Fibocom FG160

5G Sub-6 GHz Module for IoT applications

Key Benefits

- High-performance 5G Sub-6 GHz Module for IoT applications
- A better 5G network experience compliant with 3GPP Release16 standards
- Supports NR CA
- Worldwide NR/LTE/WCDMA coverage
- GNSS receiver available for applications requiring fast and accurate positioning in any environment
- Professional reference design, evaluation kits and timely technical support to help customers quickly complete product development



NR CA



Release 16



NR Sub6



LGA Package



Digital Audio / Volte / Vonk



GNSS



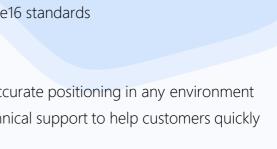
USB3.1/PCle



Fibocom Enhanced AT Commands



Professional reference design, evaluation kits



41mm

2.75mm

Fibocom FG160 is a NR Sub 6 module compliant with 3GPP Release 16 capabilities. The module delivers maximum downlink rates of 3.5Gbps and uplink rates of 900Mbps under 5G, suitable for IoT applications that require high data throughput.

FG160 module adopts LGA form factor measuring 41x44x2.75mm. It is compatible with Fibocom' s 5G module FG150, supporting LTE-TDD, LTE-FDD and WCDMA fallback

FG160 also supports multi-constellation GNSS receiver (GPS/ Galileo/ GLONASS/ BeiDou), which provides high-performance positioning and navigation. Meanwhile, it supports a rich set of interfaces including USIM, USB 3.1/3.0, PCIe 4.0 and I2S, allowing much flexibility and ease of integration for customer's application. With multiple Internet protocols and industry-standard interfaces, FM160 can be used in a variety of cellular terminals such as CPE, STB, IPC and ODU.





NR Sub6	FG160-NA-00	FG160-EAU-00
Region	North America	Europe, Asia Pacific, Australia
Basic Features		
Package	LGA	
Dimension (mm)	41x44x2.75	
NR	n2/5/12/14/25/30/48/41/70/66/71/77	n1/3/5/7/8/20/28/38/40/41/75/76/77/78/79
LTE FDD	B2/4/5/12/13/29/30/66/71	B1/3/5/7/8/20/28/32
LTE TDD	B41/48/46	B38/40/41/42/43
WCDMA	NA	B1/5/8
MIMO	NR DL 4*4MIMO: n2/5/12/14/25/30/41/48/66/70/71/77 UL 2*2MIMO: n41/77	NR DL 4*4MIMO: n1/3/5/7/20/28/38/40/41/75/76/77/78/79 UL 2*2MIMO: n41/77/78/79
	LTE DL 4*4MIMO: B2/4/5/12/13/30/41/48/66/71	LTE DL 4*4MIMO: B1/3/5/7/8/20/28/32/38/40/41/42/43
Antenna	4+1(GNSS)	
Power Supply	3.3v~4.4v, Typical 3.8V	
Operating Temp.	-30°C - +75°C	
AT Command	3GPP TS 27.007 and 27.005, Proprietary FIBOCOM AT Commands	
Data Transmission		
NR SA(Mbps)	Max. 2470 DL / Max. 900 UL	
NR NSA(Mbps)	Max. 3470 DL / Max. 555 UL	
LTE(Mbps)	Max. 1600 DL / Max. 211 UL	
WCDMA(Mbps)	Max. 42 DL / Max. 5.67 UL	
Enhanced Features		
Voice	CS Voice/ VoLTE/ VoNR	
SMS	SMS/ SMS over IP(IMS)/ SMS over NAS	
Audio	•	
DFOTA	•	
GNSS	GPS/GLONASS/Galileo/BeiDou/QZSS	
Software Features		
Driver	USB: Linux 2.6.38 and later/Windows7&10/Android7.x&8.x&9.x RIL: Android7.x&8.x&9.x NDIS: Windows7&10 ECM: Linux 2.6.38 and later Gobinet: Linux 2.6.38 and later	
MBIM	Windows 10 and later/Linux 3.8 and later QMI WWAN: Linux 3.4 and later	
QMI WWAN	Linux 3.4 and later	
Network Protocol	PAP/CHAP/IPv4/IPv6/LwM2M/APN/STK-OTA/STK-BIF	P/DTMF
Interfaces		
USB	USB3.1/3.0(USB2.0 compatible)	
PCle	PCIe4.0	
UART	•	
SPI	•	
GPIO	•	
12C	•	
SDIO	•	
UIM	•	
12S	•	
RGMII	NA	
eSIM	Optional	
Certification Approvals		
Regulation	FCC*/IC*	CE*/RCM*
Operator		
Industry	PTCRB*/GCF*	GCF*

^{* =} planning /under development \bullet = support

Fibocom Wireless Inc.

Telephon: +86 755-26733555 Post Code: info@fibocom.com Address: Floor 10 th,Tower A, Building 6, Shenzhen International Innovation Valley, Dashi 1st Rd, Nanshan, Shenzhen, China Official website: www.fibocom.com

