

The Internet of Things networking technology cheat sheet 1.0

Network:	 Sigfox	 LoRa	 NB-IoT (Cat NB1)	 LTE-M (Cat M1)	 LTE Cat 0	 LTE Cat 1
Type:	PLWAN	PLWAN	DSSS modulation	LTE (cellular)	LTE (cellular)	LTE (cellular)
Low Power:	+++++	++++	++++	+++	++	++
Throughput Kbit/s:	0,1	50	100	375	1000	10.000
Bandwidth:	Ultra-narrowband	Narrowband	Narrowband	Low	High	High
Latency:	1 – 30s	Based on profile	1.6 – 10s	10 – 15ms	Unknown	50 – 100ms
Standard:	Proprietary	Proprietary	3GPP Rel. 13	3GPP Rel. 13	3GPP Rel. 12	3GPP Rel. 8
Availability world-wide:	++	+++	++	++	+++++	++++
Spectrum:	Unlicensed ISM	Unlicensed ISM	Licensed LTE	Licensed LTE	Licensed LTE	Licensed LTE
Complexity:	Very low	Low	Very low	Low / medium	High	High
Coverage / range:	Medium / high	Medium / high	High	High	High	High
Battery life:	Very high	Very high / high	High	Medium / high	Low	Low
Gateway needed:	Yes	Yes	No, but optional	Optional	Optional	Optional
Signal penetration:	High	Medium / high	Medium / high	Medium / high	Low	Low
Security:	+++	+++	+++	+++++	+++++	+++++
Future proof:	+++	+++	+++++	+++++	+++	+++

See the accompanying blog series on basvankaam.com for more details on some of the abovementioned features/characteristics