

# What are the Synchronization Requirements for Different Types of LTE?



The following table summarizes the requirements:

Application	Frequency Error	True Time Error
LTE (FDD)	16/50 ppb	NA
LTE (TDD)	16/50 ppb	$\pm 1.5 \mu\text{s}$
LTE MBSFN*	16/50 ppb	-1 to 32 $\mu\text{s}$
LTE-A CoMP (network MIMO)**	16/50 ppb	$\pm 500 \text{ ns}$
LTE 5G	15/50 ppb	$\pm 400 \text{ ns}$
LTE (residential)	100/250 ppb	None

\*MBSFN == Multimedia Broadcast Multicast Service (MBMS) over a single frequency network

\*\* CoMP = Coordinated Multi-port Transmission/Reception

*For any other technical information inquiries, please contact us at [qg2\\_support@viavisolutions.com](mailto:qg2_support@viavisolutions.com)*