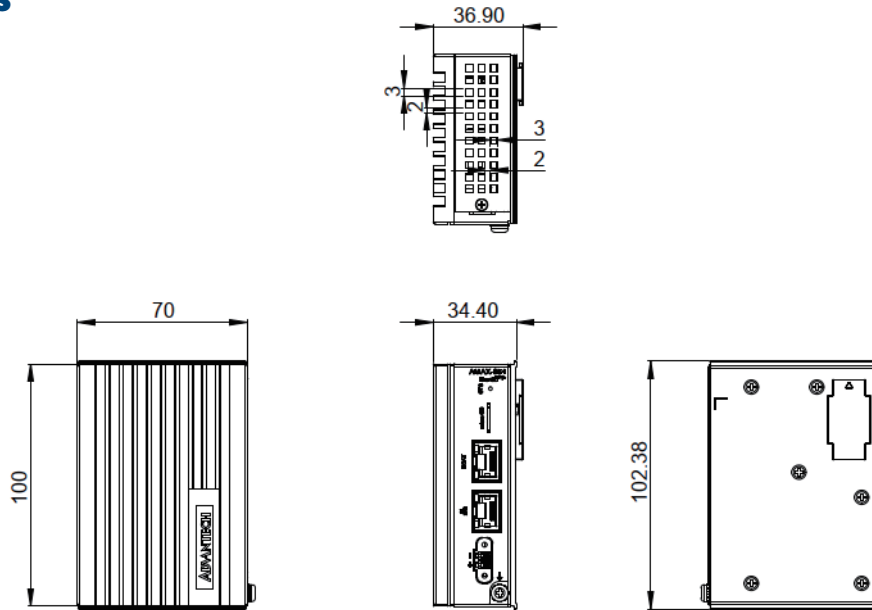
Installation Scenario

DIN-rail Mount

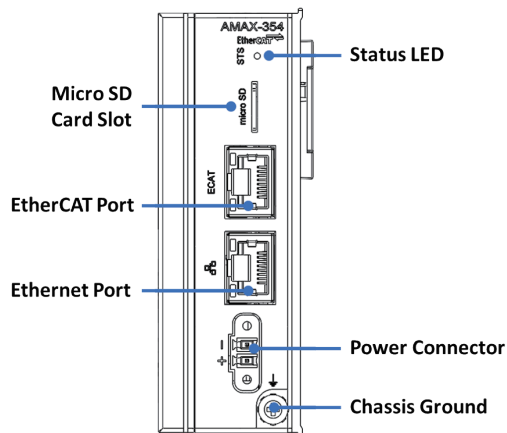


Dimensions

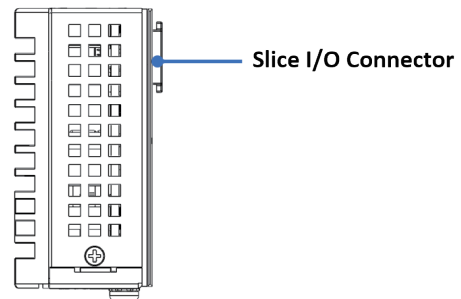
Unit: mm



Front I/O



Top I/O



Ordering Information

- **AMAX-354-32AE** 32-axis ARM-based EtherCAT Controller
- **AMAX-354-16A** 16-axis ARM-based EtherCAT Controller
- **AMAX-354-10A** 10-axis ARM-based EtherCAT Controller

Optional Accessories

DIN-Rail Power Supply

- **UNO-IPS2460-AE** A/D 100-240V 60W 24V DIN-rail power supply
- **96PSD-A60W24-MM** A/D 100-240V 60W 24V MDR DIN-rail power supply

Adapters & Power cords

- **PWR-247-DE** 60W AC to DC UNO series power adapter
- **1702002600** Power Cable US Plug 1.8 M
- **1702002605** Power Cable EU Plug 1.8 M
- **1702031801** Power Cable UK Plug 1.8 M
- **1700000596-11** Power Cable China/Australia Plug 1.8 M