

UC-8410A 系列

Arm Cortex-A7 雙核心 1 GHz IIoT 閘道，具有使用無線模組的 1 個擴充插槽、3 個 LAN 連接埠、8 個串列埠、4 個 DI、4 個 DO



特色與優點

- Freescale LS1021A Cortex-A7 1 Ghz 雙核心處理器
- 1 個 GB DDR3 SDRAM
- 8 個 RS-232/422/485 串列埠
- 3 個 10/100/1000 Mbps 乙太網路連接埠
- 支援無線功能的 PCIe 迷你插槽
- 2 台 USB 2.0 主機，用於大量儲存裝置
- 壁掛安裝
- 堅固的無風扇設計
- 提供 -40 至 75°C 寬溫度型號
- 長期支援 Linux 至 2027 年；包括錯誤修復和安全修補

認證



簡介

UC-8410A 系列嵌入式電腦支援極為豐富的通訊介面，包括 8 個 RS-232/422/485 串列埠、3 個乙太網路連接埠、1 個用於無線模組的 PCIe 迷你插槽、4 個數位輸入通道、4 個數位輸出通道、1 個 mSATA 插槽以及 2 台 USB 2.0 主機。

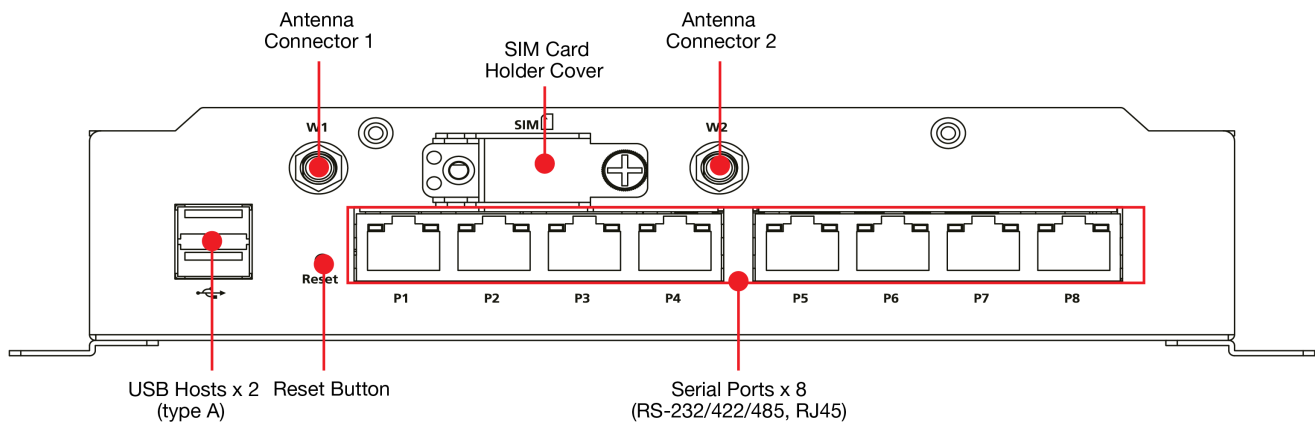
UC-8410A 電腦使用 Freescale Cortex-A7 雙核心 1 GHz RISC CPU。這款功能強大的運算引擎可支援多個實用的通訊功能，不會有產生過熱的情況。內建的 8 GB eMMC 卡以及 1 GB DDR3 SDRAM 可提供足夠記憶體，讓您執行您的應用程式軟體，同時 mSATA 插槽可讓您靈活地新增額外的資料儲存空間。

UC-8410A 電腦配備有各式通訊介面，包括串列埠、乙太網路連接埠、無線通訊插槽，以及數位輸入/輸出通道，使其成為需要網路和裝置通訊的工業應用的理想通訊平台。

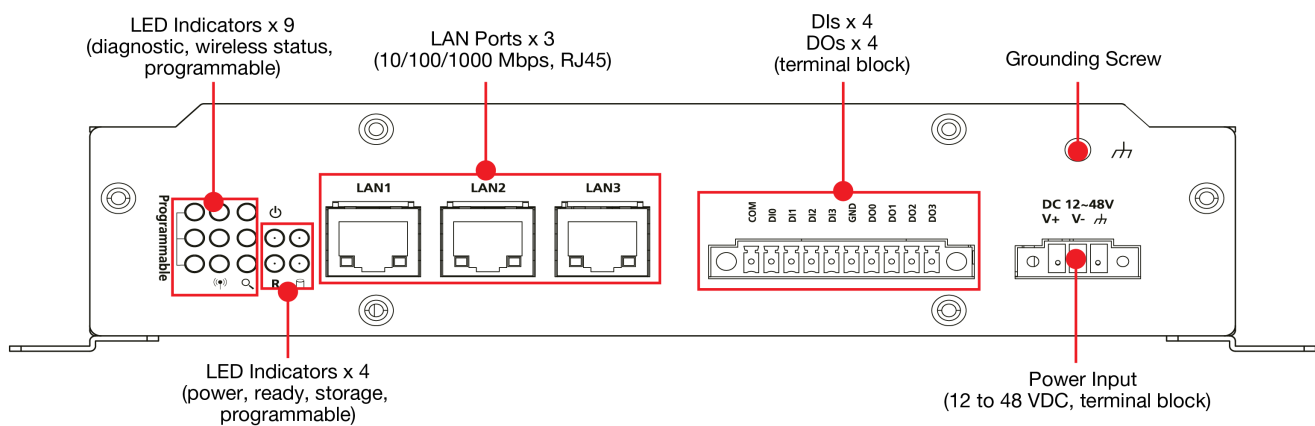
UC-8410A 系列已配備預先安裝的 Linux Debian 8，為軟體程式開發提供開放軟體作業系統。這樣的設計也使得 UC-8410A 電腦成為工業應用中理想的解決方案，但是無需付出高額成本與過多努力。除了 UC-8410A 這款標準型號外，亦提供可適應嚴苛工業環境，可在 -40 至 75°C 操作的寬溫度型號。

外觀

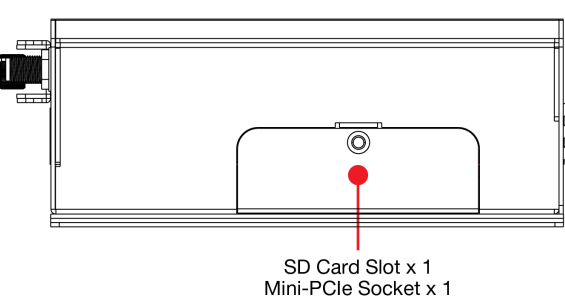
前視圖



後視圖



左視圖



規格

Computer	
CPU	Armv7 Cortex-A7 dual-core 1 GHz
System Memory Pre-installed	1 GB DDR3L
Storage Pre-installed	8 GB eMMC

Storage Slot	SD slots x 1 mSATA slots x 1, internal mini-PCIe socket
Supported OS	Linux Debian 8 (Linux kernel v4.1), 2022 EOL Moxa Industrial Linux 1 (Debian 9, kernel 4.4), 2027 EOL See www.moxa.com/MIL

Computer Interface

Ethernet Ports	Auto-sensing 10/100/1000 Mbps ports (RJ45 connector) x 3
Serial Ports	RS-232/422/485 ports x 8, software selectable (RJ45)
USB 2.0	USB 2.0 hosts x 2, type-A connectors
Digital Input	DIs x 4
Digital Output	DOs x 4
Expansion Slots	UC-8410A-LX Series: 1
Cellular Antenna Connector	UC-8410A-LX Series: 2
Number of SIMs	UC-8410A-LX Series: 1
SIM Format	UC-8410A-LX Series: Mini
Console Port	1 x 4-pin header to DB9 console port

Ethernet Interface

Magnetic Isolation Protection	1.5 kV (built-in)
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Serial Interface

Baudrate	50 bps to 115.2 kbps
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark
Flow Control	RTS/CTS, XON/XOFF ADDC (automatic data direction control) for RS-485 RTS Toggle (RS-232 only)

Serial Signals

RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422	Tx+, Tx-, Rx+, Rx-, GND
RS-485-2w	Data+, Data-, GND
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND

Digital Inputs

Channel-to-Channel Isolation	3000 VDC
Connector	Screw-fastened Euroblock terminal
Dry Contact	On: short to GND Off: open

Sensor Type	Dry contact Wet contact (NPN or PNP)
Wet Contact (DI to COM)	On: 10 to 30 VDC Off: 0 to 3 VDC

Digital Outputs

Connector	Screw-fastened Euroblock terminal
Current Rating	200 mA per channel
I/O Type	Sink
Voltage	Open-drain to 30 VDC

LED Indicators

System	Power x 1 System ready x 1 Storage x 1 Programmable x 10
LAN	2 per port (10/100/1000 Mbps)
Serial	2 per port (Tx, Rx)

Power Parameters

Input Current	1.57A @ 12 VAC max.
Input Voltage	12 to 48 VDC
Power Consumption	19 W (max.)
Power Connector	Terminal block (for DC models)

Physical Characteristics

Dimensions	200 x 120 x 48.6 mm (7.87 x 4.72 x 1.91 in)
Weight	1,000 g (2.21 lb)
Housing	Metal
IP Rating	IP30
Installation	Wall mounting (standard)

Environmental Limits

Operating Temperature	Standard Models: -10 to 60°C (14 to 140°F) Wide Temp. Models: -40 to 75°C (-40 to 167°F) Wide Temp. Models with LTE/Wi-Fi: -40 to 70°C (-40 to 158°F)
Storage Temperature (package included)	Standard Models: -20 to 75°C (-4 to 167°F) Wide Temp. Models: -40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

EMC	EN 55032/35
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 0.5 kV; Signal: 0.5 kV IEC 61000-4-5 Surge: Power: 0.5 kV; Signal: 1 kV

	IEC 61000-4-6 CS: 3 V IEC 61000-4-8 PFMF
Safety	UL/IEC 60950-1 & 62368-1
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-64

Declaration

Green Product	RoHS, CRoHS, WEEE
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Warranty

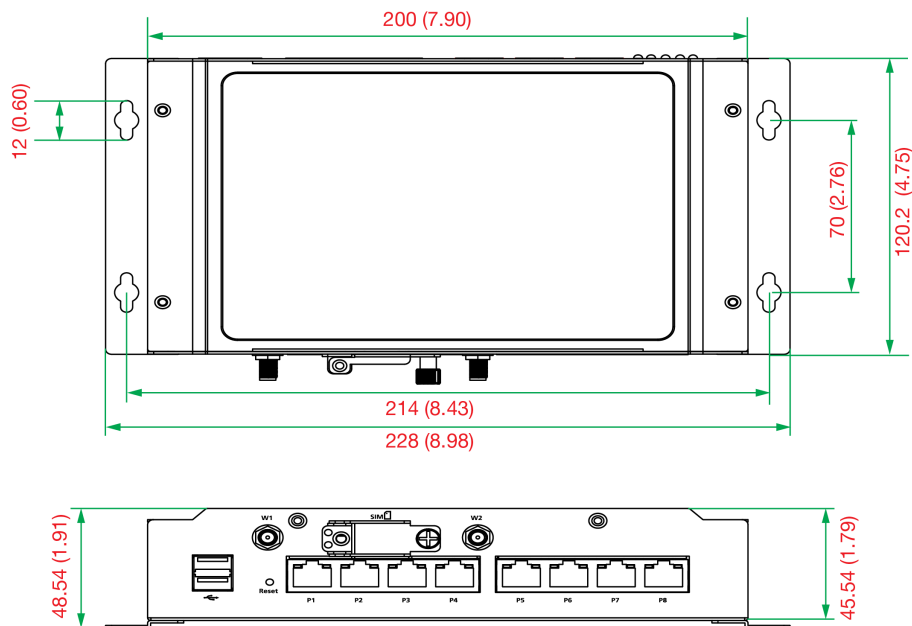
Warranty Period	5 years
Details	See www.moxa.com/tw/warranty

Package Contents

Device	1 x UC-8410A Series computer
Installation Kit	1 x terminal block, 3-pin 1 x wall-mounting kit
Cable	1 x 4-pin header to DB9 console cable 1 x terminal block to power jack converter
Documentation	1 x quick installation guide 1 x warranty card

尺寸

單位：公釐（英吋）



訂購資訊

Model Name	CPU	OS	mPCIe Slot for Wireless Module	SIM Slots	Operating Temp.
UC-8410A-LX	Armv7 Cortex-A7 dual-core 1 GHz	Debian 8	√	1	-10 to 60°C
UC-8410A-LX (deb9)	Armv7 Cortex-A7 dual-core 1 GHz	Moxa Industrial Linux (Debian 9)	√	1	-10 to 60°C
UC-8410A-T-LX	Armv7 Cortex-A7 dual-core 1 GHz	Debian 8	√	1	-40 to 75°C -40 to 70°C (with Wi-Fi)
UC-8410A-T-LX (deb9)	Armv7 Cortex-A7 dual-core 1 GHz	Moxa Industrial Linux (Debian 9)	√	1	-40 to 75°C -40 to 70°C (with LTE/Wi-Fi)
UC-8410A-NW-LX	Armv7 Cortex-A7 dual-core 1 GHz	Debian 8	–	–	-10 to 60°C
UC-8410A-NW-LX (deb9)	Armv7 Cortex-A7 dual-core 1 GHz	Moxa Industrial Linux (Debian 9)	–	–	-10 to 60°C
UC-8410A-NW-T-LX	Armv7 Cortex-A7 dual-core 1 GHz	Debian 8	–	–	-40 to 75°C
UC-8410A-NW-T-LX (deb9)	Armv7 Cortex-A7 dual-core 1 GHz	Moxa Industrial Linux (Debian 9)	–	–	-40 to 75°C

配件 (選購)

Antennas

ANT-WDB-ARM-02	2 dBi at 2.4 GHz or 2 dBi at 5 GHz, RP-SMA (male) omnidirectional rubber-duck antenna
ANT-LTE-OSM-06-3m BK MIMO	Multiband antenna with screw-fastened mounting option for 700-2700/2400-2500/5150-5850 MHz frequencies
ANT-LTE-ASM-05 BK	704-960/1710-2620 MHz, LTE stick antenna, 5 dBi

Cables

CBL-F9DPF1x4-BK-100	Console cable with 4-pin connector, 1 m
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Cellular Wireless Modules

UC-8410A LTE-CAT4-EU	Telit LE910C4-EU LTE Cat. 4 mini card with 2 M2.5 screws for the EMEA region, compatible with UC-8410A hardware rev. 2.1.0 and higher
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Wi-Fi Wireless Modules

Wi-Fi-BGN(252NI)	Wi-Fi module with 2 antennas, antenna cables and connectors, 2 black screws, 2 lock washers, 2 nuts, 1 thermal pad
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DIN-Rail Mounting Kits

UC-8410A DIN-rail Kit	DIN-rail kit with 6 M3 screws (also included in the UC-8410A Series package)
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Power Adapters

PWR-24250-DT-S1	Desktop power supply (requires power cord), 24 VDC, 2.5 A, 100 to 240 VAC, 0 to 40°C operating temperature
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Power Cords

PWC-C13CN-3B-183	Power cord with three-prong CN plug, 1.83 m
PWC-C13AU-3B-183	Power cord with AU plug, 1.83 m
PWC-C13JP-3B-183	Power cord with JP plug, 7A/125V, 1.83 m
PWC-C13UK-3B-183	Power cord with UK plug, 1.83 m
PWC-C13US-3B-183	Power cord with US plug, 1.83 m
PWC-C13EU-3B-183	Power cord with EU/KR plug, 1.83 m

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