

TAP-M310R 系列

Wi-Fi 6 (802.11ax) 鐵路列車對地 IP67 無線 AP/用戶端



特色與優點

- 具整合式交換器連接埠與 AC 或 DC 電源輸入的彈性型號選擇
- 內建天線分離器以最佳化軌旁部署
- 內建 2.4 GHz 和 5 GHz 帶通濾波器，可實現更可靠的無線連接
- 實現低於 50 毫秒且以控制器為基礎的 Turbo Roaming 快速漫遊，達成無縫列車對地通訊

認證



EN 50155

簡介

TAP-M310R 系列 Wi-Fi 6 (802.11ax) 鐵路列車對地 IP67 等級無線 AP/用戶端專為 CBTC、CCTV 與 BBRS 通訊所設計，支援切換時間低於 50 毫秒的無縫以控制器為基礎的 Turbo Roaming 快速漫遊。TAP-M310R 系列提供多種配置，包括 AC 或 DC 電源輸入以及整合式交換器連接埠，可實現更彈性的部署，以滿足不同車載與軌旁應用的需求。TAP-M310R 系列內建帶通濾波器以減少干擾，並具備 Moxa 的 Turbo Chain 技術，以提供可靠的 LAN 通訊。

規格

WLAN Interface

WLAN Standards	2.4 GHz: 802.11b/g/n/ax with 1024 QAM support, 20/40 MHz 5 GHz: 802.11a/n/ac/ax with 1024 QAM support, 20/40/80 MHz
Frequency Band for US (20 MHz operating channels)	TAP-M310R-US models only: 2.412 to 2.462 GHz (11 channels) 5.180 to 5.240 GHz (4 channels) 5.745 to 5.825 GHz (5 channels)
Frequency Band for EU (20 MHz operating channels)	TAP-M310R-EU models only: 2.412 to 2.472 GHz (13 channels) 5.180 to 5.240 GHz (4 channels) 5.745 to 5.825 GHz (5 channels)
Wireless Security	SSID broadcast enable/disable WPA2/WPA3 Personal (AES) WPA2/WPA3 Enterprise (IEEE 802.1X/RADIUS, AES)
Transmission Rate	802.11b: 1 to 11 Mbps 802.11a/g: 6 to 54 Mbps 802.11n: 6.5 to 300 Mbps 802.11ac: up to 540 Mbps 802.11ax: 5 GHz up to 1201 Mbps, 2.4 GHz up to 576 Mbps
Transmitter Power for 802.11a	TAP-M310R-NPS-1R and -1P1R models: 22±1.5 dBm @ 6 Mbps 20 MHz 22±1.5 dBm @ 9 Mbps 20 MHz 22±1.5 dBm @ 12 Mbps 20 MHz 22±1.5 dBm @ 18 Mbps 20 MHz 20±1.5 dBm @ 24 Mbps 20 MHz 19.5±1.5 dBm @ 36 Mbps 20 MHz 19±1.5 dBm @ 48 Mbps 20 MHz 19±1.5 dBm @ 54 Mbps 20 MHz TAP-M310R-1P1R1S and -1P2R1S models: 18±1.5 dBm @ 6 Mbps 20 MHz 18±1.5 dBm @ 9 Mbps 20 MHz

	18±1.5 dBm @ 12 Mbps 20 MHz 18±1.5 dBm @ 18 Mbps 20 MHz 17±1.5 dBm @ 24 Mbps 20 MHz 17±1.5 dBm @ 36 Mbps 20 MHz 16±1.5 dBm @ 48 Mbps 20 MHz 15.5±1.5 dBm @ 54 Mbps 20 MHz
Transmitter Power for 802.11n (5 GHz)	TAP-M310R-NPS-1R and -1P1R models: 22±1.5 dBm @ MCS0 20 MHz 22±1.5 dBm @ MCS1 20 MHz 21.5±1.5 dBm @ MCS2 20 MHz 21.5±1.5 dBm @ MCS3 20 MHz 19.5±1.5 dBm @ MCS4 20 MHz 19±1.5 dBm @ MCS5 20 MHz 19±1.5 dBm @ MCS6 20 MHz 18.5±1.5 dBm @ MCS7 20 MHz 22±1.5 dBm @ MCS8 20 MHz 22±1.5 dBm @ MCS9 20 MHz 21.5±1.5 dBm @ MCS10 20 MHz 21.5±1.5 dBm @ MCS11 20 MHz 20.5±1.5 dBm @ MCS12 20 MHz 19.5±1.5 dBm @ MCS13 20 MHz 19.5±1.5 dBm @ MCS14 20 MHz 19±1.5 dBm @ MCS15 20 MHz 22±1.5 dBm @ MCS0 40 MHz 22±1.5 dBm @ MCS1 40 MHz 22±1.5 dBm @ MCS2 40 MHz 21.5±1.5 dBm @ MCS3 40 MHz 21±1.5 dBm @ MCS4 40 MHz 20±1.5 dBm @ MCS5 40 MHz 20±1.5 dBm @ MCS6 40 MHz 19.5±1.5 dBm @ MCS7 40 MHz 22±1.5 dBm @ MCS8 40 MHz 22±1.5 dBm @ MCS9 40 MHz 21.5±1.5 dBm @ MCS10 40 MHz 21.5±1.5 dBm @ MCS11 40 MHz 20±1.5 dBm @ MCS12 40 MHz 20±1.5 dBm @ MCS13 40 MHz 20±1.5 dBm @ MCS14 40 MHz 20±1.5 dBm @ MCS15 40 MHz
	TAP-M310R-1P1R1S and -1P2R1S models: 18.5±1.5 dBm @ MCS0 20 MHz 18.5±1.5 dBm @ MCS1 20 MHz 18.5±1.5 dBm @ MCS2 20 MHz 18±1.5 dBm @ MCS3 20 MHz 17±1.5 dBm @ MCS4 20 MHz 16.5±1.5 dBm @ MCS5 20 MHz 16±1.5 dBm @ MCS6 20 MHz 15.5±1.5 dBm @ MCS7 20 MHz 18.5±1.5 dBm @ MCS8 20 MHz 18.5±1.5 dBm @ MCS9 20 MHz 18.5±1.5 dBm @ MCS10 20 MHz 18±1.5 dBm @ MCS11 20 MHz 17±1.5 dBm @ MCS12 20 MHz 16.5±1.5 dBm @ MCS13 20 MHz 15.5±1.5 dBm @ MCS14 20 MHz 15.5±1.5 dBm @ MCS15 20 MHz 18.5±1.5 dBm @ MCS0 40 MHz 18.5±1.5 dBm @ MCS1 40 MHz 18.5±1.5 dBm @ MCS2 40 MHz 17.5±1.5 dBm @ MCS3 40 MHz 17.5±1.5 dBm @ MCS4 40 MHz 16.5±1.5 dBm @ MCS5 40 MHz 15.5±1.5 dBm @ MCS6 40 MHz 15±1.5 dBm @ MCS7 40 MHz 18±1.5 dBm @ MCS8 40 MHz 18±1.5 dBm @ MCS9 40 MHz 17.5±1.5 dBm @ MCS10 40 MHz 17±1.5 dBm @ MCS11 40 MHz 17±1.5 dBm @ MCS12 40 MHz 16.5±1.5 dBm @ MCS13 40 MHz 15.5±1.5 dBm @ MCS14 40 MHz 15±1.5 dBm @ MCS15 40 MHz

Transmitter Power for 802.11ac (5 GHz, Dual Chain)	TAP-M310R-NPS-1R and -1P1R models: 22±1.5 dBm @ MCS0 20 MHz 22±1.5 dBm @ MCS1 20 MHz 21.5±1.5 dBm @ MCS2 20 MHz 21.5±1.5 dBm @ MCS3 20 MHz 20.5±1.5 dBm @ MCS4 20 MHz 20±1.5 dBm @ MCS5 20 MHz 19.5±1.5 dBm @ MCS6 20 MHz 19.5±1.5 dBm @ MCS7 20 MHz 19±1.5 dBm @ MCS8 20 MHz 21.5±1.5 dBm @ MCS0 40 MHz 21.5±1.5 dBm @ MCS1 40 MHz 21±1.5 dBm @ MCS2 40 MHz 20.5±1.5 dBm @ MCS3 40 MHz 20±1.5 dBm @ MCS4 40 MHz 19.5±1.5 dBm @ MCS5 40 MHz 19.5±1.5 dBm @ MCS6 40 MHz 19.5±1.5 dBm @ MCS7 40 MHz 19±1.5 dBm @ MCS8 40 MHz 18.5±1.5 dBm @ MCS9 40 MHz 21±1.5 dBm @ MCS0 80 MHz 21±1.5 dBm @ MCS1 80 MHz 21±1.5 dBm @ MCS2 80 MHz 21±1.5 dBm @ MCS3 80 MHz 20±1.5 dBm @ MCS4 80 MHz 20±1.5 dBm @ MCS5 80 MHz 19±1.5 dBm @ MCS6 80 MHz 19±1.5 dBm @ MCS7 80 MHz 18.5±1.5 dBm @ MCS8 80 MHz 18.5±1.5 dBm @ MCS9 80 MHz TAP-M310R-1P1R1S and -1P2R1S models: 18±1.5 dBm @ MCS0 20 MHz 18±1.5 dBm @ MCS1 20 MHz 18±1.5 dBm @ MCS2 20 MHz 18±1.5 dBm @ MCS3 20 MHz 17±1.5 dBm @ MCS4 20 MHz 17±1.5 dBm @ MCS5 20 MHz 15.5±1.5 dBm @ MCS6 20 MHz 15±1.5 dBm @ MCS7 20 MHz 14.5±1.5 dBm @ MCS8 20 MHz 18±1.5 dBm @ MCS0 40 MHz 18±1.5 dBm @ MCS1 40 MHz 18±1.5 dBm @ MCS2 40 MHz 18±1.5 dBm @ MCS3 40 MHz 17±1.5 dBm @ MCS4 40 MHz 17±1.5 dBm @ MCS5 40 MHz 15±1.5 dBm @ MCS6 40 MHz 15.5±1.5 dBm @ MCS7 40 MHz 15±1.5 dBm @ MCS8 40 MHz 14.5±1.5 dBm @ MCS9 40 MHz 18±1.5 dBm @ MCS0 80 MHz 18±1.5 dBm @ MCS1 80 MHz 18±1.5 dBm @ MCS2 80 MHz 18±1.5 dBm @ MCS3 80 MHz 17±1.5 dBm @ MCS4 80 MHz 17±1.5 dBm @ MCS5 80 MHz 15.5±1.5 dBm @ MCS6 80 MHz 15±1.5 dBm @ MCS7 80 MHz 14.5±1.5 dBm @ MCS8 80 MHz 14.5±1.5 dBm @ MCS9 80 MHz
Transmitter Power for 802.11ax (5 GHz, Dual Chain)	TAP-M310R-NPS-1R and -1P1R models: 22±1.5 dBm @ MCS0 20 MHz 22±1.5 dBm @ MCS1 20 MHz 21±1.5 dBm @ MCS2 20 MHz 21±1.5 dBm @ MCS3 20 MHz 19±1.5 dBm @ MCS4 20 MHz 19±1.5 dBm @ MCS5 20 MHz 19±1.5 dBm @ MCS6 20 MHz 19±1.5 dBm @ MCS7 20 MHz 19±1.5 dBm @ MCS8 20 MHz 18.5±1.5 dBm @ MCS9 20 MHz 18±1.5 dBm @ MCS10 20 MHz

	17.5±1.5 dBm @ MCS11 20 MHz 21.5±1.5 dBm @ MCS0 40 MHz 21.5±1.5 dBm @ MCS1 40 MHz 21±1.5 dBm @ MCS2 40 MHz 21±1.5 dBm @ MCS3 40 MHz 20±1.5 dBm @ MCS4 40 MHz 20±1.5 dBm @ MCS5 40 MHz 19±1.5 dBm @ MCS6 40 MHz 19±1.5 dBm @ MCS7 40 MHz 19±1.5 dBm @ MCS8 40 MHz 18.5±1.5 dBm @ MCS9 40 MHz 18±1.5 dBm @ MCS10 40 MHz 17.5±1.5 dBm @ MCS11 40 MHz 21±1.5 dBm @ MCS0 80 MHz 21±1.5 dBm @ MCS1 80 MHz 21±1.5 dBm @ MCS2 80 MHz 21±1.5 dBm @ MCS3 80 MHz 20±1.5 dBm @ MCS4 80 MHz 20±1.5 dBm @ MCS5 80 MHz 18.5±1.5 dBm @ MCS6 80 MHz 18.5±1.5 dBm @ MCS7 80 MHz 18.5±1.5 dBm @ MCS8 80 MHz 18±1.5 dBm @ MCS9 80 MHz 18±1.5 dBm @ MCS10 80 MHz 17.5±1.5 dBm @ MCS11 80 MHz TAP-M310R-1P1R1S and -1P2R1S models: 18±1.5 dBm @ MCS0 20 MHz 18±1.5 dBm @ MCS1 20 MHz 18±1.5 dBm @ MCS2 20 MHz 18±1.5 dBm @ MCS3 20 MHz 17±1.5 dBm @ MCS4 20 MHz 17±1.5 dBm @ MCS5 20 MHz 15.5±1.5 dBm @ MCS6 20 MHz 15±1.5 dBm @ MCS7 20 MHz 14.5±1.5 dBm @ MCS8 20 MHz 14±1.5 dBm @ MCS9 20 MHz 13.5±1.5 dBm @ MCS10 20 MHz 13.5±1.5 dBm @ MCS11 20 MHz 18±1.5 dBm @ MCS0 40 MHz 18±1.5 dBm @ MCS1 40 MHz 17.5±1.5 dBm @ MCS2 40 MHz 17.5±1.5 dBm @ MCS3 40 MHz 16.5±1.5 dBm @ MCS4 40 MHz 16.5±1.5 dBm @ MCS5 40 MHz 16±1.5 dBm @ MCS6 40 MHz 15.5±1.5 dBm @ MCS7 40 MHz 14±1.5 dBm @ MCS8 40 MHz 14±1.5 dBm @ MCS9 40 MHz 13.5±1.5 dBm @ MCS10 40 MHz 13.5±1.5 dBm @ MCS11 40 MHz 18±1.5 dBm @ MCS0 80 MHz 18±1.5 dBm @ MCS1 80 MHz 17.5±1.5 dBm @ MCS2 80 MHz 17.5±1.5 dBm @ MCS3 80 MHz 16.5±1.5 dBm @ MCS4 80 MHz 16.5±1.5 dBm @ MCS5 80 MHz 15.5±1.5 dBm @ MCS6 80 MHz 15.5±1.5 dBm @ MCS7 80 MHz 14.5±1.5 dBm @ MCS8 80 MHz 14±1.5 dBm @ MCS9 80 MHz 13.5±1.5 dBm @ MCS10 80 MHz 13.5±1.5 dBm @ MCS11 80 MHz
Transmitter Power for 802.11b	TAP-M310R-NPS-1R and -1P1R models: 27±1.5 dBm @ 1 Mbps 27±1.5 dBm @ 2 Mbps 27±1.5 dBm @ 5.5 Mbps 27±1.5 dBm @ 11 Mbps TAP-M310R-1P1R1S and -1P2R1S models: 23.5±1.5 dBm @ 1 Mbps 23.5±1.5 dBm @ 2 Mbps 23.5±1.5 dBm @ 5.5 Mbps

	23.5±1.5 dBm @ 11 Mbps
Transmitter Power for 802.11g	TAP-M310R-NPS-1R and -1P1R models: 26.5±1.5 dBm @ 6 Mbps 26.5±1.5 dBm @ 9 Mbps 26.5±1.5 dBm @ 12 Mbps 25±1.5 dBm @ 18 Mbps 25±1.5 dBm @ 24 Mbps 25±1.5 dBm @ 36 Mbps 24.5±1.5 dBm @ 48 Mbps 23.5±1.5 dBm @ 54 Mbps TAP-M310R-1P1R1S and -1P2R1S models: 23±1.5 dBm @ 6 Mbps 23±1.5 dBm @ 9 Mbps 23±1.5 dBm @ 12 Mbps 22±1.5 dBm @ 18 Mbps 22±1.5 dBm @ 24 Mbps 22±1.5 dBm @ 36 Mbps 21.5±1.5 dBm @ 48 Mbps 20.5±1.5 dBm @ 54 Mbps
Transmitter Power for 802.11n (2.4 GHz)	TAP-M310R-NPS-1R and -1P1R models: 26.5±1.5 dBm @ MCS0 20 MHz 26.5±1.5 dBm @ MCS1 20 MHz 25±1.5 dBm @ MCS2 20 MHz 25±1.5 dBm @ MCS3 20 MHz 25±1.5 dBm @ MCS4 20 MHz 24.5±1.5 dBm @ MCS5 20 MHz 23.5±1.5 dBm @ MCS6 20 MHz 23±1.5 dBm @ MCS7 20 MHz 25.5±1.5 dBm @ MCS8 20 MHz 25.5±1.5 dBm @ MCS9 20 MHz 24±1.5 dBm @ MCS10 20 MHz 24±1.5 dBm @ MCS11 20 MHz 24±1.5 dBm @ MCS12 20 MHz 24±1.5 dBm @ MCS13 20 MHz 22.5±1.5 dBm @ MCS14 20 MHz 22±1.5 dBm @ MCS15 20 MHz 26±1.5 dBm @ MCS0 40 MHz 26±1.5 dBm @ MCS1 40 MHz 25.5±1.5 dBm @ MCS2 40 MHz 25±1.5 dBm @ MCS3 40 MHz 24.5±1.5 dBm @ MCS4 40 MHz 24±1.5 dBm @ MCS5 40 MHz 23±1.5 dBm @ MCS6 40 MHz 22.5±1.5 dBm @ MCS7 40 MHz 24±1.5 dBm @ MCS8 40 MHz 24±1.5 dBm @ MCS9 40 MHz 23.5±1.5 dBm @ MCS10 40 MHz 23.5±1.5 dBm @ MCS11 40 MHz 22±1.5 dBm @ MCS12 40 MHz 22±1.5 dBm @ MCS13 40 MHz 21.5±1.5 dBm @ MCS14 40 MHz 21.5±1.5 dBm @ MCS15 40 MHz TAP-M310R-1P1R1S and -1P2R1S models: 23±1.5 dBm @ MCS0 20 MHz 23±1.5 dBm @ MCS1 20 MHz 22±1.5 dBm @ MCS2 20 MHz 22±1.5 dBm @ MCS3 20 MHz 21.5±1.5 dBm @ MCS4 20 MHz 21±1.5 dBm @ MCS5 20 MHz 20.5±1.5 dBm @ MCS6 20 MHz 19.5±1.5 dBm @ MCS7 20 MHz 23±1.5 dBm @ MCS8 20 MHz 23±1.5 dBm @ MCS9 20 MHz 21±1.5 dBm @ MCS10 20 MHz 21±1.5 dBm @ MCS11 20 MHz 21±1.5 dBm @ MCS12 20 MHz 21±1.5 dBm @ MCS13 20 MHz 20±1.5 dBm @ MCS14 20 MHz 19±1.5 dBm @ MCS15 20 MHz 22.5±1.5 dBm @ MCS0 40 MHz

	22.5±1.5 dBm @ MCS1 40 MHz 22.5±1.5 dBm @ MCS2 40 MHz 21.5±1.5 dBm @ MCS3 40 MHz 21±1.5 dBm @ MCS4 40 MHz 20.5±1.5 dBm @ MCS5 40 MHz 20±1.5 dBm @ MCS6 40 MHz 19.5±1.5 dBm @ MCS7 40 MHz 22±1.5 dBm @ MCS8 40 MHz 22±1.5 dBm @ MCS9 40 MHz 21±1.5 dBm @ MCS10 40 MHz 20±1.5 dBm @ MCS11 40 MHz 19±1.5 dBm @ MCS12 40 MHz 19±1.5 dBm @ MCS13 40 MHz 18.5±1.5 dBm @ MCS14 40 MHz 19±1.5 dBm @ MCS15 40 MHz
Transmitter Power for 802.11ac (2.4 GHz, Dual Chain)	TAP-M310R-NPS-1R and -1P1R models: 26±1.5 dBm @ MCS0 20 MHz 26±1.5 dBm @ MCS1 20 MHz 24.5±1.5 dBm @ MCS2 20 MHz 24.5±1.5 dBm @ MCS3 20 MHz 24.5±1.5 dBm @ MCS4 20 MHz 24±1.5 dBm @ MCS5 20 MHz 23±1.5 dBm @ MCS6 20 MHz 22.5±1.5 dBm @ MCS7 20 MHz 22.5±1.5 dBm @ MCS8 20 MHz 25±1.5 dBm @ MCS0 40 MHz 25±1.5 dBm @ MCS1 40 MHz 24±1.5 dBm @ MCS2 40 MHz 24±1.5 dBm @ MCS3 40 MHz 22.5±1.5 dBm @ MCS4 40 MHz 22.5±1.5 dBm @ MCS5 40 MHz 22.5±1.5 dBm @ MCS6 40 MHz 22.5±1.5 dBm @ MCS7 40 MHz 22.5±1.5 dBm @ MCS8 40 MHz 22±1.5 dBm @ MCS9 40 MHz TAP-M310R-1P1R1S and -1P2R1S models: 22.5±1.5 dBm @ MCS0 20 MHz 22.5±1.5 dBm @ MCS1 20 MHz 22±1.5 dBm @ MCS2 20 MHz 21.5±1.5 dBm @ MCS3 20 MHz 21.5±1.5 dBm @ MCS4 20 MHz 21±1.5 dBm @ MCS5 20 MHz 20±1.5 dBm @ MCS6 20 MHz 19.5±1.5 dBm @ MCS7 20 MHz 19.5±1.5 dBm @ MCS8 20 MHz 22±1.5 dBm @ MCS0 40 MHz 22±1.5 dBm @ MCS1 40 MHz 22±1.5 dBm @ MCS2 40 MHz 21±1.5 dBm @ MCS3 40 MHz 21±1.5 dBm @ MCS4 40 MHz 20±1.5 dBm @ MCS5 40 MHz 19.5±1.5 dBm @ MCS6 40 MHz 19.5±1.5 dBm @ MCS7 40 MHz 19±1.5 dBm @ MCS8 40 MHz 18.5±1.5 dBm @ MCS9 40 MHz
Transmitter Power for 802.11ax (2.4 GHz, Dual Chain)	TAP-M310R-NPS-1R and -1P1R models: 26.5±1.5 dBm @ MCS0 20 MHz 26.5±1.5 dBm @ MCS1 20 MHz 24.5±1.5 dBm @ MCS2 20 MHz 24.5±1.5 dBm @ MCS3 20 MHz 24±1.5 dBm @ MCS4 20 MHz 24±1.5 dBm @ MCS5 20 MHz 23.5±1.5 dBm @ MCS6 20 MHz 23.5±1.5 dBm @ MCS7 20 MHz 22.5±1.5 dBm @ MCS8 20 MHz 22±1.5 dBm @ MCS9 20 MHz 21.5±1.5 dBm @ MCS10 20 MHz 21.5±1.5 dBm @ MCS11 20 MHz 25±1.5 dBm @ MCS0 40 MHz 25±1.5 dBm @ MCS1 40 MHz 24±1.5 dBm @ MCS2 40 MHz

	24±1.5 dBm @ MCS3 40 MHz 24±1.5 dBm @ MCS4 40 MHz 22±1.5 dBm @ MCS5 40 MHz 22±1.5 dBm @ MCS6 40 MHz 22±1.5 dBm @ MCS7 40 MHz 22±1.5 dBm @ MCS8 40 MHz 22±1.5 dBm @ MCS9 40 MHz 21.5±1.5 dBm @ MCS10 40 MHz 21.5±1.5 dBm @ MCS11 40 MHz TAP-M310R-1P1R1S and -1P2R1S models: 22.5±1.5 dBm @ MCS0 20 MHz 22.5±1.5 dBm @ MCS1 20 MHz 21±1.5 dBm @ MCS2 20 MHz 21±1.5 dBm @ MCS3 20 MHz 21±1.5 dBm @ MCS4 20 MHz 20.5±1.5 dBm @ MCS5 20 MHz 20±1.5 dBm @ MCS6 20 MHz 19.5±1.5 dBm @ MCS7 20 MHz 19±1.5 dBm @ MCS8 20 MHz 19±1.5 dBm @ MCS9 20 MHz 18.5±1.5 dBm @ MCS10 20 MHz 18.5±1.5 dBm @ MCS11 20 MHz 22±1.5 dBm @ MCS0 40 MHz 22±1.5 dBm @ MCS1 40 MHz 21±1.5 dBm @ MCS2 40 MHz 21±1.5 dBm @ MCS3 40 MHz 21±1.5 dBm @ MCS4 40 MHz 20.5±1.5 dBm @ MCS5 40 MHz 19.5±1.5 dBm @ MCS6 40 MHz 19.5±1.5 dBm @ MCS7 40 MHz 19±1.5 dBm @ MCS8 40 MHz 18.5±1.5 dBm @ MCS9 40 MHz 18±1.5 dBm @ MCS10 40 MHz 18±1.5 dBm @ MCS11 40 MHz
Receiver Sensitivity for 802.11a	TAP-M310R-NPS-1R and -1P1R models: Typ. -89 @ 6 Mbps Typ. -87 @ 9 Mbps Typ. -86 @ 12 Mbps Typ. -84 @ 18 Mbps Typ. -81 @ 24 Mbps Typ. -78 @ 36 Mbps Typ. -73 @ 48 Mbps Typ. -72 @ 54 Mbps TAP-M310R-1P1R1S and -1P2R1S models: Typ. -86 @ 6 Mbps Typ. -84 @ 9 Mbps Typ. -83 @ 12 Mbps Typ. -80 @ 18 Mbps Typ. -77 @ 24 Mbps Typ. -74 @ 36 Mbps Typ. -70 @ 48 Mbps Typ. -68 @ 54 Mbps
Receiver Sensitivity for 802.11n (5 GHz)	TAP-M310R-NPS-1R and -1P1R models: Typ. -89 dBm @ MCS0 20 MHz Typ. -86 dBm @ MCS1 20 MHz Typ. -83 dBm @ MCS2 20 MHz Typ. -80 dBm @ MCS3 20 MHz Typ. -76 dBm @ MCS4 20 MHz Typ. -72 dBm @ MCS5 20 MHz Typ. -70 dBm @ MCS6 20 MHz Typ. -69 dBm @ MCS7 20 MHz Typ. -89 dBm @ MCS8 20 MHz Typ. -86 dBm @ MCS9 20 MHz Typ. -84 dBm @ MCS10 20 MHz Typ. -81 dBm @ MCS11 20 MHz Typ. -78 dBm @ MCS12 20 MHz Typ. -74 dBm @ MCS13 20 MHz Typ. -72 dBm @ MCS14 20 MHz Typ. -70 dBm @ MCS15 20 MHz Typ. -86 dBm @ MCS0 40 MHz

Typ. -83 dBm @ MCS1 40 MHz
 Typ. -80 dBm @ MCS2 40 MHz
 Typ. -77 dBm @ MCS3 40 MHz
 Typ. -74 dBm @ MCS4 40 MHz
 Typ. -69 dBm @ MCS5 40 MHz
 Typ. -68 dBm @ MCS6 40 MHz
 Typ. -66 dBm @ MCS7 40 MHz
 Typ. -87 dBm @ MCS8 40 MHz
 Typ. -83 dBm @ MCS9 40 MHz
 Typ. -81 dBm @ MCS10 40 MHz
 Typ. -78 dBm @ MCS11 40 MHz
 Typ. -75 dBm @ MCS12 40 MHz
 Typ. -71 dBm @ MCS13 40 MHz
 Typ. -70 dBm @ MCS14 40 MHz
 Typ. -68 dBm @ MCS15 40 MHz

TAP-M310R-1P1R1S and -1P2R1S models:

Typ. -85 dBm @ MCS0 20 MHz
 Typ. -82 dBm @ MCS1 20 MHz
 Typ. -80 dBm @ MCS2 20 MHz
 Typ. -76 dBm @ MCS3 20 MHz
 Typ. -73 dBm @ MCS4 20 MHz
 Typ. -68 dBm @ MCS5 20 MHz
 Typ. -67 dBm @ MCS6 20 MHz
 Typ. -65 dBm @ MCS7 20 MHz
 Typ. -86 dBm @ MCS8 20 MHz
 Typ. -83 dBm @ MCS9 20 MHz
 Typ. -81 dBm @ MCS10 20 MHz
 Typ. -78 dBm @ MCS11 20 MHz
 Typ. -75 dBm @ MCS12 20 MHz
 Typ. -71 dBm @ MCS13 20 MHz
 Typ. -69 dBm @ MCS14 20 MHz
 Typ. -66 dBm @ MCS15 20 MHz
 Typ. -83 dBm @ MCS0 40 MHz
 Typ. -79 dBm @ MCS1 40 MHz
 Typ. -77 dBm @ MCS2 40 MHz
 Typ. -74 dBm @ MCS3 40 MHz
 Typ. -70 dBm @ MCS4 40 MHz
 Typ. -66 dBm @ MCS5 40 MHz
 Typ. -65 dBm @ MCS6 40 MHz
 Typ. -63 dBm @ MCS7 40 MHz
 Typ. -84 dBm @ MCS8 40 MHz
 Typ. -80 dBm @ MCS9 40 MHz
 Typ. -78 dBm @ MCS10 40 MHz
 Typ. -74 dBm @ MCS11 40 MHz
 Typ. -72 dBm @ MCS12 40 MHz
 Typ. -68 dBm @ MCS13 40 MHz
 Typ. -67 dBm @ MCS14 40 MHz
 Typ. -65 dBm @ MCS15 40 MHz

Receiver Sensitivity for 802.11ac (5 GHz)

TAP-M310R-NPS-1R and -1P1R models:

Typ. -89 dBm @ MCS0 20 MHz
 Typ. -86 dBm @ MCS1 20 MHz
 Typ. -83 dBm @ MCS2 20 MHz
 Typ. -80 dBm @ MCS3 20 MHz
 Typ. -78 dBm @ MCS4 20 MHz
 Typ. -73 dBm @ MCS5 20 MHz
 Typ. -72 dBm @ MCS6 20 MHz
 Typ. -70 dBm @ MCS7 20 MHz
 Typ. -66 dBm @ MCS8 20 MHz
 Typ. -87 dBm @ MCS0 40 MHz
 Typ. -83 dBm @ MCS1 40 MHz
 Typ. -81 dBm @ MCS2 40 MHz
 Typ. -78 dBm @ MCS3 40 MHz
 Typ. -75 dBm @ MCS4 40 MHz
 Typ. -71 dBm @ MCS5 40 MHz
 Typ. -70 dBm @ MCS6 40 MHz
 Typ. -68 dBm @ MCS7 40 MHz
 Typ. -64 dBm @ MCS8 40 MHz
 Typ. -62 dBm @ MCS9 40 MHz
 Typ. -84 dBm @ MCS0 80 MHz
 Typ. -81 dBm @ MCS1 80 MHz
 Typ. -78 dBm @ MCS2 80 MHz
 Typ. -75 dBm @ MCS3 80 MHz

Typ. -72 dBm @ MCS4 80 MHz
Typ. -68 dBm @ MCS5 80 MHz
Typ. -66 dBm @ MCS6 80 MHz
Typ. -64 dBm @ MCS7 80 MHz
Typ. -61 dBm @ MCS8 80 MHz
Typ. -59 dBm @ MCS9 80 MHz

TAP-M310R-1P1R1S and -1P2R1S models:

Typ. -86 dBm @ MCS0 20 MHz
Typ. -82 dBm @ MCS1 20 MHz
Typ. -80 dBm @ MCS2 20 MHz
Typ. -77 dBm @ MCS3 20 MHz
Typ. -74 dBm @ MCS4 20 MHz
Typ. -70 dBm @ MCS5 20 MHz
Typ. -68 dBm @ MCS6 20 MHz
Typ. -67 dBm @ MCS7 20 MHz
Typ. -63 dBm @ MCS8 20 MHz
Typ. -83 dBm @ MCS0 40 MHz
Typ. -80 dBm @ MCS1 40 MHz
Typ. -78 dBm @ MCS2 40 MHz
Typ. -74 dBm @ MCS3 40 MHz
Typ. -72 dBm @ MCS4 40 MHz
Typ. -68 dBm @ MCS5 40 MHz
Typ. -66 dBm @ MCS6 40 MHz
Typ. -65 dBm @ MCS7 40 MHz
Typ. -61 dBm @ MCS8 40 MHz
Typ. -59 dBm @ MCS9 40 MHz
Typ. -81 dBm @ MCS0 80 MHz
Typ. -77 dBm @ MCS1 80 MHz
Typ. -75 dBm @ MCS2 80 MHz
Typ. -71 dBm @ MCS3 80 MHz
Typ. -68 dBm @ MCS4 80 MHz
Typ. -65 dBm @ MCS5 80 MHz
Typ. -63 dBm @ MCS6 80 MHz
Typ. -61 dBm @ MCS7 80 MHz
Typ. -57 dBm @ MCS8 80 MHz
Typ. -56 dBm @ MCS9 80 MHz

Receiver Sensitivity for 802.11ax (5 GHz)

TAP-M310R-NPS-1R and -1P1R models:

Typ. -89 dBm @ MCS0 20 MHz
Typ. -86 dBm @ MCS1 20 MHz
Typ. -84 dBm @ MCS2 20 MHz
Typ. -81 dBm @ MCS3 20 MHz
Typ. -78 dBm @ MCS4 20 MHz
Typ. -73 dBm @ MCS5 20 MHz
Typ. -72 dBm @ MCS6 20 MHz
Typ. -70 dBm @ MCS7 20 MHz
Typ. -66 dBm @ MCS8 20 MHz
Typ. -65 dBm @ MCS9 20 MHz
Typ. -61 dBm @ MCS10 20 MHz
Typ. -59 dBm @ MCS11 20 MHz
Typ. -87 dBm @ MCS0 40 MHz
Typ. -84 dBm @ MCS1 40 MHz
Typ. -82 dBm @ MCS2 40 MHz
Typ. -78 dBm @ MCS3 40 MHz
Typ. -75 dBm @ MCS4 40 MHz
Typ. -71 dBm @ MCS5 40 MHz
Typ. -70 dBm @ MCS6 40 MHz
Typ. -68 dBm @ MCS7 40 MHz
Typ. -65 dBm @ MCS8 40 MHz
Typ. -63 dBm @ MCS9 40 MHz
Typ. -59 dBm @ MCS10 40 MHz
Typ. -57 dBm @ MCS11 40 MHz
Typ. -84 dBm @ MCS0 80 MHz
Typ. -81 dBm @ MCS1 80 MHz
Typ. -78 dBm @ MCS2 80 MHz
Typ. -76 dBm @ MCS3 80 MHz
Typ. -72 dBm @ MCS4 80 MHz
Typ. -68 dBm @ MCS5 80 MHz
Typ. -67 dBm @ MCS6 80 MHz
Typ. -65 dBm @ MCS7 80 MHz
Typ. -61 dBm @ MCS8 80 MHz
Typ. -59 dBm @ MCS9 80 MHz
Typ. -55 dBm @ MCS10 80 MHz

	Typ. -53 dBm @ MCS11 80 MHz TAP-M310R-1P1R1S and -1P2R1S models: Typ. -87 dBm @ MCS0 20 MHz Typ. -83 dBm @ MCS1 20 MHz Typ. -81 dBm @ MCS2 20 MHz Typ. -78 dBm @ MCS3 20 MHz Typ. -75 dBm @ MCS4 20 MHz Typ. -71 dBm @ MCS5 20 MHz Typ. -69 dBm @ MCS6 20 MHz Typ. -67 dBm @ MCS7 20 MHz Typ. -64 dBm @ MCS8 20 MHz Typ. -62 dBm @ MCS9 20 MHz Typ. -58 dBm @ MCS10 20 MHz Typ. -56 dBm @ MCS11 20 MHz Typ. -84 dBm @ MCS0 40 MHz Typ. -81 dBm @ MCS1 40 MHz Typ. -79 dBm @ MCS2 40 MHz Typ. -76 dBm @ MCS3 40 MHz Typ. -72 dBm @ MCS4 40 MHz Typ. -63 dBm @ MCS5 40 MHz Typ. -67 dBm @ MCS6 40 MHz Typ. -65 dBm @ MCS7 40 MHz Typ. -62 dBm @ MCS8 40 MHz Typ. -60 dBm @ MCS9 40 MHz Typ. -56 dBm @ MCS10 40 MHz Typ. -54 dBm @ MCS11 40 MHz Typ. -81 dBm @ MCS0 80 MHz Typ. -78 dBm @ MCS1 80 MHz Typ. -75 dBm @ MCS2 80 MHz Typ. -72 dBm @ MCS3 80 MHz Typ. -69 dBm @ MCS4 80 MHz Typ. -65 dBm @ MCS5 80 MHz Typ. -64 dBm @ MCS6 80 MHz Typ. -62 dBm @ MCS7 80 MHz Typ. -58 dBm @ MCS8 80 MHz Typ. -56 dBm @ MCS9 80 MHz Typ. -52 dBm @ MCS10 80 MHz Typ. -50 dBm @ MCS11 80 MHz
Receiver Sensitivity for 802.11b	TAP-M310R-NPS-1R and -1P1R models: Typ. -94 dBm @ 1 Mbps Typ. -90 dBm @ 2 Mbps Typ. -88 dBm @ 5.5 Mbps Typ. -85 dBm @ 11 Mbps TAP-M310R-1P1R1S and -1P2R1S models: Typ. -91 dBm @ 1 Mbps Typ. -87 dBm @ 2 Mbps Typ. -85 dBm @ 5.5 Mbps Typ. -83 dBm @ 11 Mbps
Receiver Sensitivity for 802.11g	TAP-M310R-NPS-1R and -1P1R models: Typ. -89 dBm @ 6 Mbps Typ. -87 dBm @ 9 Mbps Typ. -86 dBm @ 12 Mbps Typ. -84 dBm @ 18 Mbps Typ. -81 dBm @ 24 Mbps Typ. -78 dBm @ 36 Mbps Typ. -73 dBm @ 48 Mbps Typ. -72 dBm @ 54 Mbps TAP-M310R-1P1R1S and -1P2R1S models: Typ. -86 dBm @ 6 Mbps Typ. -84 dBm @ 9 Mbps Typ. -83 dBm @ 12 Mbps Typ. -81 dBm @ 18 Mbps Typ. -78 dBm @ 24 Mbps Typ. -74 dBm @ 36 Mbps Typ. -70 dBm @ 48 Mbps Typ. -69 dBm @ 54 Mbps
Receiver Sensitivity for 802.11n (2.4 GHz)	TAP-M310R-NPS-1R and -1P1R models:

Typ. -88 dBm @ MCS0 20 MHz
 Typ. -86 dBm @ MCS1 20 MHz
 Typ. -83 dBm @ MCS2 20 MHz
 Typ. -80 dBm @ MCS3 20 MHz
 Typ. -77 dBm @ MCS4 20 MHz
 Typ. -72 dBm @ MCS5 20 MHz
 Typ. -71 dBm @ MCS6 20 MHz
 Typ. -69 dBm @ MCS7 20 MHz
 Typ. -90 dBm @ MCS8 20 MHz
 Typ. -87 dBm @ MCS9 20 MHz
 Typ. -85 dBm @ MCS10 20 MHz
 Typ. -82 dBm @ MCS11 20 MHz
 Typ. -78 dBm @ MCS12 20 MHz
 Typ. -74 dBm @ MCS13 20 MHz
 Typ. -73 dBm @ MCS14 20 MHz
 Typ. -71 dBm @ MCS15 20 MHz
 Typ. -86 dBm @ MCS0 40 MHz
 Typ. -84 dBm @ MCS1 40 MHz
 Typ. -81 dBm @ MCS2 40 MHz
 Typ. -78 dBm @ MCS3 40 MHz
 Typ. -74 dBm @ MCS4 40 MHz
 Typ. -70 dBm @ MCS5 40 MHz
 Typ. -68 dBm @ MCS6 40 MHz
 Typ. -67 dBm @ MCS7 40 MHz
 Typ. -88 dBm @ MCS8 40 MHz
 Typ. -85 dBm @ MCS9 40 MHz
 Typ. -83 dBm @ MCS10 40 MHz
 Typ. -79 dBm @ MCS11 40 MHz
 Typ. -76 dBm @ MCS12 40 MHz
 Typ. -72 dBm @ MCS13 40 MHz
 Typ. -70 dBm @ MCS14 40 MHz
 Typ. -68 dBm @ MCS15 40 MHz

TAP-M310R-1P1R1S and -1P2R1S models:

Typ. -85 dBm @ MCS0 20 MHz
 Typ. -82 dBm @ MCS1 20 MHz
 Typ. -80 dBm @ MCS2 20 MHz
 Typ. -77 dBm @ MCS3 20 MHz
 Typ. -73 dBm @ MCS4 20 MHz
 Typ. -69 dBm @ MCS5 20 MHz
 Typ. -68 dBm @ MCS6 20 MHz
 Typ. -66 dBm @ MCS7 20 MHz
 Typ. -87 dBm @ MCS8 20 MHz
 Typ. -84 dBm @ MCS9 20 MHz
 Typ. -82 dBm @ MCS10 20 MHz
 Typ. -79 dBm @ MCS11 20 MHz
 Typ. -75 dBm @ MCS12 20 MHz
 Typ. -71 dBm @ MCS13 20 MHz
 Typ. -70 dBm @ MCS14 20 MHz
 Typ. -68 dBm @ MCS15 20 MHz
 Typ. -83 dBm @ MCS0 40 MHz
 Typ. -80 dBm @ MCS1 40 MHz
 Typ. -78 dBm @ MCS2 40 MHz
 Typ. -74 dBm @ MCS3 40 MHz
 Typ. -71 dBm @ MCS4 40 MHz
 Typ. -67 dBm @ MCS5 40 MHz
 Typ. -65 dBm @ MCS6 40 MHz
 Typ. -64 dBm @ MCS7 40 MHz
 Typ. -85 dBm @ MCS8 40 MHz
 Typ. -81 dBm @ MCS9 40 MHz
 Typ. -79 dBm @ MCS10 40 MHz
 Typ. -75 dBm @ MCS11 40 MHz
 Typ. -72 dBm @ MCS12 40 MHz
 Typ. -69 dBm @ MCS13 40 MHz
 Typ. -67 dBm @ MCS14 40 MHz
 Typ. -65 dBm @ MCS15 40 MHz

Receiver Sensitivity for 802.11ac (2.4 GHz)

TAP-M310R-NPS-1R and -1P1R models:

Typ. -90 dBm @ MCS0 20 MHz
 Typ. -86 dBm @ MCS1 20 MHz
 Typ. -84 dBm @ MCS2 20 MHz
 Typ. -81 dBm @ MCS3 20 MHz
 Typ. -78 dBm @ MCS4 20 MHz
 Typ. -74 dBm @ MCS5 20 MHz

	Typ. -72 dBm @ MCS6 20 MHz Typ. -71 dBm @ MCS7 20 MHz Typ. -67 dBm @ MCS8 20 MHz Typ. -87 dBm @ MCS0 40 MHz Typ. -84 dBm @ MCS1 40 MHz Typ. -82 dBm @ MCS2 40 MHz Typ. -78 dBm @ MCS3 40 MHz Typ. -75 dBm @ MCS4 40 MHz Typ. -71 dBm @ MCS5 40 MHz Typ. -70 dBm @ MCS6 40 MHz Typ. -68 dBm @ MCS7 40 MHz Typ. -65 dBm @ MCS8 40 MHz Typ. -63 dBm @ MCS9 40 MHz TAP-M310R-1P1R1S and -1P2R1S models: Typ. -86 dBm @ MCS0 20 MHz Typ. -83 dBm @ MCS1 20 MHz Typ. -81 dBm @ MCS2 20 MHz Typ. -78 dBm @ MCS3 20 MHz Typ. -75 dBm @ MCS4 20 MHz Typ. -71 dBm @ MCS5 20 MHz Typ. -69 dBm @ MCS6 20 MHz Typ. -67 dBm @ MCS7 20 MHz Typ. -64 dBm @ MCS8 20 MHz Typ. -84 dBm @ MCS0 40 MHz Typ. -81 dBm @ MCS1 40 MHz Typ. -79 dBm @ MCS2 40 MHz Typ. -75 dBm @ MCS3 40 MHz Typ. -72 dBm @ MCS4 40 MHz Typ. -68 dBm @ MCS5 40 MHz Typ. -67 dBm @ MCS6 40 MHz Typ. -65 dBm @ MCS7 40 MHz Typ. -61 dBm @ MCS8 40 MHz Typ. -60 dBm @ MCS9 40 MHz
Receiver Sensitivity for 802.11ax (2.4 GHz)	TAP-M310R-NPS-1R and -1P1R models: Typ. -89 dBm @ MCS0 20 MHz Typ. -87 dBm @ MCS1 20 MHz Typ. -84 dBm @ MCS2 20 MHz Typ. -81 dBm @ MCS3 20 MHz Typ. -78 dBm @ MCS4 20 MHz Typ. -74 dBm @ MCS5 20 MHz Typ. -73 dBm @ MCS6 20 MHz Typ. -71 dBm @ MCS7 20 MHz Typ. -67 dBm @ MCS8 20 MHz Typ. -65 dBm @ MCS9 20 MHz Typ. -62 dBm @ MCS10 20 MHz Typ. -60 dBm @ MCS11 20 MHz Typ. -87 dBm @ MCS0 40 MHz Typ. -85 dBm @ MCS1 40 MHz Typ. -83 dBm @ MCS2 40 MHz Typ. -80 dBm @ MCS3 40 MHz Typ. -76 dBm @ MCS4 40 MHz Typ. -72 dBm @ MCS5 40 MHz Typ. -71 dBm @ MCS6 40 MHz Typ. -69 dBm @ MCS7 40 MHz Typ. -65 dBm @ MCS8 40 MHz Typ. -63 dBm @ MCS9 40 MHz Typ. -60 dBm @ MCS10 40 MHz Typ. -58 dBm @ MCS11 40 MHz TAP-M310R-1P1R1S and -1P2R1S models: Typ. -87 dBm @ MCS0 20 MHz Typ. -84 dBm @ MCS1 20 MHz Typ. -81 dBm @ MCS2 20 MHz Typ. -78 dBm @ MCS3 20 MHz Typ. -75 dBm @ MCS4 20 MHz Typ. -71 dBm @ MCS5 20 MHz Typ. -70 dBm @ MCS6 20 MHz Typ. -68 dBm @ MCS7 20 MHz Typ. -64 dBm @ MCS8 20 MHz Typ. -62 dBm @ MCS9 20 MHz Typ. -59 dBm @ MCS10 20 MHz Typ. -56 dBm @ MCS11 20 MHz

	Typ. -85 dBm @ MCS0 40 MHz Typ. -82 dBm @ MCS1 40 MHz Typ. -79 dBm @ MCS2 40 MHz Typ. -76 dBm @ MCS3 40 MHz Typ. -73 dBm @ MCS4 40 MHz Typ. -69 dBm @ MCS5 40 MHz Typ. -68 dBm @ MCS6 40 MHz Typ. -66 dBm @ MCS7 40 MHz Typ. -62 dBm @ MCS8 40 MHz Typ. -60 dBm @ MCS9 40 MHz Typ. -57 dBm @ MCS10 40 MHz Typ. -54 dBm @ MCS11 40 MHz
WLAN Operation Mode	Access point Client Client-Router Master Slave Sniffer
Antenna Connectors	TAP-M310R-NPS-1R and -1P1R models: 2 x N-type female TAP-M310R-1P1R1S models: 4 x N-type female TAP-M310R-1P2R1S models: 8 x N-type female

Ethernet Interface

Standards	All models: IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) IEEE 802.3ab for 1000BaseT(X) IEEE 802.3bz for 2.5GBaseT IEEE 802.1Q for VLAN Tagging TAP-M310R-1P1R1S and -1P2R1S models only: IEEE 802.3z for 1000BaseX
10/100/1000/2500BaseT(X) Ports (M12 X-coded 8-pin female connector)	TAP-M310R-NPS-1R, -1P1R models: 1 TAP-M310R-1P1R1S models: 1 TAP-M310R-1P2R1S models: 2
10/100/1000BaseT(X) Ports (M12 X-coded 8-pin female connector)	TAP-M310R-1P1R1S, -1P2R1S models: 2
1000/2500BaseSFP Slots	TAP-M310R-1P1R1S, -1P2R1S models: 2

Ethernet Software Features

Management	DHCP Server DHCP Client DNS HTTP IPv4 LLDP SMTP SNMPv1/v2c/v3 Syslog TCP/IP Telnet UDP VLAN MXconfig
Security	HTTPS/SSL RADIUS SSH Certificate Management
Time Management	SNTP Client

Firewall

Filter	ICMP MAC address IP protocol Port-based Wi-Fi ACL Client Isolation
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Serial Interface

Console Port	RS-232 (M12 A-coded 5-pin male connector)
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LED Interface

LED Indicators	TAP-M310R-NPS-1R, -1P1R models: PWR, PWR R, PWR L, SYS, 2.4G, 5G, LAN 1 TAP-M310R-1P1R1S, -1P2R1S models: PWR, PWR R, PWR L, SYS, 2.4G, 5G, LAN 1, LAN 2, LAN 3, LAN 4, LAN 5, HEAD, TAIL
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Input/Output Interface

Buttons	Reset button
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Physical Characteristics

Housing	Metal
IP Rating	IP67
Dimensions	TAP-M310R-NPS-1R models: 74.25 x 150 x 130 mm (2.92 x 5.91 x 5.12 in) TAP-M310R-NPS-1P1R models: 136.65 x 150 x 130 mm (5.38 x 5.91 x 5.12 in) TAP-M310R-1P1R1S models: 198.75 x 150 x 130 mm (7.83 x 5.91 x 5.12 in) TAP-M310R-1P2R1S models: 268.15 x 150 x 130 mm (10.56 x 5.91 x 5.12 in)
Weight	TAP-M310R-NPS-1R models: 1,688 g (3.72 lb) TAP-M310R-NPS-1P1R models: 3,263.5 g (7.19 lb) TAP-M310R-1P1R1S models: 4,508.5 g (9.94 lb) TAP-M310R-1P2R1S models: 6,281 g (13.85 lb)
Installation	TAP-M310R-NPS-1R, -1P1R models: Wall mounting, DIN-rail mounting (with optional kit) TAP-M310R-1P1R1S, -1P2R1S models: DIN-rail mounting

Power Parameters

Input Current	TAP-M310R-NPS-1R models: 1.35 A @ 24 VDC TAP-M310R-NPS-1P1R models: 1.35 A @ 24 VDC, 0.3 A @ 110 VDC TAP-M310R-1P1R1S models: 110 to 220 VAC, 50 to 60 Hz, 0.36 to 0.18 A (max.) TAP-M310R-1P2R1S models: 110 to 220 VAC, 50 to 60 Hz, 0.62 to 0.31 A (max.)
Input Voltage	TAP-M310R-NPS-1R models: 24 VDC TAP-M310R-NPS-1P1R models: 24 to 110 VDC TAP-M310R-1P1R1S, -1P2R1S models: 110 to 220 VAC
Power Connector	TAP-M310R-NPS-1R models: M12 A-coded 4-pin male connector TAP-M310R-NPS-1P1R models: M12 K-coded 5-pin male connector TAP-M310R-1P1R1S, -1P2R1S models: M12 K-coded 5-pin male connector
Power Consumption	TAP-M310R-NPS-1R models: 32.4 W (max.) TAP-M310R-NPS-1P1R models: 33 W (max.) TAP-M310R-1P1R1S models: 39.6 W (max.) TAP-M310R-1P2R1S models: 68.2 W (max.)

Environmental Limits

Operating Temperature	-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 32, 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: 20 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV IEC 61000-4-6 CS: 10 V/m IEC 61000-4-8 PFMF: 30 A/m
Safety	IEC 62368-1 UL 62368-1
Cybersecurity	EN 18031-1
Railway	EN 50121-4 EN 50155
Railway Fire Protection	EN 45545-2
Radio	EN 300 328, EN 301 489-1/17, EN 301 893, EN 300 440, FCC

MTBF

Time	TAP-M310R-NPS-1R models: 2,531,479 hrs TAP-M310R-NPS-1P1R models: 1,872,508 hrs TAP-M310R-1P1R1S models: 1,414,473 hrs TAP-M310R-1P2R1S models: 922,834 hrs
Standards	Telcordia Standard SR-332

Warranty

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

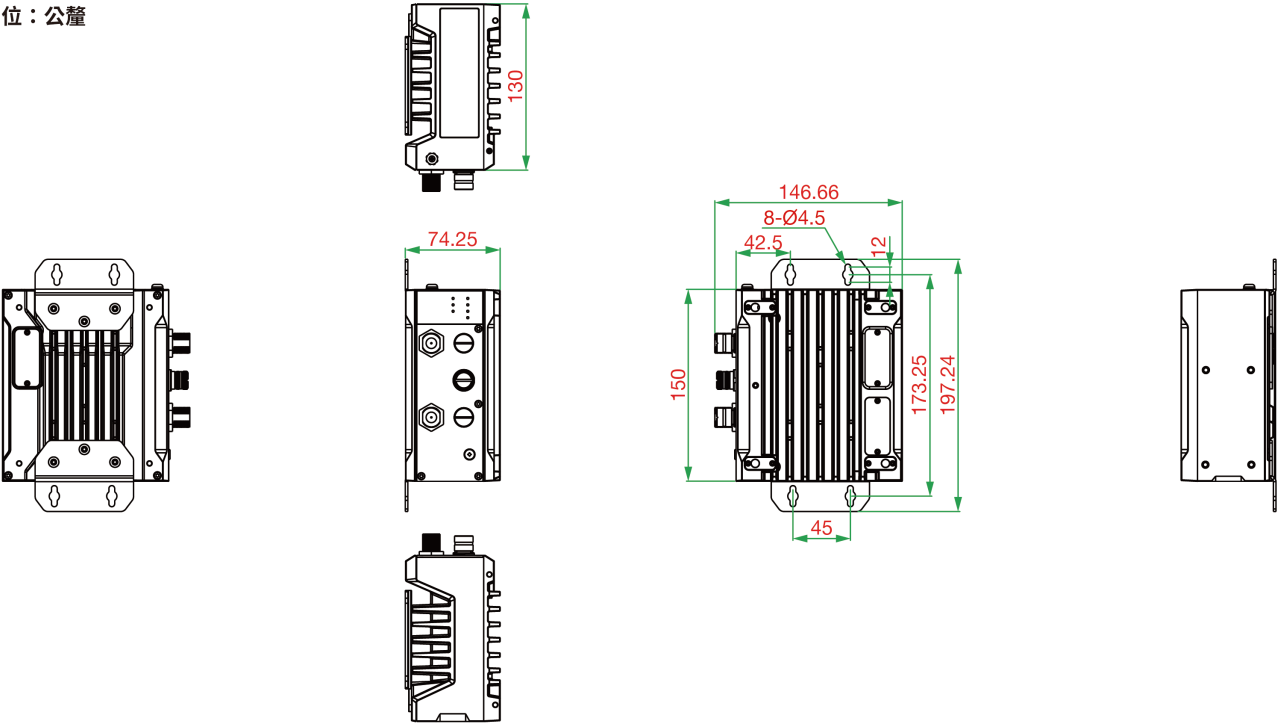
Package Contents

Device	1 x TAP-M310R Series wireless AP/Client
Installation Kit	TAP-M310R-NPS-1R, -1P1R models: 1 x Wall mounting kit
Documentation	1 x quick installation guide 1 x warranty card

尺寸

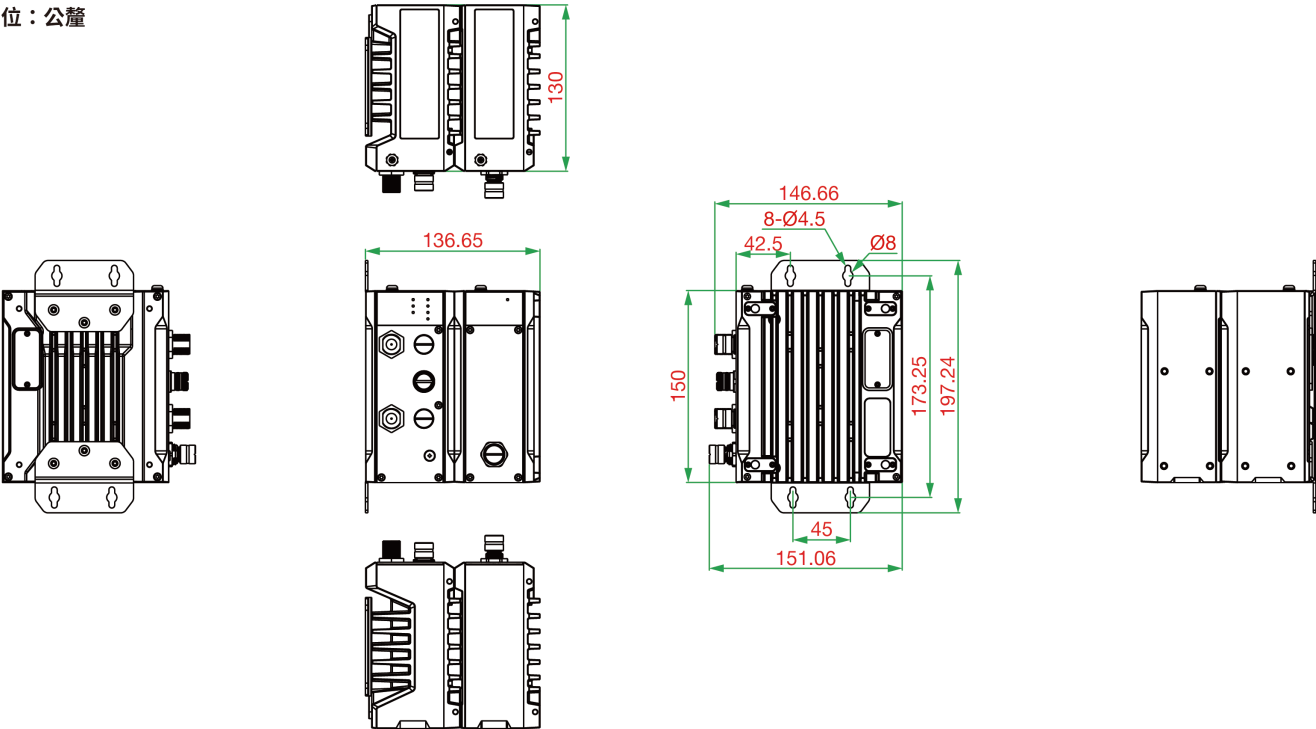
TAP-M310R-NPS-1R 型號

單位：公釐



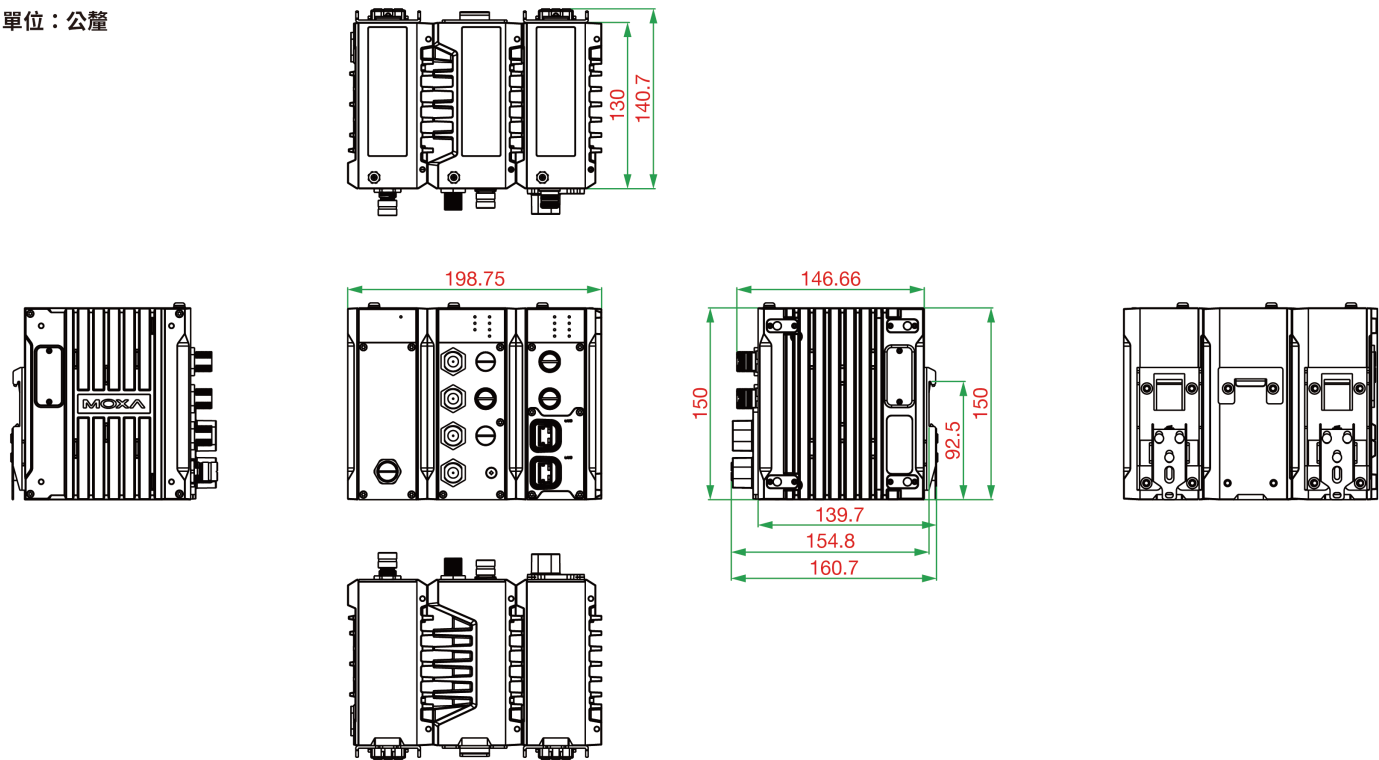
TAP-M310R-NPS-1P1R 型號

單位：公釐



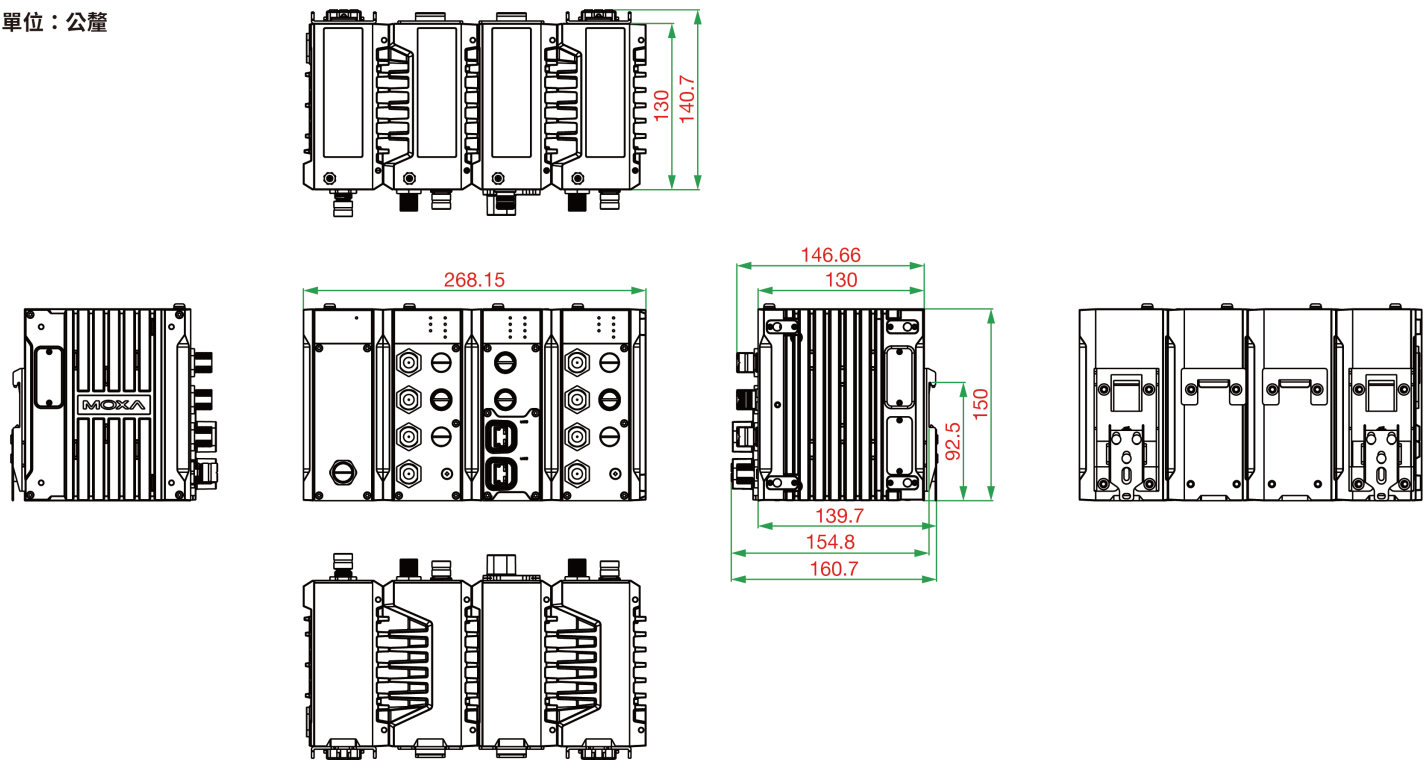
TAP-M310R-1P1R1S 型號

單位：公釐



TAP-M310R-1P2R1S 型號

單位：公釐



訂購資訊

Model Name	Application	Band	Operating Temp.
TAP-M310R-NPS-1R-EU-CT-T	Onboard	EU	-40 to 75°C
TAP-M310R-NPS-1R-US-CT-T	Onboard	US	-40 to 75°C
TAP-M310R-NPS-1P1R-EU-CT-T	Onboard	EU	-40 to 75°C

Model Name	Application	Band	Operating Temp.
TAP-M310R-NPS-1P1R-US-CT-T	Onboard	US	-40 to 75°C
TAP-M310R-1P1R1S-EU-CT-T	Wayside	EU	-40 to 75°C
TAP-M310R-1P1R1S-US-CT-T	Wayside	US	-40 to 75°C
TAP-M310R-1P2R1S-EU-CT-T	Wayside	EU	-40 to 75°C
TAP-M310R-1P2R1S-US-CT-T	Wayside	US	-40 to 75°C

配件（選購）

Cables

CBL-M12KFF5POPEN-O-150-IP67	K-coded female M12-to-5-pin open wire power cable, orange, IP67-rated, 1.5 m
CBL-M12FF5PF9-BK-150-IP67	A-coded female M12-to-5-pin DB9 console cable, black, IP67-rated, 1.5 m
CBL-M12(FF4P)/Open-BK-100-IP68	A-coded female M12-to-4-pin open cable, black, IP68-rated, 1 m
CBL-M12XMM8PRJ45-Y-200-IP67	X-coded male M12-to-RJ45 Ethernet cable, yellow, IP67-rated, 2 m

Connectors

M12K-5PFF-IP65-PxC	Crimp type M12 connector, female 5-pin, K-coded, IP65-rated
A-PLG-WPSFP-IP67	SFP cable gland for TAP-M310R Series, IP67-rated

SFP Modules

SFP-2.5GMLC-T	SFP module with 1 2.5GBaseFX port with LC connector, multi-mode, for 170, 200, 550, 600 m transmission, -40 to 85 °C operating temperature
SFP-2.5GSLC-T	SFP module with 1 2.5GBaseFX port with LC connector, single-mode, for 5 km transmission, -40 to 85 °C operating temperature
SFP-2.5GLSLC-T	SFP module with 1 2.5GBaseFX port with LC connector, single-mode, for 20 km transmission, -40 to 85 °C operating temperature
SFP-2.5GSLHLC-T	SFP module with 1 2.5GBaseFX port with LC connector, single-mode, for 45 km transmission, -40 to 85 °C operating temperature
SFP-1GLXLC-T	SFP module with 1 1000BaseLX port with LC connector for 10 km transmission, -40 to 85°C operating temperature
SFP-1GSXLC-T	SFP module with 1 1000BaseSX port with LC connector for 300m/550m transmission, -40 to 85°C operating temperature

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