

AWK-1137C 系列

入門工業級 Wi-Fi 4 (802.11n) 無線用戶端



特色與優點

- IEEE 802.11n Wi-Fi 4 用戶端
- 可選雙頻 Wi-Fi，資料傳輸速率最高可達 300 Mbps
- 不限 AP 類型的毫秒級用戶端 Turbo Roaming 快速漫遊¹
- 尺寸小巧並容易安裝
- 透過網路位址轉譯 (NAT) 輕鬆設定網路
- 整合式天線隔離設計可防止外部電氣干擾
- 全方位介面，提供一個串列埠和兩個乙太網路 LAN 連接埠

認證



簡介

AWK-1137C 系列是專為工業應用設計的無線用戶端，致力於為單一移動式裝置提供專用且無縫的連線。此系列是確保動態生產環境中 AGV、機械手臂及其他行動機具穩定連線的理想選擇。

AWK-1137C 系列的卓越效能源自基於用戶端的 Turbo Roaming 快速漫遊技術，可實現存取點之間毫秒級的極速切換。這項技術消除了切換過程中的封包遺失情形，因而能夠維持連續生產，並提升作業效率。其不限 AP 類型的設計能夠確保與任何品牌的 Wi-Fi 存取點之間無縫互通，使系統彈性達到最高。

AWK-1137C 系列支援 IEEE 802.11n 可選雙頻 Wi-Fi，資料傳輸速率高達 300 Mbps，能夠提供可靠的無線連線。其具備 -40 至 75°C 的寬操作溫度範圍且尺寸小巧，結合整合式天線隔離設計可防止外部電氣干擾，確保在嚴苛或空間受限的環境中，能夠保持效能始終如一，可靠性持久穩定。

客製化工業級無線網路技術

- 基於用戶端的 Turbo Roaming 快速漫遊，支援不限 AP 類型實現無縫漫遊，¹ 在 AP 間的漫遊復原時間小於 150 毫秒
- 採用 2x2 MIMO 技術，可提升多串流資料的傳輸及接收能力
- DFS 頻道支援提供更廣泛的 5 GHz 頻道範圍，避免現有無線基礎設施的干擾
- 專用的 MXview 無線網路管理軟體，具備動態拓撲視圖、互動式漫遊記錄播放功能，以及詳細的裝置資訊與效能指標圖表

工業合規性與認證

- 符合 EN 18031-1 標準，確保符合歐盟法規並增強對網路威脅的防護能力

規格

WLAN Interface

WLAN Standards	2.4 GHz: 802.11n with 64 QAM support, 20/40 MHz 5 GHz: 802.11n with 64 QAM support, 20/40 MHz WMM for QoS
Frequency Band for US (20 MHz operating channels)	AWK-1137C-US models only: 2.412 to 2.462 GHz (11 channels) 5.180 to 5.240 GHz (4 channels) 5.260 to 5.320 GHz (4 channels) ² 5.500 to 5.700 GHz (11 channels) ² 5.745 to 5.825 GHz (5 channels)

1. 此處所指的 Turbo Roaming 快速漫遊復原時間是在最佳狀態下，配置無干擾 20 MHz RF 頻道、WPA2-PSK 安全性和預設的 Turbo Roaming 快速漫遊參數，所得到的測試結果平均值。用戶端設定為在 100 Kbps 流量負載下 3 個頻道漫遊。其他情況也有可能會影響漫遊的效能。若想了解更多關於 Turbo Roaming 快速漫遊的參數設定，請參閱產品手冊。
2. 支援 DFS (動態頻率選擇) 頻道：在 AP 模式下，當設備偵測到一個雷達信號，會自動切換到另一個頻道。然而，根據規定，當頻道切換後，若要重啟服務，需要 60 秒的可用性檢查期。

Frequency Band for EU (20 MHz operating channels)	AWK-1137C-EU models only: 2.412 to 2.472 GHz (13 channels) 5.180 to 5.240 GHz (4 channels) 5.260 to 5.320 GHz (4 channels) ³ 5.500 to 5.700 GHz (11 channels) ³																															
Frequency Band for JP (20 MHz operating channels)	AWK-1137C-JP models only: 2.412 to 2.484 GHz (14 channels) 5.180 to 5.240 GHz (4 channels) 5.260 to 5.320 GHz (4 channels) ³ 5.500 to 5.700 GHz (11 channels) ³																															
Wireless Security	WEP encryption (64-bit and 128-bit) WPA/WPA2-Enterprise (IEEE 802.1X/RADIUS, TKIP, AES) WPA/WPA2-Personal																															
Wireless Roaming	Turbo Roaming ⁴																															
Transmission Rate	2.4 GHz: Up to 144.4 Mbps 5 GHz: Up to 300 Mbps																															
Transmitter Power	<table><tr><th></th><th>US</th><th>EU</th><th>JP</th></tr><tr><td>2.4 GHz</td><td>26 dBm</td><td>18 dBm</td><td>18 dBm</td></tr><tr><td>5 GHz (UNII-1)</td><td>23 dBm</td><td>23 dBm</td><td>23 dBm</td></tr><tr><td>5 GHz (UNII-2)</td><td>23 dBm</td><td>23 dBm</td><td>23 dBm</td></tr><tr><td>5 GHz (UNII-2e)</td><td>23 dBm</td><td>23 dBm</td><td>23 dBm</td></tr><tr><td>5 GHz (UNII-3)</td><td>23 dBm</td><td>–</td><td>–</td></tr><tr><td colspan="4">Note: Based on regional regulations, the maximum transmission power allowed on the UNII bands is restricted in the firmware, as indicated above.</td></tr></table>					US	EU	JP	2.4 GHz	26 dBm	18 dBm	18 dBm	5 GHz (UNII-1)	23 dBm	23 dBm	23 dBm	5 GHz (UNII-2)	23 dBm	23 dBm	23 dBm	5 GHz (UNII-2e)	23 dBm	23 dBm	23 dBm	5 GHz (UNII-3)	23 dBm	–	–	Note: Based on regional regulations, the maximum transmission power allowed on the UNII bands is restricted in the firmware, as indicated above.			
	US	EU	JP																													
2.4 GHz	26 dBm	18 dBm	18 dBm																													
5 GHz (UNII-1)	23 dBm	23 dBm	23 dBm																													
5 GHz (UNII-2)	23 dBm	23 dBm	23 dBm																													
5 GHz (UNII-2e)	23 dBm	23 dBm	23 dBm																													
5 GHz (UNII-3)	23 dBm	–	–																													
Note: Based on regional regulations, the maximum transmission power allowed on the UNII bands is restricted in the firmware, as indicated above.																																
Transmitter Power for 802.11a (Dual Chain)	23±1.5 dBm @ 6 to 24 Mbps 21±1.5 dBm @ 36 Mbps 29±1.5 dBm @ 48 Mbps 18±1.5 dBm @ 54 Mbps																															
Transmitter Power for 802.11n (5 GHz, Dual Chain)	23±1.5 dBm @ MCS0/8 20 MHz 18±1.5 dBm @ MCS7/15 20 MHz 23±1.5 dBm @ MCS0/8 40 MHz 18±1.5 dBm @ MCS7/15 40 MHz																															
Transmitter Power for 802.11b (Dual Chain)	26±.1.5 dBm @ 1 Mbps 26±1.5 dBm @ 2 Mbps 26±1.5 dBm @ 5.5 Mbps 25±1.5 dBm @ 11 Mbps																															
Transmitter Power for 802.11g (Dual Chain)	22±1.5 dBm @ 36 Mbps 19±1.5 dBm @ 54 Mbps 23±1.5 dBm @ 6 to 24 Mbps 20±1.5 dBm @ 48 Mbps																															
Transmitter Power for 802.11n (2.4 GHz, Dual Chain)	23±1.5 dBm @ MCS0/8 20 MHz 17±1.5 dBm @ MCS7/15 20 MHz 23±1.5 dBm @ MCS0/8 40 MHz 17±1.5 dBm @ MCS7/15 40 MHz																															
Receiver Sensitivity for 802.11a (measured at 5.680 GHz)	Typ. -90 @ 6 Mbps Typ. -88 @ 9 Mbps Typ. -87 @ 12 Mbps Typ. -85 @ 18 Mbps Typ. -81 @ 24 Mbps Typ. -78 @ 36 Mbps																															

3. 支援 DFS (動態頻率選擇) 頻道：在 AP 模式下，當設備偵測到一個雷達信號，會自動切換到另一個頻道。然而，根據規定，當頻道切換後，若要重啟服務，需要 60 秒的可用性檢查期。

4. 此處所指出的快速漫遊復原時間是在最佳化條件下記錄的平均測試結果，其中包含無干擾的 20 MHz RF 頻道、WPA2-PSK 安全性和預設快速漫遊參數。用戶端設定為在 100 Kbps 流量負載下 3 個頻道漫遊。其他情況也有可能會影響漫遊的效能。若想了解更多關於 Turbo Roaming 快速漫遊的參數設定，請參閱產品手冊。

	Typ. -74 @ 48 Mbps Typ. -73 @ 54 Mbps Note: Due to a limitation in the receiver sensitivity performance for channels 153 and 161, it is recommended to avoid using these channels in your critical applications.
Receiver Sensitivity for 802.11n (5 GHz)	Typ. -69 dBm @ MCS7 20 MHz Typ. -70 dBm @ MCS15 20 MHz Typ. -64 dBm @ MCS7 40 MHz Typ. -66 dBm @ MCS15 40 MHz Note: Due to a limitation in the receiver sensitivity performance for channels 153 and 161, it is recommended to avoid using these channels in your critical applications.
Receiver Sensitivity for 802.11b (measured at 2.437 GHz)	Typ. -89 dBm @ 1 Mbps Typ. -89 dBm @ 2 Mbps Typ. -89 dBm @ 5.5 Mbps Typ. -88 dBm @ 11 Mbps
Receiver Sensitivity for 802.11g (measured at 2.437 GHz)	Typ. -88 dBm @ 6 Mbps Typ. -88 dBm @ 9 Mbps Typ. -88 dBm @ 12 Mbps Typ. -87 dBm @ 18 Mbps Typ. -84 dBm @ 24 Mbps Typ. -81 dBm @ 36 Mbps Typ. -77 dBm @ 48 Mbps Typ. -75 dBm @ 54 Mbps
Receiver Sensitivity for 802.11n (2.4 GHz; measured at 2.437 GHz)	Typ. -70 dBm @ MCS7 20 MHz Typ. -70 dBm @ MCS15 20 MHz Typ. -64 dBm @ MCS7 40 MHz Typ. -65 dBm @ MCS15 40 MHz
WLAN Operation Mode	Client Client-Router Slave Sniffer
Antenna	External, 2/2 dBi Omni-directional
Antenna Connectors	2 RP-SMA female

Ethernet Interface

10/100BaseT(X) Ports (RJ45 connector)	2
Standards	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) IEEE 802.1Q for VLAN Tagging

Ethernet Software Features

Management	DHCP Server/Client HTTP IPv4 LLDP SMTP SNMPv1/v2c/v3 Syslog TCP/IP Telnet UDP Proxy ARP VLAN Wireless Search Utility MXconfig MXview One MXview Wireless Turbo Roaming Analyzer
Routing	Port forwarding Static Route NAT

Security	HTTPS/SSL RADIUS SSH
Time Management	NTP Client SNTP Client

Firewall

Filter	ICMP MAC address IP protocol Port-based
--------	--

Serial Interface

Connector	DB9 male
Serial Standards	RS-232, RS-422/485, RS-232/422/485
Operation Modes	Disabled, Real COM, RFC2217, TCP Client, TCP Server, UDP
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark
Flow Control	None, RTS/CTS, XON/XOFF
Baudrate	75 bps to 921.6 kbps
Serial Data Log	256 KB

Serial Signals

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

LED Interface

LED Indicators	SYS, LAN1, LAN2, WLAN, Serial
----------------	-------------------------------

Input/Output Interface

Buttons	Reset button
---------	--------------

Physical Characteristics

Housing	Metal
IP Rating	IP30
Dimensions	77.1 x 115.5 x 26 mm (3.04 x 4.55 x 1.02 in)
Weight	470 g (1.03 lb)
Installation	DIN-rail mounting Wall mounting (with optional kit)

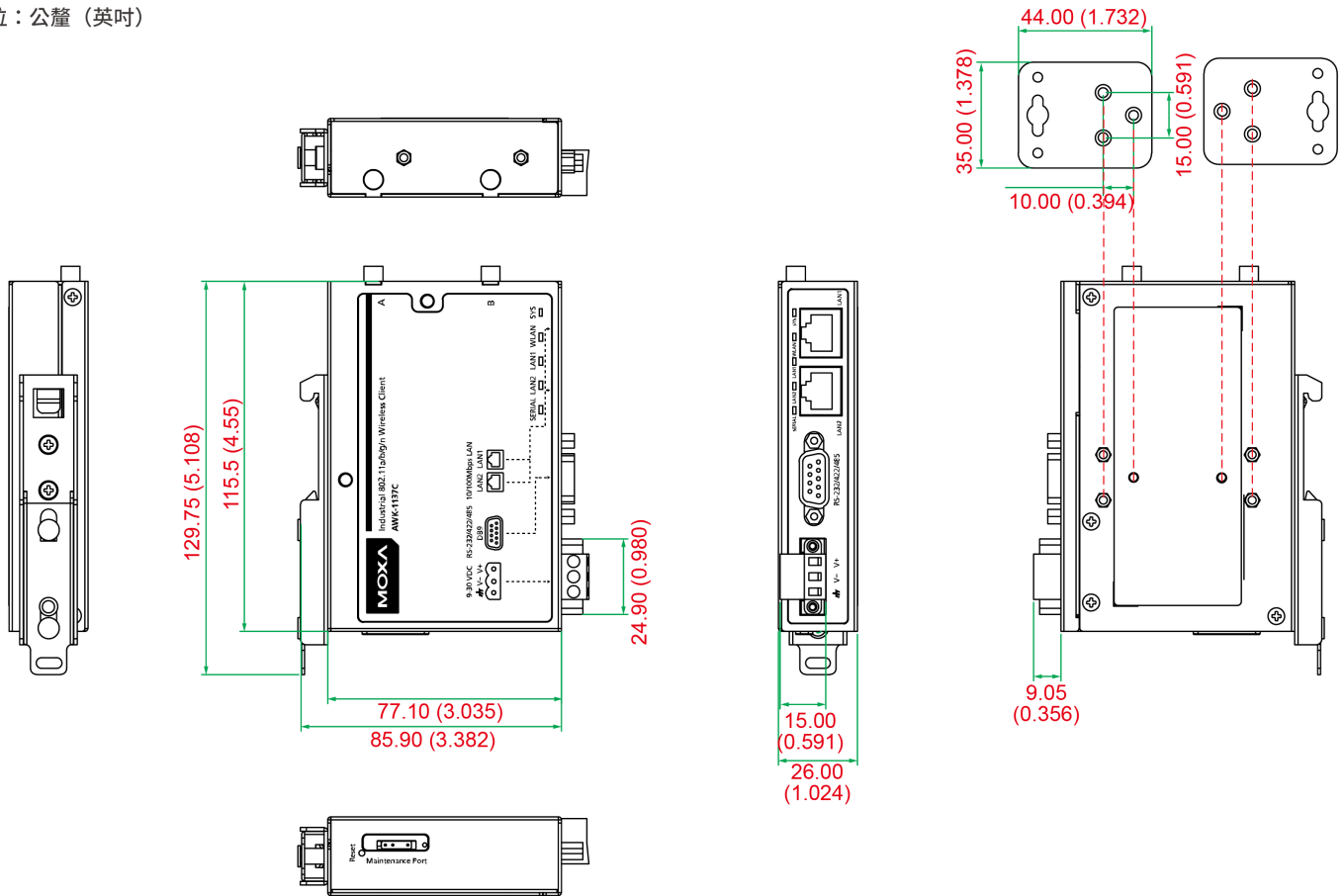
Power Parameters

Input Voltage	9 to 30 VDC
Power Connector	1 removable 3-contact terminal block(s)

Power Consumption	11.7 W (max.)
Reverse Polarity Protection	Supported
Environmental Limits	
Operating Temperature	Standard models: 0 to 60°C (32 to 140°F) Wide temp. models: -40 to 75°C (-40 to 167°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
Standards and Certifications	
EMC	EN 61000-6-2/-6-4 EN 55032/35
EMI	CISPR 22, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 8 kV; Air: 15 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 1 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF
Radio	EN 300 328 EN 301 489-1/17 EN 301 893 FCC ID SLE-1137C MIC NCC SRRC WPC KC RCM
Road Vehicles	E mark E1
Safety	EN 62368-1 UL 60950-1
Cybersecurity	EN 18031-1
Vibration	IEC 60068-2-6
MTBF	
Time	1,125,942 hrs
Standards	Telcordia Standard SR-332
Warranty	
Warranty Period	5 years
Details	See www.moxa.com/tw/warranty
Package Contents	
Device	1 x AWK-1137C Series wireless client
Installation Kit	1 x DIN-rail kit
Antenna	2 x 2.4/5 GHz antenna
Documentation	1 x quick installation guide 1 x warranty card

尺寸

單位：公釐（英吋）



訂購資訊

Model Name	Band	Standards	Operating Temp.
AWK-1137C-EU	EU	802.11a/b/g/n	0 to 60°C
AWK-1137C-EU-T	EU	802.11a/b/g/n	-40 to 75°C
AWK-1137C-JP	JP	802.11a/b/g/n	0 to 60°C
AWK-1137C-JP-T	JP	802.11a/b/g/n	-40 to 75°C
AWK-1137C-US	US	802.11a/b/g/n	0 to 60°C
AWK-1137C-US-T	US	802.11a/b/g/n	-40 to 75°C

配件（選購）

Antennas

ANT-WDB-ONF-0709	7 dBi at 2.4 GHz or 9 dBi at 5 GHz, N-type (female), dual-band, omnidirectional antenna
ANT-WDB-ANM-0306	3 dBi at 2.4 GHz or 6 dBi at 5 GHz, N-type (male), omnidirectional antenna
ANT-WDB-ONM-0707	07 dBi at 2.4 GHz and 07 dBi at 5 GHz, N-type (male), dual-band omnidirectional antenna
ANT-WDB-ANM-0502	5 dBi at 2.4 GHz or 2 dBi at 5 GHz, N-type (male), omnidirectional antenna
ANT-WDB-ARM-02	2 dBi at 2.4 GHz or 2 dBi at 5 GHz, RP-SMA (male) omnidirectional rubber-duck antenna
ANT-WDB-ARM-0202	2 dBi at 2.4 GHz or 2 dBi at 5 GHz, RP-SMA (male), dual-band, omnidirectional antenna
ANT-WDB-PNF-1011	10 dBi at 2.4 GHz and 11 dBi at 5 GHz, N-type (female), dual-band directional antenna
MAT-WDB-CA-RM-2-0205	2.4/5 GHz, ceiling antenna, 2/5 dBi, MIMO 2x2, RP-SMA-type (male)

MAT-WDB-DA-RM-2-0203-1m	2.4/5 GHz, desktop antenna, 2/3 dBi, MIMO 2x2, RP-SMA-type (male), 1 m cable
MAT-WDB-PA-NF-2-0708	2.4/5 GHz, panel antenna, 7/8 dBi, MIMO 2x2, N-type (female)
ANT-WSB5-PNF-16	16 dBi at 5 GHz, N-type (female), single-band directional antenna
ANT-WSB-PNF-12-02	12 dBi at 2.4 GHz, N-type (female), single-band directional antenna
ANT-WSB-AHRM-05-1.5m	5 dBi at 2.4 GHz, RP-SMA (male), omnidirectional/dipole antenna, 1.5 m cable

Wireless Antenna Cables

A-CRF-RFRM-R5-60	Wireless antenna cable with RP-SMA (female) to RP-SMA (male) connectors, RG-402 type, 0.6 m
A-CRF-RFRM-R4-150	Wireless antenna cable with RP-SMA (female) to RP-SMA (male) connectors, magnetic base, RG-174 type, 1.5 m
A-CRF-RMNM-L1-300	N-type (male) to RP SMA (male) LMR-195 Lite cable, 3 m
A-CRF-RMNM-L1-600	N-type (male) to RP SMA (male) LMR-195 Lite cable, 6 m
A-CRF-RMNM-L1-900	N-type (male) to RP SMA (male) LMR-195 Lite cable, 9 m

Surge Arrestors

A-SA-NFNF-02	0 to 6 GHz, N-type (female) to N-type (female) surge arrester
A-SA-NMNF-02	0 to 6 GHz, N-type (male) to N-type (female) surge arrester

Wireless Adapters

A-ADP-RJ458P-DB9F-ABC01	DB9 female to RJ45 connector for the ABC-01 Series
-------------------------	--

Wireless Terminating Resistors

A-TRM-50-NM	50-ohm termination resistor with N-type male connector
-------------	--

Wall-Mounting Kits

WK-35-01	Wall-mounting kit with 2 plates (35 x 44 x 2.5 mm) and 6 screws
----------	---

© Moxa Inc. 版權所有。2026 年 1 月 9 日更新。

未經 Moxa Inc. 明確書面許可，不得以任何方式複製或使用本文件及其任何部分。產品規格如有變更，恕不另行通知。請至本公司官網了解最新的產品資訊。