

L'arrivée de la 5G signifie-t-elle la disparition de la 2G?

spécifications principales du LTE-M, release 13 et 14



| | Cat 1 | LTE-M | | NBIoT | |
|------------------------|-----------------------------------|--|---|---|---|
| | Rel 8 | Rel 13 | Rel 14 | Rel 13 | Rel 14 |
| Deployment | LTE bands | LTE brands (in*brand) | | In-band & Guard-band LTE, standalone (GSM) | |
| Coverage, MCL | 140.7 dB MCL (2Rx) | 155.7 dB MCL (a) 160.7 dB MCL (b) | | 164 dB MCL for standalone (d) | |
| DL access scheme | OFDMA, 15 kHz tone spacing | OFDMA, 15 kHz tone spacing | | OFDMA, 15 kHz tone spacing | |
| DL modulations | QSPK, 16 QAM, 2 Rx | QSPK, 16 QAM, 1 Rx | | QSPK, 1 Rx | |
| UL access scheme | SC-FDMA, 15 KHz tone spacing | SC-FDMA, 15 KHz tone spacing | | SC-FDMA, 15 or 3, 75 KHz tone spacing | |
| UL modulations | QSPK, 16QAM | QSPK, 16 QAM | | Single Tone: $\pi/4$ -QSPK, $\pi/2$ -BSPK Multi Tone: QSPK | |
| Channel bandwidth | 1.4-20 MHz | 1.4 MHz (1.08 MHz = 6 PRB) | 5 MHz | 180 KHz (1 PRB) | |
| Coverage Enhancements | N/A | Mode A: zero-to-small rep (0 to 5 dB) Mode B: large rep (10 to 15 dB) | | CE level 0,1,2 (level 2 corresponds to 164 dB MCL) | |
| Duplex Mode | FD-FDD & TDD | FD & HD (type B), FDD & TDD | | HD (type B), FDD | |
| DL antennas | 2 | 1 | | 1 | |
| Peak data rate (DL/UL) | DL: 10 Mbps UL: 5 Mbps | DL: 300 Kbps UL: 375 Kbps in HD-FDD | DL: 300 Kbps UL: 1 Mbps (d) HD-FDD Cat M1 | DL: 20 Kbps UL: 60 Kbps for multi-tone Cat NB1 | DL: 127 Kbps (2 HARQs) UL: 158.5 for multi-tone CAT NB2 |
| Power saving | I-DRX, C-DRX | PSM, extended I-DRX, C-DRX | | PSM, extended I-DRX, C-DRX (longer time) | |
| Power class | Class 3, 23 dBm | Class 3, 23 dBm / Class 5, 20 dBm | | Class 3, 23 dBm Class 5, 20 dBm | Class 3, 23 dBm Class 5, 20 dBm Class 6, 14 dBm |
| Voice support | Yes, VoLTE | Yes, VoLTE | | No | |
| Mobility | | Limited to full mobility | Enhanced mobility | Cell reselection only | |
| Latency | Low -mid, due to higher bandwidth | Low -mid, due to higher bandwidth | | Mid -high | |