

# Dual-band GNSS benefits in urban environments

Especially in urban environments, GNSS position accuracy suffers from multipath effects. Multipath errors occur when the receiver picks up satellite signals reflected from objects around the receiver rather than signals directly from satellites.

Multipath mitigation is important for vehicles and wearables in urban environments.



**1** Multipath may create large position errors. L5 band signals mitigate these multipath effects.

**2** A dual-band receiver in an urban environment is much more accurate than a single-band receiver.

**3** In open areas with less multipath effects, dual-band and single-band receivers perform similarly.

## Relevant use cases



— L1/L5 Dual-band  
— L1 Single-band