

Requirement area	Decision	Answer	3GPP standard technology									Non 3GPP technology	
			Delivered in 4G/LTE network					Delivered in 5G networks			Delivered over Satellite - NTN	5G DECT 2020 NR (5G NR+)	LoRa
			NB-IoT	Cat-M	Cat-1bis	Cat-1	Cat-4	NB-IoT	Cat-M	RedCap	NB-IoT	5G NR+	LoRa Wan
Module location	Geographic footprint												
	Single country - local/regional deployment		X	X	X	X	X	X	X	X	X	X	X
	Single country - populated areas		X	X	X	X	X	X	X	X	X	X	X
	Single country - complete coverage												
	Western countries + mature APAC - populated areas		X	X	X	X	X	X	X	X	X	X	X
	Global coverage - populated areas				X	X	X				X		
	Truely Global incl non-populated areas										X		
	Module mobility												
	Stationary		X	X	X	X	X	X	X	X	X	X	X
Moving at up to car speed			X	X	X	X		X	X	X	X	X	
Moving at up to airplane speed					X	X			X				
Module location	Module location												
	Outdoor		X	X	X	X	X	X	X	X	X	X	
	Indoor		X	X	X	X	X	X	X	X	X	X	
	Deep indoor or underground		X	X				X	X			X	
App Requirements	Bandwith requirements												
	10s of Kbit/s		X	X	X	X	X	X	X	X	X	X	
	100s of Kbit/s			X	X	X	X		X	X			
	1 Mbit/s			(x)	X	X	X		(x)	X			
	4 Mbit/s or higher						X			X			
	Typical Latency requirements												
< 2 sec		X	X	X	X	X	X	X	X	X	X		
< 400 ms		X	X	X	X	X		X	X				
< 40 ms			X	X	X	X			X				
Text requirements													
Yes - SMS style communication required		(x)	X	X	X	X	(x)	X	X	(x)			
Voice requirements													
Yes - Voice communication requied			(x)	X	X	X		(x)	X				
Timing Requirements	Deployment date												
	Before 2026		X	X	X	X	X			X		X	
	2026 and beyond		X	X	X	X	X	X	X	X	X	X	
Power Requirements	Deployment duration												
	Until 2035		X	X	X	X	X	X	X	X	X	X	
	Until 2045							X	X	X	X	X	
Power Requirements	Power envelope												
	Power source always available		X	X	X	X	X	X	X	X	X	X	
	Operate on battery up to 1 year		X	X				X	X			X	
Operate on battery up to 10 year		X	X				X	X			X		
TCO	Module cost												
	\$		X	X				X	X		X	X	
	\$\$				X	X	X						
\$\$\$									X				

\$ = < \$10    \$\$ = \$10-30    \$\$\$ = > \$30

(X) = Support exist in standard but not all operators support it