Wireless LAN / Bluetooth M.2 [Quectel FME170Q-865]
[http://www.minipc.de/catalog/il/4089]



69.00 EUR
incl. 19% VAT, plus shipping

- **Wi-Fi 7 !**
- **Bluetooth 5.4 !**
- **5.8 Gbps data rate !**
- **2 x 2 MIMO DBS/HBS !**

- Wi-Fi 7 and Bluetooth 5.4 module in M.2 form factor
- 2.4 GHz, 5 GHz and 6 GHz Wi-Fi bands
- 2 x 2 MIMO with DBS and HBS
- Maximum Wi-Fi data rate of 5.8 Gbps
- Multi-link operation, MU-MIMO and 4096-QAM
- Dual-mode Bluetooth with LE audio, 2 Mbps BLE and BLE long range
- Operating temperature range of -10°C to +65°C

Quectel FME170Q-865 is a highly integrated M.2 module supporting Wi-Fi 7 and Bluetooth 5.4. It supports simultaneous operation on 2.4 GHz + 5 GHz, 2.4 GHz + 6 GHz, 5 GHz + 5 GHz, and 5 GHz + 6 GHz. With 4K-QAM and 320 MHz bandwidth, the module achieves a maximum data rate of 5.8 Gbps and supports ultra-low latency for real-time response.

Multi-link operation (MLO) enables routers to use multiple wireless bands and channels simultaneously to connect to a Wi-Fi 7 client. This provides higher data rates, lower latency and enhanced network reliability.

FME170Q-865 also integrates dual-mode Bluetooth and supports LE audio, 2 Mbps Bluetooth low energy and BLE long range. The module is suitable for laptop applications.

Region	Global
PRIMARY TECHNOLOGY	Wi-Fi 7 / Bluetooth 5.4
WLAN standard	IEEE 802.11a/b/g/n/ac/ax/be
FORM FACTOR	M.2 / 22.0 x 30.0 x 2.20 mm / 2.57 g weight
Frequency bands	2.4 GHz / 5 GHz / 6 GHz
Operating temperature	-10°C ~ +65°C
Physical rate (max.)	802.11a: 54 Mbps 802.11b: 11 Mbps 802.11g: 54 Mbps 802.11n: 600 Mbps 802.11ac: 1732 Mbps 802.11ax: 3000 Mbps 802.11be: 5800 Mbps
Interfaces	PCIe: x 1 (for Wi-Fi) USB: x 1 (for Bluetooth) PCM: x 1 (for Bluetooth) Wi-Fi/BT antenna: x 2 (ANT_Wi-Fi0/BT, ANT_Wi-Fi1/BT)
Enhanced features	MIMO: 2 x 2 (support DBS and HBS) HBS: High band simultaneous DBS: Dual band simultaneous MLO: Multi-link operation MU-MIMO: Multi-user multiple input multiple output Bluetooth: Dual-mode Bluetooth, LE audio, 2 Mbps BLE, BLE long range Encryption mode: WPA3
Electrical characteristics	VBAT: 3.0 V ~ 3.6 V, typ. 3.3 V Max. current at Tx mode: 1126.5 mA @ VCC
Certifications	CE/FCC/IC/RCM/SRRC/KC