

Moxa New Arm-based Computers

Compact 64-bit computers with cellular



**Dual-core, 2 GB RAM
Compact**



**Dual-core, 2 GB RAM
Built-in LTE**

Series	UC-1200A Series	UC-2200A Series	
Model Name	UC-1222A	UC-2222A-T	UC-2222A-T-EU/AP/US
Computer			
CPU	Armv8 Cortex-A53 1 GHz dual-core	Armv8 Cortex-A53 1 GHz dual-core	Armv8 Cortex-A53 1 GHz dual-core
Memory	2 GB	2 GB	2 GB
Storage Preinstalled	16 GB	16 GB	16 GB
Storage Slot	Micro SD x 1	Micro SD x 1	Micro SD x 1
OS	Moxa Industrial Linux 3 (Linux Debian 11 kernel 5.10)	Moxa Industrial Linux 3 (Linux Debian 11 kernel 5.10)	Moxa Industrial Linux 3 (Linux Debian 11 kernel 5.10)
TPM	TPM 2.0	TPM 2.0	TPM 2.0
Ethernet Ports	2 GbE	2 GbE	2 GbE
Serial Ports (RS-232/422/485)	2	2	2
CAN Ports	–	–	–
DIs / DOs	–	–	–
USB Ports	USB 2.0 x 1	USB 2.0 x 1	USB 2.0 x 1
Wireless			
Wireless Expansion Slot	mPCIe x 1	mPCIe x 1	–
Cellular Connectivity	–	–	Built-in LTE Cat. 4
SIM Slots	Nano SIM x 1	Nano SIM x 1	Nano SIM x 1
Wi-Fi	–	–	–
GPS	–	–	Yes
Standards and Certification			
Safety/EMC/RF	FCC, IC, UL, CE, BSMI, KC, RCM, UKCA	FCC, IC, UL, CE, BSMI, KC, RCM, UKCA	FCC, IC, UL, CE, NCC, RCM, TELEC, UKCA
Carrier Approval	–	–	AT&T, Verizon
Hazardous Locations	CID2, ATEX	CID2, ATEX	CID2, ATEX
Operating Temperature	-40 to 60°C	-40 to 75°C	-40 to 70°C
Power Consumption	4.5 W	4.5 W	7.8 W

Moxa New Wireless-ready Arm-based Computers

Cellular & Wi-Fi built-in with international certifications and carrier approvals



Quad-core, 4 GB RAM
Built-in LTE and Wi-Fi

Series	UC-3400A Series			
Model Name	UC-3420A-T-LTE	UC-3424A-T-LTE	UC-3430A-T-LTE-WiFi	UC-3434A-T-LTE-WiFi
Computer				
CPU	Armv8 Cortex-A53 1.4 GHz quad-core	Armv8 Cortex-A53 1.4 GHz quad-core	Armv8 Cortex-A53 1.4 GHz quad-core	Armv8 Cortex-A53 1.4 GHz quad-core
Memory	4 GB	4 GB	4 GB	4 GB
Storage Preinstalled	16 GB	16 GB	16 GB	16 GB
Storage Slot	Micro SD x 1	Micro SD x 1	Micro SD x 1	Micro SD x 1
OS	Moxa Industrial Linux 3 (Linux Debian 11 kernel 5.10)	Moxa Industrial Linux 3 (Linux Debian 11 kernel 5.10)	Moxa Industrial Linux 3 (Linux Debian 11 kernel 5.10)	Moxa Industrial Linux 3 (Linux Debian 11 kernel 5.10)
TPM	TPM 2.0	TPM 2.0	TPM 2.0	TPM 2.0
Ethernet Ports	2 GbE	2 GbE	2 GbE	2 GbE
Serial Ports (RS-232/422/485)	2	2	2	2
CAN Ports	–	2	–	2
DIs / DOs	–	–	–	–
USB Ports	USB 2.0 x 1	USB 2.0 x 1	USB 2.0 x 1	USB 2.0 x 1
Wireless				
Wireless Expansion Socket	–	–	–	–
Cellular Connectivity	Built-in LTE Cat. 4	Built-in LTE Cat. 4	Built-in LTE Cat. 4	Built-in LTE Cat. 4
SIM Slots	Nano SIM x 2	Nano SIM x 2	Nano SIM x 2	Nano SIM x 2
Wi-Fi	–	–	Built-in WiFi 6	Built-in WiFi 6
GPS	Yes	Yes	Yes	Yes
Standards and Certification				
Safety/EMC/RF	FCC, IC, UL, CE, UKCA, NCC, RCM, TELEC	FCC, IC, UL, CE, UKCA, NCC, RCM, TELEC	FCC, IC, UL, CE, UKCA, NCC, RCM	FCC, IC, UL, CE, UKCA, NCC, RCM
Carrier Approval	AT&T, Verizon	AT&T, Verizon	AT&T, Verizon	AT&T, Verizon
Hazardous Locations	CID2, ATEX	CID2, ATEX	CID2, ATEX	CID2, ATEX
Operating Temperature	-40 to 70°C	-40 to 70°C	-40 to 70°C	-40 to 70°C
Power Consumption	10 W			

Moxa New Wireless-ready Arm-based Computers

5G built-in with international certifications and carrier approvals



Quad-core, 4 GB RAM
5G/CAN/serial Isolation

Series	UC-4400A Series					
Model Name	UC-4410A-T	UC-4430A-T	UC-4450A-T-5G	UC-4454A-T-5G	UC-4414A-I-T	UC-4434A-I-T
Computer						
CPU	Armv8 Cortex-A53 1.6 GHz quad-core	Armv8 Cortex-A53 1.6 GHz quad-core	Armv8 Cortex-A53 1.6 GHz quad-core	Armv8 Cortex-A53 1.6 GHz quad-core	Armv8 Cortex-A53 1.6 GHz quad-core	Armv8 Cortex-A53 1.6 GHz quad-core
Memory	4 GB	4 GB	4 GB	4 GB	4 GB	4 GB
Storage Preinstalled	16 GB	16 GB	16 GB	16 GB	16 GB	16 GB
Storage Slot	Micro SD x 1	Micro SD x 1	Micro SD x 1	Micro SD x 1	Micro SD x 1	Micro SD x 1
OS	Moxa Industrial Linux 3 (Linux Debian 11 kernel 5.10)	Moxa Industrial Linux 3 (Linux Debian 11 kernel 5.10)	Moxa Industrial Linux 3 (Linux Debian 11 kernel 5.10)	Moxa Industrial Linux 3 (Linux Debian 11 kernel 5.10)	Moxa Industrial Linux 3 (Linux Debian 11 kernel 5.10)	Moxa Industrial Linux 3 (Linux Debian 11 kernel 5.10)
TPM	TPM 2.0	TPM 2.0	TPM 2.0	TPM 2.0	TPM 2.0	TPM 2.0
Ethernet Ports	2 GbE	2 GbE	2 GbE	2 GbE	2 GbE	2 GbE
Serial Ports (RS-232/422/485)	2	2	2	4	4 (2 ports with isolation)	4 (2 ports with isolation)
CAN Ports	1	1	1	2	2	2
DIs / DOs	4 DIs, 4 DOs	4 DIs, 4 DOs	4 DIs, 4 DOs	4 DIs, 4 DOs	4 DIs, 4 DOs	4 DIs, 4 DOs
USB Ports	USB 2.0 x 1	USB 2.0 x 1	USB 2.0 x 1	USB 2.0 x 1	USB 2.0 x 1	USB 2.0 x 1
Wireless						
Wireless Expansion Socket	–	M.2 socket x 1 mPCIe slot x 1	M.2 socket x 1	M.2 socket x 1	–	M.2 socket x 1 mPCIe slot x 1
Cellular Connectivity	–	Optional LTE Cat.4 accessory	Built-in 5G	Built-in 5G	–	Optional LTE Cat.4 accessory
SIM Slots	–	Nano SIM x 2	Nano SIM x 2	Nano SIM x 2	–	Nano SIM x 2
Wi-Fi	–	Optional WiFi 6 accessory	Optional WiFi 6 accessory	Optional WiFi 6 accessory	–	Optional WiFi 6 accessory
GPS	–	Optional	Yes	Yes	–	Optional
Standards and Certification						
Safety/EMC/RF	FCC, IC, CE, UKCA, RCM, KC, BSMI, UL	FCC, IC, CE, UKCA, RCM, KC, UL (no RF certification)	FCC, IC, UL, CE, UKCA, NCC, RCM	FCC, IC, UL, CE, UKCA, NCC, RCM	FCC, IC, CE, UKCA, RCM, KC, BSMI, UL	FCC, IC, CE, UKCA, RCM, KC, UL (no RF certification)
Carrier Approval	–	–	AT&T, Verizon	AT&T, Verizon	–	–
Operating Temperature	• Non-wireless: -40 to 75°C • Wireless: -40 to 70°C					
Power Consumption	• 14 W (with cellular and Wi-Fi) • 12 W (with cellular only) • 10 W (without wireless module)					

Moxa Industrial Linux

Moxa's Debian-based industrial-grade stable Linux distribution for long-term projects



Features and Benefits

- ✓ Debian-based distribution that can use all standard Debian packages
- ✓ Developed as per IEC 62443-4-1 and compliant with IEC 62443-4-2 industrial cybersecurity standards (Moxa Industrial Linux 3 Secure)
- ✓ Long-term support until 2027 for Moxa Industrial Linux 1 and 2031 for Moxa Industrial Linux 3
- ✓ Wireless connection management utility with automatic network keep alive and failover
- ✓ Ready-to-use APIs and library to ease access to hardware and I/O interfaces
- ✓ Crash-free robust file system
- ✓ Over-the air (OTA) software updates

Product Series	MIL1	MIL3 / MIL4*	
		Standard	Secure
Support			
Supported Devices	UC-2100 Series, UC-3100 Series, UC-5100 Series, UC-8100 Series, UC-8100A Series, UC-8410A Series, UC-8540 Series, UC-8580 Series	UC-1200A Series, UC-2200A Series, UC-3400A Series, UC-4400A Series, UC-8200 Series, ioThinX 4533 Series	UC-1200A Series, UC-2200A Series, UC-3400A Series, UC-4400A Series, UC-8200 Series, V3200 Series, V3400 Series
10-year Superior Long-term Support (bug fixes and security updates)	2018 to 2027	MIL3: 2022 to 2031 MIL4: 2025 to 2035	
Management			
Middleware for I/O Communication and Control	–	✓	✓
Network Connection and Management Tool	✓ (basic)	✓ (advanced)	✓ (advanced)
Provisioning Tool	–	✓	✓
Security			
IEC 62443-4-1 Certified Development	–	✓	✓
Security Diagnostic Tool	–	–	✓
Secure Boot / Disk Protection	–	LUKS	LUKS, Secure Boot
Dynamic Interface Control	–	✓	✓
Secure Updates via APT	–	–	✓
Backup and Recovery Tool	–	✓	✓
Host-based Intrusion Detection	–	User-configurable	Pre-defined, User-configurable
Brute-force Protection	–	✓	✓
Network Security Monitoring	–	✓	✓
Security Event Auditing (Syslog)	✓ (basic)	✓ (basic)	✓ (advanced)
Secure Decommission Tool	–	✓	✓

* MIL4 is plan to launch in Jan, 2026

Wireless-ready Arm-based Computers

Built-in cellular or Wi-Fi module, RF type approvals, and carrier approvals



Built-in LTE Cat.1



Built-in LTE
Cat.1 and Wi-Fi



Built-in LTE
Cat.1 and Wi-Fi



Built-in LTE
Cat.4 with Wi-Fi expansion

Series	UC-3100 Series			UC-8200 Series
Model	UC-3101	UC-3111	UC-3121	UC-8220
Computer				
CPU	Arm Cortex-A8 1 GHz	Arm Cortex-A8 1 GHz	Arm Cortex-A8 1 GHz	Arm Cortex-A7 1 GHz dual core
Memory	1 GB	1 GB	1 GB	2 GB
Storage Preinstalled	8 GB	8 GB	8 GB	8 GB
Storage Slot	–	SD x 1	SD x 1	MicroSD x 1
OS	Moxa Industrial Linux 1 (Debian 9, Kernel 4.4)	Moxa Industrial Linux 1 (Debian 9, Kernel 4.4)	Moxa Industrial Linux 1 (Debian 9, Kernel 4.4)	Moxa Industrial Linux 1 (Debian 9, Kernel 4.4) Moxa Industrial Linux 3 (Debian 11, Kernel 5.10)
TPM	TPM 2.0	TPM 2.0	TPM 2.0	TPM 2.0
Ethernet Ports	2 LAN	2 LAN	2 LAN	2 GbE
Serial Ports (RS-232/422/485)	1	2	1	2
CAN Ports	–	–	1	1
DIs / DOs	–	–	–	4 DIs, 4 DOs
USB Ports	USB 2.0 x 1	USB 2.0 x 1	USB 2.0 x 1	USB 2.0 x 1
Wireless				
Wireless Expansion Slot	–	–	–	mPCIe slot x 1
Cellular Connectivity	Built-in LTE Cat. 1 ¹	Built-in LTE Cat. 1 ¹	Built-in LTE Cat. 1 ¹	Built-in LTE Cat. 4 ¹
SIM Slots	Nano SIM x 2	Nano SIM x 2	Nano SIM x 2	Nano SIM x 2
Wi-Fi	–	Built-in WiFi 4	Built-in WiFi 4	Expandable ²
GPS	Yes	Yes	Yes	Yes
Standards and Certifications				
Safety/EMC/RF	CE, FCC, UL, IC, RCM, UKCA, TELEC	CE, FCC, UL, IC, RCM, UKCA, WPC, TELEC, IFETEL (US model), ENACOM (EU model), NBTC (EU model), SUBTEL (US model)	CE, FCC, UL, IC, RCM, UKCA, TELEC	CE, FCC, UL, IC, RCM, UKCA, NCC, TELEC, BIS
Carrier Approval	Verizon, AT&T	Verizon, AT&T	Verizon, AT&T	Verizon, AT&T
Hazardous Locations	ATEX, CID2, IECEx	ATEX, CID2, IECEx	ATEX, CID2, IECEx	ATEX, CID2
Environmental Limits and Power Parameters				
Operating Temperature	-40 to 70°C	-40 to 70°C	-40 to 70°C	-40 to 70°C
Power Consumption (max.)	6 W	8 W	8 W	10 W

1. Wireless module must be purchased separately.

Arm-based Computers With **Wireless Options**

Flexibility to add cellular or Wi-Fi capability when needed



1 mPCIe for cellular/Wi-Fi



1 mPCIe for cellular/Wi-Fi



1 mPCIe for cellular/Wi-Fi



1 mPCIe for cellular/Wi-Fi



1 mPCIe for cellular
1 mPCIe for Wi-Fi



1 mPCIe for cellular/Wi-Fi

Series	UC-2100 Series	UC-5100 Series		UC-8100 Series	UC-8200 Series	UC-8410A Series
Model	UC-2104	UC-5102	UC-5112	UC-8112	UC-8220	UC-8410A
Computer						
CPU	Arm Cortex-A8 600 MHz	Arm Cortex-A8 1 GHz	Arm Cortex-A8 1 GHz	Arm Cortex-A8 1 GHz	Arm Cortex-A7 1 GHz dual core	Arm Cortex-A7 1 GHz dual core
Memory	256 MB	512 MB	512 MB	512 MB	2 GB	1 GB
Storage Preinstalled	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB
Storage Slot	–	SD x 1	SD x 1	SD x 1	MicroSD x 1	SD x 1, mSATA x 1
OS	Moxa Industrial Linux (Debian 9, Kernel 4.4)	Moxa Industrial Linux (Debian 9, Kernel 4.4)	Moxa Industrial Linux (Debian 9, Kernel 4.4)	Moxa Industrial Linux (Debian 9, Kernel 4.4)	Moxa Industrial Linux 1 (Debian 9, Kernel 4.4) Moxa Industrial Linux 3 (Debian 11, Kernel 5.10)	Linux Debian 8 (kernel 4.4) Moxa Industrial Linux (Debian 9, Kernel 4.4)
Ethernet Ports	1 LAN	2 LAN	2 LAN	2 LAN	2 GbE	3 GbE
Serial Ports (RS-232/422/485)	–	4	4	2	2	8
CAN Ports	–	–	2	–	1	–
DIs / DOs	–	4 DIs, 4 DOs	4 DIs, 4 DOs	–	4 DIs, 4 DOs	4 DIs, 4 DOs
USB Ports	–	USB 2.0 x 1	USB 2.0 x 1	USB 2.0 x 1	USB 2.0 x 1	USB 2.0 x 2
Wireless¹						
Wireless Expansion Slot	mPCIe x 1	mPCIe x 1	mPCIe x 1	mPCIe x 1	mPCIe x 2	mPCIe x 1
SIM Slots	Mini SIM x 1	Micro SIM x 2	Micro SIM x 2	Mini SIM x 1	Nano SIM x 2	Mini SIM x 1
Standards and Certifications						
Safety/EMC/RF	CE, FCC, UL, IC, UKCA, BIS	CE, FCC, UL, IC, UKCA	CE, FCC, UL, IC, UKCA	CE, FCC, UL, IC, UKCA, RCM, BSMI, BIS	CE, FCC, UL, IC, RCM, UKCA, NCC, KC, BIS	CE, FCC, UL, IC, UKCA
Hazardous Locations	–	–	–	–	ATEX, CID2	–
Environmental Limits and Power Parameters						
Operating Temperature	-10 to 70°C	• -40 to 85°C • -40 to 70°C (with LTE) • -10 to 70°C (with Wi-Fi)	• -40 to 85°C • -40 to 70°C (with LTE) • -10 to 70°C (with Wi-Fi)	-10 to 60°C	• -40 to 85°C • -40 to 70°C (with LTE/Wi-Fi)	• -40 to 75°C • -40 to 70°C (with Wi-Fi)
Power Consumption	4 W	11 W	11 W	8 W	10 W	19 W

1. Wireless module must be purchased separately.

Standard Arm-based Computers

Low power consumption and small form factor



Series	UC-2100 Series				UC-5100 Series		UC-8200 Series	UC-8410A Series
Model	UC-2101	UC-2102	UC-2111	UC-2112	UC-5101	UC-5111	UC-8210	UC-8410A-NW
Computer								
CPU	Arm Cortex-A8 600 MHz	Arm Cortex-A8 600 MHz	Arm Cortex-A8 600 MHz	Arm Cortex-A8 1 GHz	Arm Cortex-A8 1 GHz	Arm Cortex-A8 1 GHz	Arm Cortex-A7 1 GHz dual-core	Arm Cortex-A7 1 GHz dual-core
Memory	256 MB	256 MB	512 MB	512 MB	512 MB	512 MB	2 GB	1 GB
Storage Preinstalled	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB
Storage Slot	–	–	MicroSD x1	MicroSD x 1	SD x 1	SD x 1	MicroSD x 1	SD x 1 mSATA x 1
OS	Moxa Industrial Linux (Debian 9, Kernel 4.4)	Moxa Industrial Linux (Debian 9, Kernel 4.4)	Moxa Industrial Linux (Debian 9, Kernel 4.4)	Moxa Industrial Linux (Debian 9, Kernel 4.4)	Moxa Industrial Linux (Debian 9, Kernel 4.4)	Moxa Industrial Linux (Debian 9, Kernel 4.4)	Moxa Industrial Linux (Debian 9, kernel 4.4 or Debian 11. kernel 5.10)	Moxa Industrial Linux (Debian 9, kernel 4.4)
TPM	–	–	–	–	–	–	TPM 2.0	–
Ethernet Ports	1 LAN	2 LAN	2 LAN	1 GbE, 1 LAN	2 LAN	2 LAN	2 GbE	3 GbE
Serial Ports (RS-232/422/485)	1	–	2	2	4	4	2	8
CAN Ports	–	–	–	–	–	2	1	–
DIs / DOs	–	–	–	–	4 DIs, 4 DOs	4 DIs, 4 DOs	4 DIs, 4 DOs	4 DIs, 4 DOs
USB Ports	–	–	–	–	USB 2.0 x 1	USB 2.0 x 1	USB 2.0 x 1	USB 2.0 x 2
Standards and Certifications								
Safety/EMC/RF	CE, FCC, UL, IC, UKCA, RCM, BIS	CE, FCC, UL, IC, UKCA, RCM, BIS	CE, FCC, UL, IC, UKCA, RCM, BIS	CE, FCC, UL, IC, UKCA, RCM, BIS	CE, FCC, UL, IC, UKCA, RCM	CE, FCC, UL, IC, UKCA, RCM	CE, FCC, UL, IC, KC, UKCA, BIS	CE, FCC, UL, IC, UKCA, RCM
Hazardous Locations	–	–	–	ATEX, CID2	–	–	ATEX, CID2	–
Environmental Limits and Power Parameters								
Operating Temperature	-10 to 60°C	-10 to 60°C	-10 to 60°C	• -40 to 75°C (T models) • -10 to 60°C	• -40 to 85°C (T models) • -10 to 60°C	• -40 to 85°C (T models) • -10 to 60°C	-40 to 85°C	• -40 to 75°C (T models) • -10 to 60°C
Power Consumption	4 W	4 W	4 W	4 W	11 W	11 W	10 W	19 W