

AMAX-7570

DIN Rail IPC Controller

NEW



Features

- Intel® Atom® x6425RE (1.9GHz) processor with 8GB DDR4 memory
- Wide power input range (10 ~ 36 V_{DC})
- Wide operating temperature range (-40 ~ 60 °C/-40 ~ 140 °F)
- Port isolation for 8 x DI, 8 x DO, 2 x COM
- DP++ ensures HDMI/DVI compatibility
- Dual storage: 1 x M.2 M-key 2242 PCIe/NVMe or SATA/SSD
- Onboard TPM 2.0 provides hardware-based security
- Modular design for optional iDoor extension
- Real-Time BIOS optimization
- Compliant with IEC 61010-1 safety requirements
- CODESYS Pre-Licensed



Introduction

Advantech AMAX series is designed for all IoT control requirements. Our entire product range is built on cutting-edge computing technology, providing the essential value for IoT connectivity. With an optimized real-time control system (1ms latency with low jitter) for CODESYS integration and data retention design during power outages, AMAX delivers a diverse array of control systems in various form factors tailored to meet the demands of different application scenarios.

Specifications

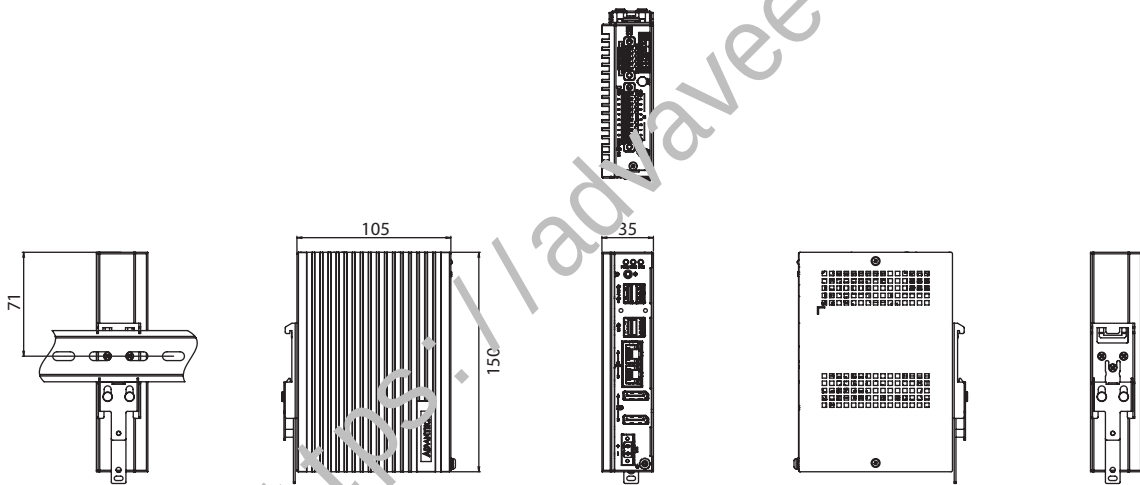
Model		AMAX-7570	
Part Number		AMAX-7570-103X6A AMAX-7570-102X6A AMAX-7570-106X6A	AMAX-7570-200X6A AMAX-7570-202X6A AMAX-7570-206X6A
Description		Intel® ATOM™ IPC Controller	
SoftPLC	Runtime Version	CODESYS V3.5 SP16 CODESYS V3.5 SP18 CODESYS V3.5 SP20	CODESYS Linux Control V4
	Visualization	Target Visualization (Local HMI), Web Visualization (Web Browser)	Target Visualization (Local HMI) Web Visualization (Web Browser)
	Motion Control	SoftMotion CNC Robotic(optional from AMAX-75x0-BTO)	SoftMotion CNC Robotic(optional from AMAX-75x0-BTO)
	Ind. Ethernet Fieldbus Support	EtherCAT MainDevice PROFINET IO-Controller EtherNet/IP Scanner (IEC/CIFX) MODBUS/TCP Server (Slave) and Client (Master)	EtherCAT MainDevice MODBUS/TCP Server (Slave) and Client (Master)**
	Ind. Fieldbus Support	MODBUS/RTU Client (Master) PROFIBUS Master & CANopen Master	**
	Uplink Communication	OPC UA Server(CODESYS), ODBC(CODESYS) MQTT (Sparkplug) via CODESYS Agent from Advantech	OPC UA Server(CODESYS)
	Motion Control Benchmark	EtherCAT, CSP mode, PTP, 64axis 1ms achievable	EtherCAT, CSP mode, PTP, 64axis 500us achievable
Sysem Hardware	BIOS	Real-time optimize BIOS	
	Processor	Intel® Atom™ x6425RE 1.9GHz, Quad core, 1.5MB L2	
	Memory	SO-DIMM 8GB, 1 x slot optional	
	Ethernet	Intel® i226-IT GbE(LAN A/B)	
	LED Indicators	LEDs for Power, Battery Low, RUN(CODESYS program run)	
	Storage(Flash)	M.2 M key PCIe2 optional (Shared with M.2 iDoor) M.2 E key SSD optional	
	Retain Memory	2MB	
	Expansion	1 x iDoor extension module(M.2 Mkey)	
I/O Interfaces	Local Digital IO	8DI/8DO, isolated 2500V _{DC}	
	Serial Ports	2 x RS-232/422/485 (terminal), 50 ~ 115.2kbps, isolated 2500V _{DC}	
	LAN Ports	2 x 10/100/1000/2500BASE-T Fast Ethernet (RJ45)	
	USB Ports	2 x USB 3.2 Gen2 , 1 x USB 3.2 Gen1 and 1 x USB 2.0	
	Display	2 x DP 1.2, up to 4096 x 2160 @ 60Hz	
	Grounding Protection	Chassis grounding	
	Power Connector	1 x 2 Pins	

Specifications (Cont.)

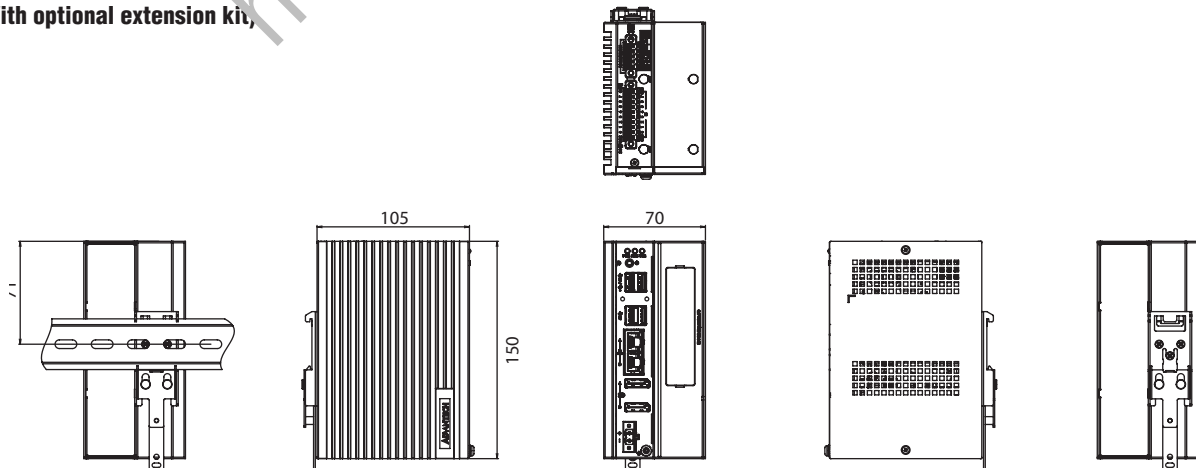
General	Power Requirement	10~36V _{DC}	
	Power Consumption	21W (typical), 47W (max.)	
	OS Support	Win10 LTSC 2021 LTSC 64bit	AdvLinuxTU-IOTG_x64 V3 (Ubuntu 20) AdvLinuxTU-IOTG_x64 V4 (Ubuntu 22)
	Enclosure	Aluminum Alloy housing	
	Mounting	DIN-rail	
	Weight (Net)	Approx. 0.8kg	
	Dimensions (W x H x D)	35 x 150 x 105 mm	
Environment	Certification	CE, FCC, UL 61010-2-201, CCC, BSMI	
	Operating Temperature	-40 ~ 60°C (-40 ~ 140°F)	
	Storage Temperature	-40 ~ 85°C (-40 ~ 185°F)	
	Relative Humidity	10 ~ 95% RH @ 40°C, non-condensing	
	Shock Protection	Operating, IEC 60068-2-27, 50G, half sine, 11ms	
	Vibration Protection	*Operating, IEC 60068-2-64, 2 Grms, random, 5 ~ 500 Hz, 1hr/axis (SSD)"	

Dimensions

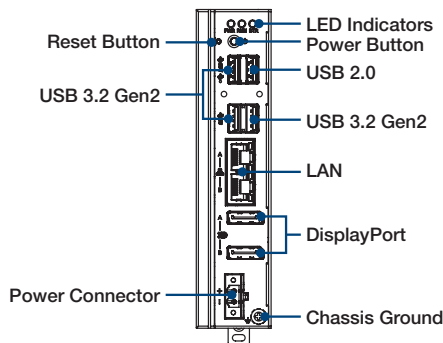
Unit: mm



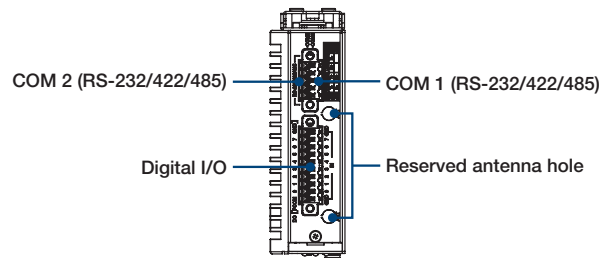
(With optional extension kit,



Front I/O



Top I/O



Ordering Information

- **AMAX-7570-100X6A** Intel Atom, 1.9GHz, 8G, 2LAN, 2COM, 4USB, 8DIO, WCDS
- **AMAX-7570-102X6A** Intel Atom, 1.9GHz, 8G, 2LAN, 2COM, 4USB, 8DIO, WCDS+TW
- **AMAX-7570-106X6A** Intel Atom, 1.9GHz, 8G, 2LAN, 2COM, 4USB, 8DIO, WCDS+TWS
- **AMAX-7570-200X6A** Intel Atom, 1.9GHz, 8G, 2LAN, 2COM, 4USB, 8DIO, LCDS
- **AMAX-7570-202X6A** Intel Atom, 1.9GHz, 8G, 2LAN, 2COM, 4USB, 8DIO, LCDS+TW
- **AMAX-7570-200X6A** Intel Atom, 1.9GHz, 8G, 2LAN, 2COM, 4USB, 8DIO, LCDS+TWS
- **UNO-137-ID1EC** UNO-137 second stack extension kit with 1 x iDoor slot

Embedded OS

- **20701WLE1S0008** Img WIN11 LTSC x64 v7.01 B011 UNO-137_V2 Entry
- **20701WX1ES0002** Img WIN10 LTSC x64 v6.08 B001 UNO-137_V2 Entry
- **20701U22DS0001** Image AdvLinuxTu-IOTG_x64 v4.0.4 for UNO series

Optional Accessories

- **UNO-137-VEGA330** Accessory kit for VEGA-330
- **1990034408N010** Thermal Pad for CPU
- **1990026727N000** Thermal Pad for RAM

DIN-Rail Power Supply

- **PSP-A160W24** A/D 100~240V, 60W, 24V (ADV)
- **96PFD-A120W24-MN** A/D 100 ~ 240V, 120W, 24V NDR
- **PFD-A120W24** A/D 100 ~ 240V, 120W, 24V(ADV) (recommended for use with PoE iDoor module)

Adapter & Power Cable

- **XARK-ADP-90MDH** ADP A/D 100-240V 90W 19V W/PFC C6 END CORD 2 PIN
- **1700001524** Power Cord UL 3P 10A 125V 183cm for US
- **170203183C** Power Cord EU 3P 2.5A 250V 183cm for EU
- **170203180A** Power Cord BSI 3P 2.5A 250V 183cm for UK
- **1700019146** Power Cord CCC 3P 2.5A 250V 183cm for CN
- **1700018553** Power Cord SAA 3P 2.5A 250V 183cm for AU
- **1700008921-11** Power Cord PSE 3P 7A 125V 183cm for AJP
- **96PSA-A120W24T2-4** ADP A/D 100-240V 120W 24V C14 CORD END 62368 (recommended for use with PoE iDoor module)
- **1702002600** Power cable US plug, 1.8 M (industrial grade)
- **1702002605** Power cable EU plug, 1.8 M (industrial grade)
- **1702031801** Power cable UK plug, 1.8 M (industrial grade)
- **1700000596** Power cable China/Australia plug, 1.8 M (industrial grade)
- **1700000237-31** Power cable Japan plug, 1.8 M (industrial grade)

WiFi module and Antenna

- **EWM-W165M203E** Intel 6E AX210 noVpro, WiFi6+BT5.3, -40~85 degree
- **1750008717-01** Dipole Ant. D.B 2.4/5G WiFi 3dBi SMA/M-R BLK
- **1750008799-01** Cable Ant.SMA/F-R-BH MFH4/113 BLK L170

Please note: If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries. Please contact Advantech for certificate compliance.

Extension Kit



Advantech offers an optional second-stack extension kit for expanding the system functionalities

UNO-137-ID1EC

Second-stack extension kit with 1 x iDoor slot (for UNO-137-I23BA)



Specifications

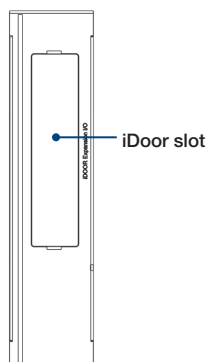
General	
Ports	1x iDoor slot
Dimensions (W x D x H)	35 x 105 x 150 mm (1.4 x 4.1 x 5.9 in)
Weight	0.2 kg (0.4 lb)

Note: The system operating temperature can be maintained at 60 °C/140 °F with most iDoor modules (excluding PoE and USB 3.0 modules)

Supported iDoor Modules

iDoor Smart Digital/Analog I/O	
PCM-34D2R2-AE	Isolated RS-232, DB9 x2, M.2 Bkey (2242, USB)
PCM-34D2R4-AE	Isolated RS-422/485, DB9 x2, M.2 Bkey (2242, USB)
PCM-34D4R2-AE	Non-Isolated RS-232, DB37x1, M.2 Bkey (2242, USB)
PCM-34D4R4-AE	Non-Isolated RS-422/485, DB37x1, M.2 Bkey 2242, USB
PCM-34R1TP-AE	Intel I225, 2.5Gb/s, IEEE 1588, TSN, RJ45*1, M.2
PCM-34R1TP-AE	Intel I225, 2.5Gb/s, IEEE 1588, TSN, RJ45*1, M.2

Front I/O



Ordering Information

Part Number	Description
UNO-137-ID1EC	UNO-137 V2 second-stack extension kit with 1 x iDoor slot