seeed studio

INDUSTRIAL PRODUCT DATASHEET

RTL8822CE Wireless NIC Kits

RTL8822CE Wireless NIC Kits deliver dual-band 867Mbps Wi-Fi via an M.2 2230 module with external antenna support.

SKU	UPDATED
E24121001	2026-05-19 07:34:10



Overview



The RTL8822CE Wireless NIC Kits provide dual-band (2.4GHz/5GHz) Wi-Fi connectivity with PHY rates up to 867Mbps, conforming to IEEE 802.11a/b/g/n/ac standards. The M.2 2230 form factor with A or E key and MHF4 connectors allows for external antenna connection, operating on a DC 3.3V power supply and supporting Linux and Windows 10/11.

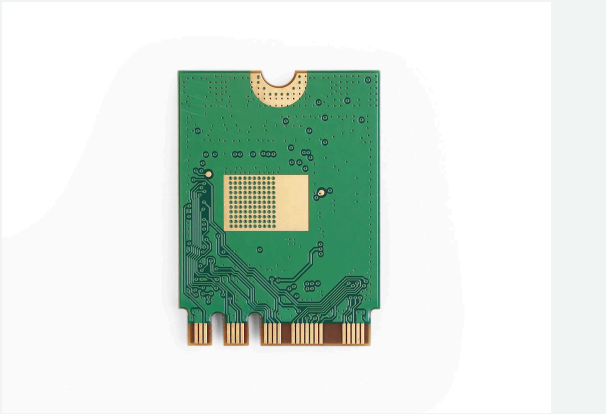
Key Features

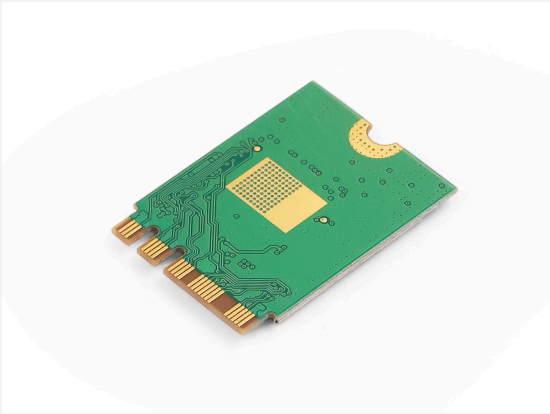
- Supports 2.4G/5GHz dual-band
- Wireless PHY rate can reach up to 867Mbps
- IEEE Standards: IEEE 802.11a/b/g/n/ac
- Form factor: M.2 2230 generic A key or E key
- Connect to external antenna through MHF4 connectors
- Power Supply: DC3.3V±0.2V power supply
- Supports Linux, Windows 10/11, etc.

Product Gallery





















Specification

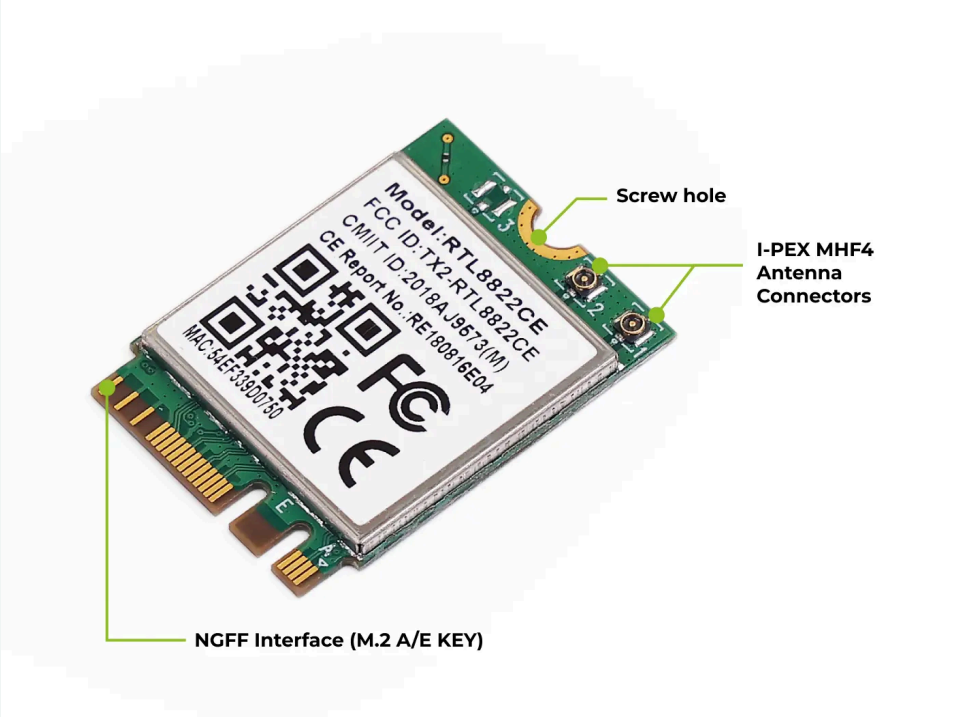
Chipset	RTL8822CE - CG
WLAN Standards	IEEE802.11a/b/g/n/ac
BT Specification	Bluetooth Core Specification v5.0/4.2/2.1
Host Interface	PCI Express 2.1 for WLAN & USB2.0 FS for Bluetooth
Antenna	Connect to the external antennas through MHF4 connector
Dimension	M.2, 30*22*2.15mm (L*W*H)
Power Supply	DC 3.3V±0.2V @ 1000mA (Max)
Operation Temperature	-20°C to +70°C
Operation Humidity	10% to 95% RH (Non - Condensing)

Antenna Parameters	Details	
Frequency Bands, MHz	2400 - 2500	5100 - 7000
VSWR (Max)	3.0:1	3.0:1
Peak Gain, dBi (Typ)	Up to 2.35@2500MHz	Up to 1.66@5580MHz
Nominal Impedance	50 Ω	50 Ω
Max Power (ambient temp of 25°C)	10 Watts	10 Watts
Azimuth Beam Width (deg)	Omnidirectional	Omnidirectional
Polarization	Linear	Linear
Radome	PC, Black	PC, Black

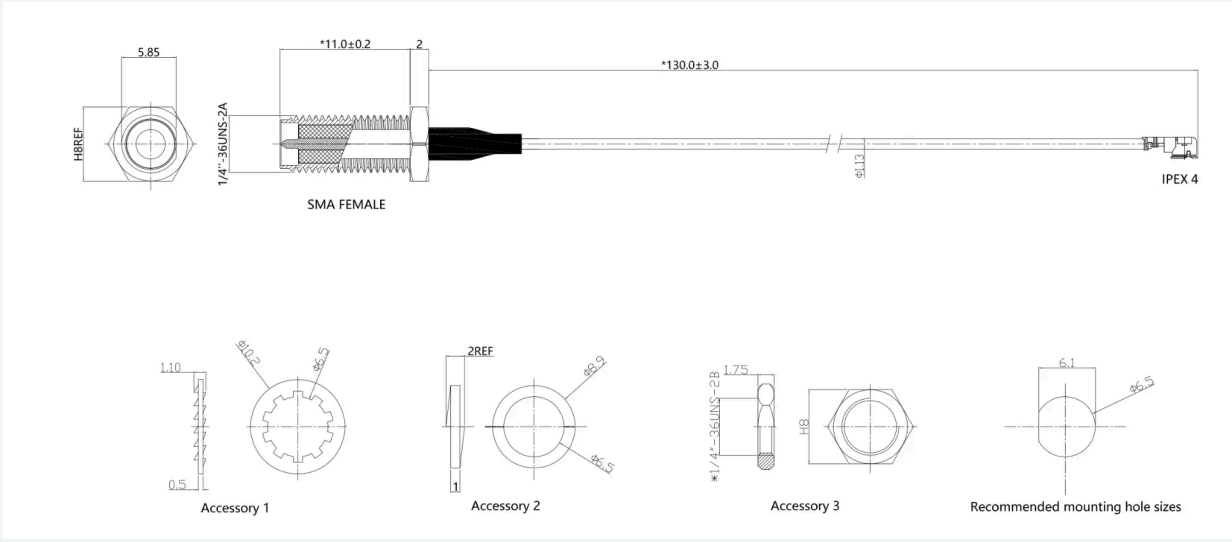
Storage Temperature Range (°C)	-40 °C to +85 °C	-40 °C to +85 °C
Operational Temperature Range (°C)	-30 °C to +80 °C	-30 °C to +80 °C

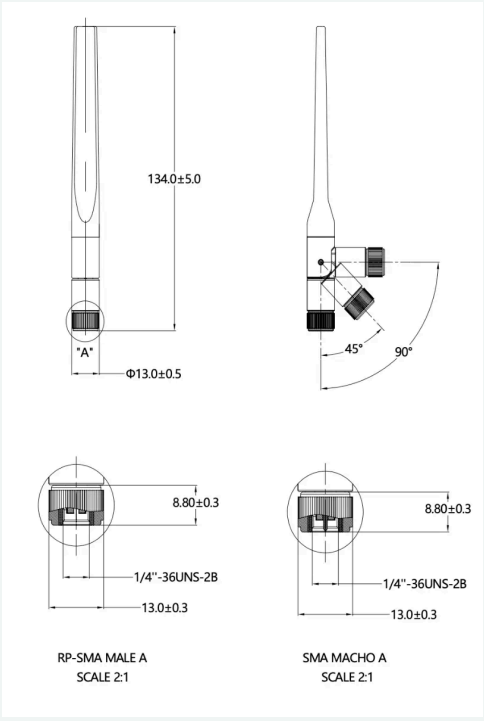
Coaxial Cabel Parameters		Details
Electrical	Frequency Range	DC - 6GHZ
	Nominal Impedance	50 Ohm
	Working Voltage	335 V MAX.
	Proof Voltage	750V
	VSWR	1.4 MAX.
Mechanical	Torsional	15IN - 1LBS MIN.
	Pluggable	500
Environmental	Operating Temperature Range	- 55°C TO + 125°C
	Salt Spray	48 Hours
	RoHS Compliant	Compliant
	REACH Compliant	Compliant

Hardware Overview









Part List

Wireless-RTL8822CE	x1
Antenna	x2
Connector and Cable	x2

Resource Links

- https://www.seeedstudio.com/RTL8822CE-Wireless-NIC-Kits-for-Nvidia-Jetson-Orin.html
- Wi-Fi Module Datasheet

Seeed Technology Co.,Ltd.
9F, Building G3, International E City,
Zhongshanyuan Road, Nanshan, Shenzhen, China

Tel: +86 0755-80695676
Web: www.seeed.cc
Shop: www.seeedstudio.com