

GPS Antenna Module

WGM-UDR8

- UDR(untethered dead reckoning) GNSS solution.
- Independent of any electrical connection to the car.
- Positioning accuracy in dense cities and covered areas.
- Complete positioning solution with integrated 3D sensors.
- Real time positioning update rate of up to 20 Hz.



Performance Data WGM-UDR8 Series

Receiver Type	72-channel u-blox M8 engine, GPS / QZSS L1 C / A, GLONASS L10F BeiDou B1I, Galileo E1B / C, SBAS L1 C / A: WAAS / EGNOS / MSAS / GAGAN
Update Rate	Up to 20 Hz
Position Accuracy	Standalone 2.5 m CEP, SBAS 1.0 m CEP
Acquisition	Cold start 26s, Warm start 3s, Hot start 1s
Sensitivity	Cold start -148 dBm, Hot start -157 dBm, Tracking -160 dBm
Assistance	AssistNow GNSS Online, OMA SUPL & 3GPP compliant AssistNow GNSS Offline (up to 35 days), AssistNow Autonomous (up to 6 days)

Electrical Data

DC Supply	5V~28V
Power Consumption	Acquisition < 220mW, Tracking < 170mW

Interfaces

Serial Interfaces	UART / USB
Protocols	NMEA / UBX binary / RTCM
1PPS Output	Programmable duration and polarity

Dynamics

Velocity	Up to 500 m/s
Altitude	Up to 50,000 m (max)
Acceleration	Standard up to 4 g

Environmental Data

Operating Temp.	-40° C to +85° C
Storage Temp.	-40° C to +85° C

RoHS Compliant (lead-free)