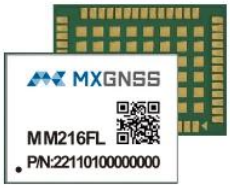
MM216FL
All-system all-frequency high precision positioning module



MM216FL is a high-precision positioning module supporting all currently system and all frequency of BDS, GPS, GALILEO, GLONASS,QZSS, NAVIC and SBAS. Built on MXGNSS's MXT2720 SOC chip, which has low power consumption and high performance, it achieves millimeter-level accuracy. This product is mainly used in safety monitoring, CORS receiver, surveying and mapping, agricultural vehicle autonomous driving, UAV and other high-precision navigation markets

Technical Features

•Simutaneous reception of All-constellation and All-frequency

•Significantly reduced TTFF for rapid positioning

•Support A-GNSS

•Smart-surpress anti-jamming technology

•Low power consumption design, strong multi-path resistance, high accuracy, and reliability Smart Suppress

•Mainstream package size 17x12mm

Specifications

Power Supply	
Voltage	3.0V~ 3.6V
RF input	
Signal Tracking	GPS: L1C/A/L1C/L2C/L5
	BDS:B1I/B2I/B1C/B2b/B2a/B3I
	Galileo: E1/E5a/E5b/E6c
	GLONASS: G1/G2
	QZSS:L1C/A/L1C/L2C/L5/L6
	NAVIC:L5
	L-BAND
	SABS
Physical	
Package	54-PIN LGA
	17x22x2.4mm
I/O Data Interface	
UART	Default 115200bps

Communication Interface	3xUART□1xPPS□1xSPI□1xEVENT□1xI2C
GNSS Performance	
TTFF	Cold Starts: ≤24s
	Hot Starts: □2s
	A-GNSS: □1s
RTK Initialization Time	□5s
Initialization Reliability	99.9%
Position Accuracy	PVT≤1m
	RTK≤0.8cm+1ppm
Observation Accuracy(RMS)	Phase:≤1mm
	Code:≤1mm
Velocity Accuracy	0.03m/s
1PPS Accuracy	20ns
Nav. Update Rate	1HZ
Nav. Data Format	NMEA 0183 V4.1
	RTCM V3.X

Application Fields

CORS receiver

Safety monitoring

Smart driving

UAV

Mapping