

GPS Antenna Module

WGM-P6

- High precision of < 1 m.
- High accuracy positioning at a fraction of the cost.
- u-blox 6 position engine:
 - Navigate down to -160 dBm and -146 dBm coldstart.
 - Faster acquisition with AssistNow Autonomous.
 - Hybrid GPS / SBAS engine (WAAS, EGNOS, MSAS).
 - Anti-Jamming technology.
- A-GPS: AssistNow Online and AssistNow Offline services, OMA SUPL.



Performance Data WGM-P6 Series

| | |
|-------------------|--------------------------------------------------------------------------------------------------|
| Receiver Type | 50-channel u-blox6 engine, GPS L1 C / A code, BAS: WAAS / EGNOS / MSAS / GAGAN |
| Update Rate | Up to 5 Hz |
| Position Accuracy | Standalone 2.0 m CEP, SBAS 2.0 m CEP SBAS + PPP2 < 1 m (2D, R50), SBAS + PPP2 < 2 m (3D, R50) |
| Acquisition | Cold start 32s, Warm start 3s, Hot start 1s |
| Sensitivity | Cold start -146 dBm, Hot start -155 dBm, Tracking -160 dBm |

Electrical Data

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|-------------------|---------------------------------------|
| DC Supply | 5V~28V |
| Power Consumption | Acquisition < 350mW, Tracking < 220mW |

Interfaces

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

Dynamics

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

Environmental Data

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

RoHS Compliant (lead-free)